

Technical Paper No. 349

Alaska Migratory Bird Subsistence Harvest Estimates, 2004–2007, Alaska Migratory Bird Co-Management Council

Liliana C. Naves



Revised Edition, March 2010

**Alaska Department of Fish and Game
Division of Subsistence**



**Alaska Migratory Bird
Co-Management Council**



Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the following reports by the Division of Subsistence. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)

cubic feet per second	ft ³ /s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry

all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of)	pH
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

General

Alaska Department of Fish and Game	ADF&G
Alaska Administrative Code	AAC
all commonly accepted abbreviations	
e.g., Mr., Mrs., AM, PM, etc.	
all commonly accepted professional titles e.g., Dr., Ph.D., R.N., etc.	
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat. or long.
monetary symbols (U.S.)	\$, ¢
months (tables and figures):	
first three letters	Jan, ... ,Dec
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
United States Code	U.S.C.
U.S. state	
use two-letter abbreviations	
e.g.,	AK, WA

Measures (fisheries)

fork length	FL
mideye-to-fork	MEF
mideye-to-tail-fork	METF
standard length	SL
total length	TL

Mathematics, statistics

all standard mathematical signs, symbols and abbreviations	
alternate hypothesis	HA
base of natural logarithm	e
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics (F, t, χ^2 , etc.)	
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	E
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	log ₂ , etc.
minute (angular)	'
not significant	NS
null hypothesis	HO
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	“
standard deviation	SD
standard error	SE
variance:	
population	Var
sample	var

TECHNICAL PAPER NO. 349

**Alaska Migratory Bird Subsistence Harvest Estimates,
2004–2007,
Alaska Migratory Bird Co-Management Council**

Liliana C. Naves
Alaska Department of Fish and Game
Division of Subsistence, Anchorage

Alaska Department of Fish and Game
Division of Subsistence
333 Raspberry Road, Anchorage, Alaska 99518-1599

Revised Edition, March 2010

Development and publication of this manuscript were financed by U.S. Fish and Wildlife Service under Cooperative Agreement 70181-7-J653.

Cover Herman Squartsoff collects glaucous-winged gull eggs, Kodiak. Photograph by Donna Dewhurst, used with permission.

The Division of Subsistence Technical Paper series was established in 1979 and represents the most complete collection of information about customary and traditional uses of fish and wildlife resources in Alaska. The papers cover all regions of the state. Some papers were written in response to specific fish and game management issues. Others provide detailed, basic information on the subsistence uses of particular communities which pertain to a large number of scientific and policy questions.

Technical Paper series reports are available through the Alaska State Library and on the Internet: <http://www.subsistence.adfg.state.ak.us/>. This publication has undergone editorial and professional review.

Liliana C. Naves
Alaska Department of Fish and Game, Division of Subsistence
333 Raspberry Road, Anchorage, Alaska, 99518-1599

This document should be cited as:

Naves, L.C. 2010, revised [2009]. Alaska migratory bird subsistence harvest estimates, 2004–2007, Alaska Migratory Bird Co-Management Council. Alaska Department of Fish and Game Division of Subsistence, Technical Paper No. 349, Anchorage.

The Alaska Department of Fish and Game (ADF&G) administers all programs and activities free from discrimination based on race, color, national origin, age, sex, religion, marital status, pregnancy, parenthood, or disability. The department administers all programs and activities in compliance with Title VI of the Civil Rights Act of 1964, Section 504 of the Rehabilitation Act of 1973, Title II of the Americans with Disabilities Act (ADA) of 1990, the Age Discrimination Act of 1975, and Title IX of the Education Amendments of 1972.

If you believe you have been discriminated against in any program, activity, or facility please write:

ADF&G ADA Coordinator, P.O. Box 115526, Juneau AK 99811-5526

U.S. Fish and Wildlife Service, 4040 N. Fairfax Drive, Suite 300 Webb, Arlington VA 22203

Office of Equal Opportunity, U.S. Department of the Interior, Washington DC 20240

The department's ADA Coordinator can be reached via phone at the following numbers:

(VOICE) 907-465-6077, (Statewide Telecommunication Device for the Deaf) 1-800-478-3648, (Juneau TDD) 907-465-3646, or (FAX) 907-465-6078

For information on alternative formats and questions on this publication, please contact:

ADF&G Division of Subsistence at <http://www.subsistence.adfg.state.ak.us/>.

ERRATA

Originally published in December 2009, Technical Paper No. 349, *Alaska Migratory Bird Subsistence Harvest Estimates, 2004–2007, Alaska Migratory Bird Co-Management Council*, has been revised and updated to reflect the following changes:

- Table 146 (North Slope Region, 2007, p. 170) has been updated to include a footnote regarding the harvest of yellow-billed loons.
- The tables listed below have been revised to correct harvest estimates at the regional level for the Yukon-Kuskokwim Delta region.

Table 4.	p. 28
Table 5.	p. 29
Table 16.	p. 40
Table 17.	p. 41
Table 56.	p. 80
Table 57.	p. 81
Table 128.	p. 152
Table 129.	p. 153

TABLE OF CONTENTS

LIST OF TABLES	iii
LIST OF FIGURES	vii
LIST OF APPENDICES	vii
ABSTRACT	ix
INTRODUCTION	1
AMBCC SUBSISTENCE HARVEST ASSESSMENT PROGRAM	1
AMBCC MEMBER ORGANIZATIONS	2
USES OF THE INFORMATION FROM THE SUBSISTENCE HARVEST SURVEY	2
METHODS	5
DATA COLLECTION	5
Regions, Subregions, Villages.....	5
Sampling Methods.....	18
<i>“None, Low, High” Stratification</i>	18
<i>Census: 100% sampling</i>	18
<i>Simple Random Sampling</i>	18
<i>“Harvester, Other” Stratification</i>	19
The Survey Year and Survey Seasons	19
Village and Household Consent	20
No Contact and Refusals	20
Reporting Harvests	20
Species Represented on the Harvest Report Form.....	20
Data Transfer	21
Data Management and Reporting	21
DATA ANALYSIS	21
Geographic Scale of Harvest Estimates	21
Expansion at the Subregional Level	22
Expansion at Regional Level	23
Conversion of Egg Volume to Numbers of Eggs.....	24
Reports of Fall Egg Harvest.....	25
Household Participation Rates	25
RESULTS	27
2004 HARVEST ESTIMATES	30
2005 HARVEST ESTIMATES	70
2006 HARVEST ESTIMATES	102
2007 HARVEST ESTIMATES	142

TABLE OF CONTENTS *continued...*

HOUSEHOLD PARTICIPATION RATES 2004–2007	178
ACKNOWLEDGEMENTS	179
REFERENCES CITED	181
APPENDICES	183
APPENDIX A.—REGIONS, SUBREGIONS, AND COMMUNITIES SURVEYED FROM 2004–2007.	184
APPENDIX B.—HARVEST REPORT FORMS (~20% OF ORIGINAL SIZE).	189
APPENDIX C.—SPECIES REPRESENTED IN THE 3 VERSIONS OF THE HARVEST REPORT FORM AND THEIR DISTRIBUTION RANGE IN ALASKA.	192
APPENDIX D.—FORMULAS TO CALCULATE SUBREGION ESTIMATED HARVESTS, VARIANCES, AND CONFIDENCE INTERVALS (3-STAGE STRATIFIED CLUSTER SAMPLING).	197
APPENDIX E.—FORMULAS TO CALCULATE REGION ESTIMATED HARVESTS, VARIANCES, AND CONFIDENCE INTERVALS (4-STAGE STRATIFIED SAMPLING).	199

LIST OF TABLES

Table 1.—Regions surveyed from 2004–2007.	6
Table 2.—Seasonal survey coverage and household visits.	19
Table 3.—Estimated conversion factors, egg volume to number of eggs.	24
Table 4.—Annual harvest estimates, total birds at the subregional and regional levels, 2004–2007.	28
Table 5.—Annual harvest estimates, total bird eggs at the subregional and regional levels, 2004–2007.	29
Table 6.—Estimated harvest of birds, Gulf of Alaska/Cook Inlet Region, 2004.	30
Table 7.—Estimated harvest of eggs, Gulf of Alaska/Cook Inlet Region, 2004.	31
Table 8.—Estimated harvest of birds, Gulf of Alaska/Cook Inlet Region, Gulf of Alaska Subregion, 2004.	32
Table 9.—Estimated harvest of eggs, Gulf of Alaska/Cook Inlet Region, Gulf of Alaska Subregion, 2004.	33
Table 10.—Estimated harvest of birds, Gulf of Alaska/Cook Inlet Region, Cook Inlet Subregion, 2004.	34
Table 11.—Estimated harvest of eggs, Gulf of Alaska/Cook Inlet Region, Cook Inlet subregion, 2004.	35
Table 12.—Estimated harvest of birds, Bristol Bay Region, South Alaska Peninsula Subregion, 2004.	36
Table 13.—Estimated harvest of eggs, Bristol Bay Region, South Alaska Peninsula Subregion, 2004.	37
Table 14.—Estimated harvest of birds, Bristol Bay Region, Southwest Bristol Bay Subregion, 2004.	38
Table 15.—Estimated harvest of eggs, Bristol Bay Region, Southwest Bristol Bay Subregion, 2004.	39
Table 16.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, 2004.	40
Table 17.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, 2004.	41
Table 18.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2004.	42
Table 19.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2004.	43
Table 20.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2004.	44
Table 21.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2004.	45
Table 22.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2004.	46
Table 23.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2004.	47
Table 24.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2004.	48
Table 25.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2004.	49
Table 26.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2004.	50
Table 27.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2004.	51
Table 28.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Central Kuskokwim Subregion, 2004.	52
Table 29.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Central Kuskokwim Subregion, 2004.	53
Table 30.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2004.	54
Table 31.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2004.	55
Table 32.—Estimated harvest of birds, Bering Strait/Norton Sound Region, 2004.	56
Table 33.—Estimated harvest of eggs, Bering Strait/Norton Sound Region, 2004.	57
Table 34.—Estimated harvest of birds, Interior Alaska Region, 2004.	58
Table 35.—Estimated harvest of eggs, Interior Alaska Region, 2004.	59
Table 36.—Estimated harvest of birds, Interior Alaska Region, Mid Yukon/Upper Kuskokwim Subregion, 2004.	60
Table 37.—Estimated harvest of eggs, Interior Alaska Region, Mid Yukon/Upper Kuskokwim Subregion, 2004.	61
Table 38.—Estimated harvest of birds, Interior Alaska Region, Yukon/Koyukuk Subregion, 2004.	62

LIST OF TABLES *continued...*

Table 39.—Estimated harvest of eggs, Interior Alaska Region, Yukon/Koyukuk Subregion, 2004.	63
Table 40.—Estimated harvest of birds, Interior Alaska Region, Upper Yukon Subregion, 2004.....	64
Table 41.—Estimated harvest of eggs, Interior Alaska Region, Upper Yukon Subregion, 2004.	65
Table 42.—Estimated harvest of birds, Interior Alaska Region, Tanana Villages Subregion, 2004.....	66
Table 43.—Estimated harvest of eggs, Interior Alaska Region, Tanana Villages Subregion, 2004.	67
Table 44.—Estimated harvest of birds, Upper Copper River Region, 2004.....	68
Table 45.—Estimated harvest of eggs, Upper Copper River Region, 2004.	69
Table 46.—Estimated harvest of birds, Gulf of Alaska/Cook Inlet Region, Cook Inlet Subregion, 2005.	70
Table 47.—Estimated harvest of eggs, Gulf of Alaska/Cook Inlet Region, Cook Inlet Subregion, 2005.....	71
Table 48.—Estimated harvest of birds, Aleutian/Pribilof Islands Region, Aleutian Pribilof/Villages Subregion, 2005.....	72
Table 49.—Estimated harvest of eggs, Aleutian/Pribilof Islands Region, Aleutian Pribilof/Villages Subregion, 2005.	73
Table 50.—Estimated harvest of birds, Bristol Bay Region, 2005.....	74
Table 51.—Estimated harvest of eggs, Bristol Bay Region, 2005.....	75
Table 52.—Estimated harvest of birds, Bristol Bay Region, Southwest Bristol Bay Subregion, 2005.....	76
Table 53.—Estimated harvest of eggs, Bristol Bay Region, Southwest Bristol Bay Subregion, 2005.	77
Table 54.—Estimated harvest of birds, Bristol Bay Region, Dillingham Subregion, 2005.	78
Table 55.—Estimated harvest of eggs, Bristol Bay Region, Dillingham Subregion, 2005.....	79
Table 56.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, 2005.....	80
Table 57.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, 2005.	81
Table 58.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2005.....	82
Table 59.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2005.....	83
Table 60.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2005.....	84
Table 61.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2005.	85
Table 62.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2005.....	86
Table 63.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2005.....	87
Table 64.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2005.....	88
Table 65.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2005.	89
Table 66.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2005.	90
Table 67.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2005.....	91
Table 68.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2005.....	92
Table 69.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2005.	93
Table 70.—Estimated harvest of birds, Bering Strait/Norton Sound Region, 2005.....	94
Table 71.—Estimated harvest of eggs, Bering Strait/Norton Sound Region, 2005.....	95
Table 72.—Estimated harvest of birds, North Slope Region, 2005.....	96
Table 73.—Estimated harvest of eggs, North Slope Region, 2005.....	97
Table 74.—Estimated harvest of birds, Interior Region, Mid Yukon/Upper Kuskokwim Subregion, 2005.	98
Table 75.—Estimated harvest of eggs, Interior Region, Mid Yukon/Upper Kuskokwim Subregion, 2005.....	99
Table 76.—Estimated harvest of birds, Interior Region, Yukon/Koyukuk Subregion, 2005.....	100

LIST OF TABLES *continued...*

Table 77.—Estimated harvest of eggs, Interior Region, Yukon/Koyukuk Subregion, 2005	101
Table 78.—Estimated harvest of birds, Gulf of Alaska/Cook Inlet Region, Gulf of Alaska Subregion, 2006.....	102
Table 79.—Estimated harvest of eggs, Gulf of Alaska/Cook Inlet Region, Gulf of Alaska Subregion, 2006.	103
Table 80.—Estimated harvest of birds, Kodiak Archipelago Region, 2006.....	104
Table 81.—Estimated harvest of eggs, Kodiak Archipelago Region, 2006.....	105
Table 82.—Estimated harvest of birds, Kodiak Archipelago Region, Kodiak Villages Subregion, 2006.....	106
Table 83.—Estimated harvest of eggs, Kodiak Archipelago Region, Kodiak Villages Subregion, 2006.	107
Table 84.—Estimated harvest of birds, Kodiak Archipelago Region, Kodiak City and Road Connected Subregion, 2006.....	108
Table 85.—Estimated harvest of eggs, Kodiak Archipelago Region, Kodiak City and Road Connected Subregion, 2006.	109
Table 86.—Estimated harvest of birds, Bristol Bay Region, Southwest Bristol Bay Subregion, 2006.....	110
Table 87.—Estimated harvest of eggs, Bristol Bay Region, Southwest Bristol Bay Subregion, 2006.	111
Table 88.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, 2006.....	112
Table 89.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, 2006.	113
Table 90.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2006.....	114
Table 91.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2006.....	115
Table 92.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2006.....	116
Table 93.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2006.	117
Table 94.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2006.....	118
Table 95.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2006.....	119
Table 96.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2006.....	120
Table 97.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2006.	121
Table 98.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2006.	122
Table 99.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2006.....	123
Table 100.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Central Kuskokwim Subregion, 2006.	124
Table 101.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Central Kuskokwim Subregion, 2006.....	125
Table 102.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2006.....	126
Table 103.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2006.....	127
Table 104.—Estimated harvest of birds, Northwest Arctic Region, Northwest Arctic Villages Subregion, 2006.....	128
Table 105.—Estimated harvest of eggs, Northwest Arctic Region, Northwest Arctic Villages Subregion, 2006.....	129
Table 106.—Estimated harvest of birds, Interior Alaska Region, 2006.	130
Table 107.—Estimated harvest of eggs, Interior Alaska Region, 2006.....	131
Table 108.—Estimated harvest of birds, Interior Alaska Region, Mid Yukon/Upper Kuskokwim Subregion, 2006.	132
Table 109.—Estimated harvest of eggs, Interior Alaska Region, Mid Yukon/Upper Kuskokwim Subregion, 2006.....	133
Table 110.—Estimated harvest of birds, Interior Alaska Region, Yukon/Koyukuk Subregion, 2006.....	134
Table 111.—Estimated harvest of eggs, Interior Alaska Region, Yukon/Koyukuk Subregion, 2006.....	135
Table 112.—Estimated harvest of birds, Interior Alaska Region, Upper Yukon Subregion, 2006.....	136
Table 113.—Estimated harvest of eggs, Interior Alaska Region, Upper Yukon Subregion, 2006.	137
Table 114.—Estimated harvest of birds, Interior Alaska Region, Tanana Villages Subregion, 2006.....	138

LIST OF TABLES *continued...*

Table 115.—Estimated harvest of eggs, Interior Alaska Region, Tanana Villages Subregion, 2006.	139
Table 116.—Estimated harvest of birds, Interior Alaska Region, Tok Subregion, 2006.	140
Table 117.—Estimated harvest of eggs, Interior Alaska Region, Tok Subregion, 2006.....	141
Table 118.—Estimated harvest of birds, Aleutian/Pribilof Islands Region, Aleutian/Pribilof Villages Subregion, 2007.	142
Table 119.—Estimated harvest of eggs, Aleutian/Pribilof Islands Region, Aleutian/Pribilof Villages Subregion, 2007.....	143
Table 120.—Estimated harvest of birds, Bristol Bay Region, 2007.....	144
Table 121.—Estimated harvest of eggs, Bristol Bay Region, 2007.....	145
Table 122.—Estimated harvest of birds, Bristol Bay Region, South Alaska Peninsula Subregion, 2007.....	146
Table 123.—Estimated harvest of eggs, Bristol Bay Region, South Alaska Peninsula Subregion, 2007.	147
Table 124.—Estimated harvest of birds, Bristol Bay Region, Southwest Bristol Bay Subregion, 2007.....	148
Table 125.—Estimated harvest of eggs, Bristol Bay Region, Southwest Bristol Bay Subregion, 2007.	149
Table 126.—Estimated harvest of birds, Bristol Bay Region, Dillingham Subregion, 2007.	150
Table 127.—Estimated harvest of eggs, Bristol Bay Region, Dillingham Subregion, 2007.....	151
Table 128.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, 2007.....	152
Table 129.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, 2007.	153
Table 130.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2007.....	154
Table 131.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2007.....	155
Table 132.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2007.....	156
Table 133.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2007.	157
Table 134.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2007.....	158
Table 135.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2007.....	159
Table 136.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2007.....	160
Table 137.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2007.	161
Table 138.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2007.	162
Table 139.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2007.	163
Table 140.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Central Kuskokwim Subregion, 2007.....	164
Table 141.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Central Kuskokwim Subregion, 2007.....	165
Table 142.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2007.....	166
Table 143.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2007.....	167
Table 144.—Estimated harvest of birds, Bering Strait/Norton Sound Region, 2007.	168
Table 145.—Estimated harvest of eggs, Bering Strait/Norton Sound Region, 2007.....	169
Table 146.—Estimated harvest of birds, North Slope Region, 2007.....	170
Table 147.—Estimated harvest of eggs, North Slope Region, 2007.....	171
Table 148.—Estimated harvest of birds, Interior Alaska Region, Yukon/Koyukuk Subregion, 2007.....	172
Table 149.—Estimated harvest of eggs, Interior Alaska Region, Yukon/Koyukuk Subregion, 2007.	173
Table 150.—Estimated harvest of birds, Interior Alaska Region, Upper Yukon Subregion, 2007.....	174
Table 151.—Estimated harvest of eggs, Interior Alaska Region, Upper Yukon Subregion, 2007.	175
Table 152.—Estimated harvest of birds, Upper Copper River Region, 2007.....	176

LIST OF TABLES *continued...*

Table 153.—Estimated harvest of eggs, Upper Copper River Region, 2007.	177
Table 154.—Household participation rates, 2004–2007.	178

LIST OF FIGURES

Figure 1.—Regions and subregions of the AMBCC migratory bird subsistence harvest survey.	7
Figure 2.—Gulf of Alaska/Cook Inlet and Upper Copper River regions.	8
Figure 3.—Kodiak Archipelago region.	9
Figure 4.—Aleutian/Pribilof Islands region.	10
Figure 5.—Bristol Bay region.	11
Figure 6.—Yukon-Kuskokwim Delta region.	12
Figure 7.—Bering Strait/Norton Sound region.	13
Figure 8.—Northwest Arctic region.	14
Figure 9.—North Slope region.	15
Figure 10.—Interior Alaska region.	16
Figure 11.—Southeast Alaska region.	17

LIST OF APPENDICES

Appendix A.—Regions, subregions, and communities surveyed from 2004–2007.	184
Appendix B.—Harvest report forms (~20% of original size).	189
Appendix C.—Species represented in the 3 versions of the harvest report form and their distribution range in Alaska.	192
Appendix D.—Formulas to calculate subregion estimated harvests, variances, and confidence intervals (3-stage stratified cluster sampling).	197
Appendix E.—Formulas to calculate region estimated harvests, variances, and confidence intervals (4-stage stratified sampling).	199

ABSTRACT

This report presents subsistence harvest estimates of migratory birds and their eggs in Alaska for the data years 2004–2007. Data were gathered through the harvest assessment program of the Alaska Migratory Bird Co-Management Council. This program relies on collaboration among the U.S. Fish and Wildlife Service, the Alaska Department of Fish and Game, and a number of regional Alaska Native organizations. Information obtained by this program is used to evaluate federal subsistence harvest regulations, to document customary and traditional uses of migratory birds in Alaska, and to plan for the continued harvest and conservation of birds. Participation in the harvest survey is voluntary at both the village and household levels. The survey covers spring, summer, and fall harvests in most regions. Some regions also have a winter survey. Harvest estimates are based on a stratified clustered sampling. The sample frame encompasses all households in villages eligible for the subsistence harvest of migratory birds and their eggs in Alaska. Households are the primary sampling unit and villages are the secondary unit. Data at the household level are confidential and are further aggregated to conform to information management protocols. Data at village level are considered sensitive. Clusters of villages (subregions) with similar harvest patterns allow expansion of reported harvests in surveyed villages to nonsurveyed villages in the same subregion. Subregions are grouped within regions, which approximately correspond to the designated migratory bird management regions. Within villages, households are stratified by harvest level. Villages and regions are surveyed on a rotating schedule based on monitoring priorities and budget constraints.

Key words: Alaska Migratory Bird Co-Management Council, AMBCC, migratory birds, migratory bird eggs, subsistence harvest, subsistence hunting, subsistence harvest estimates, ducks, geese, swans, cranes, grouse, seabirds, shorebirds, grebes, loons.

INTRODUCTION

AMBCC SUBSISTENCE HARVEST ASSESSMENT PROGRAM

In 1918, Canada and the United States ratified the Migratory Bird Treaty Act (the treaty) to protect wild bird populations. The treaty later included agreements with Mexico, Japan, and Russia. The treaty set provisions to protect migratory bird populations, including an annual hunting season closure from March 10 to September 1. However, this provision failed to provide for the harvest of migratory birds by northern peoples of Alaska and Canada in spring and summer; these harvests have been historically necessary to their subsistence way of life. Despite the closure, customary and traditional hunting of migratory birds in spring and summer continued.

In 1997, the U.S. Congress authorized an amendment to the treaty that legally recognized the traditional spring and summer subsistence harvests of migratory birds by northern peoples of Alaska and Canada. The goal of the amendment was to promote conservation of migratory birds by including subsistence hunting in the regulatory process. This amendment authorized the U.S. Fish and Wildlife Service (USFWS) to open regulated spring and summer subsistence hunts of migratory birds in Alaska. The treaty amendment also mandated that Alaska's indigenous inhabitants play a meaningful role in migratory bird conservation by participating in relevant management bodies. As a result of this direction, the Alaska Migratory Bird Co-Management Council (AMBCC) was formed. The AMBCC is composed of representatives from the USFWS, Alaska Department of Fish and Game (ADF&G), and regional Alaska Native entities (CFR vol. 65, No. 60, pp. 16405–16409, March 28, 2000). The AMBCC first met in October 2000, at which time they discussed the assessment of spring–summer subsistence harvests, important for describing traditional historical uses of migratory birds as well as their levels of harvest. Harvest monitoring is also particularly important to meet the intentions of the amended treaty: 1) subsistence harvests generally should remain at traditional levels, relative to bird population sizes; 2) subsistence data should be integrated with flyway and national harvest management programs; and 3) regulatory processes for all migratory bird hunting should be inclusive to users and responsive to conservation needs. The AMBCC found the available harvest data insufficient to properly address management issues, and formed the Subsistence Harvest Survey Committee. This group of Alaska agency staff, regional partners, and consultants was charged with designing a statewide migratory bird subsistence harvest survey to assess the magnitude and composition of subsistence harvests.

A comprehensive statewide harvest survey protocol (AMBCC 2003) was designed based on the harvest surveys conducted in the context of a goose management plan (Pamplin 1986; Zavaleta 1999) for the Bristol Bay (Seim and Wentworth 1996; Wentworth 2007a), Yukon–Kuskokwim delta (Wentworth and Seim 1996; Wentworth 1998, 2004, 2007b), and Bering Strait areas (Kawerak Inc. 2004), as well as on elements of the USFWS Harvest Information Program (HIP), which assesses sport harvests of selected migratory bird species. The AMBCC subsistence harvest assessment program was to begin with the first open spring–summer subsistence season in 2003, but delays in survey approval and other procedural problems prevented harvest data collection and the survey was first implemented in 2004. However, the subsistence harvest survey has not been implemented to full performance standards, due primarily to inadequate funding of the survey program; the budget has been 40–50% short every year, and it has not been adjusted for inflation. Consequently, cost-cutting measures have resulted in reduced sampling efforts

and limited resources for village outreach as well as surveyor and field-coordinator training. In 2005, the Harvest Survey Committee economized by adopting a regional rotation, and since then only the Yukon–Kuskokwim delta region has been surveyed yearly. Other regions are surveyed approximately every other year, depending on monitoring priorities and budget constraints. The necessity of reduced and rotating survey coverage has significantly impaired the accuracy of harvest estimates and greatly extended the time necessary to detect changes in harvest levels.

In 2007, the AMBCC Harvest Survey Committee asked the ADF&G Division of Subsistence to assess the performance of the original survey design, the effectiveness of the diminished sampling effort, and other operational issues. Based on the survey assessment report (Naves et al. 2008), the AMBCC Subsistence Harvest Survey Committee evaluated problems, considered technical improvements to the survey methods, and collaboratively reformulated an operational plan which will be implemented in 2010. The AMBCC and its Harvest Survey Committee recognize the need to conduct an effective survey that provides timely and accurate harvest information in order to meet treaty obligations, as well as to sustain migratory bird populations and harvest traditions.

AMBCC MEMBER ORGANIZATIONS

The Alaska Migratory Bird Co-Management Council is composed of representatives from:

- U.S. Fish and Wildlife Service;
- Alaska Department of Fish and Game;
- Chugach Regional Resources Commission;
- Sun’aq Tribe of Kodiak;
- Aleutian–Pribilof Islands Association;
- Bristol Bay Native Association;
- Association of Village Council Presidents;
- Kawerak Inc.;
- Maniilaq Association;
- North Slope Borough;
- Tanana Chiefs Conference;
- Copper River Native Association; and
- Southeast Inter-Tribal Fish and Wildlife Commission.

USES OF THE INFORMATION FROM THE SUBSISTENCE HARVEST SURVEY

Harvest estimates from the subsistence harvest survey will be available to the communities (“villages”), Alaska Native organizations, state and federal resource management and conservation agencies, the Pacific Flyway Council, and the general public. Data at the household level are confidential and data at the village level are considered sensitive. Preliminary harvest estimates based on survey data are submitted to Alaska Native regional partners for review before being adopted by the AMBCC. Information from the survey is not to be used for punitive enforcement purposes, nor has this been reported to have happened. Survey data are used to:

- Document the importance of customary and traditional uses of migratory birds by Alaska rural villages so that subsistence uses will be protected and conducted in a sustainable manner;
- Document subsistence harvest trends and track major changes in harvests;
- Assist the USFWS in the evaluation of spring–summer migratory bird harvest regulations; and
- Assist in the development of management plans by state and federal agencies.

METHODS

DATA COLLECTION

Regions, Subregions, Villages

A total of 192 rural villages have been listed within the regions eligible to participate in the subsistence harvest of migratory birds in Alaska (50 CFR, Part 92, Subpart 92.5, Appendix A). According to the Alaska Department of Labor and Workforce Development's year 2007 population estimates, these villages have a total population of approximately 87,000 people in 25,000 households (ADLWD 2009). A census survey to evaluate the subsistence harvests of migratory birds within eligible areas would be impractical and cost prohibitive. Thus, appropriate sampling of regions, subregions, villages, and households is the basis for the calculation of harvest estimates. Data collection from the 2004–2007 survey sometimes deviated from the original survey design (AMBCC 2003; Wentworth 2006) by varying degrees, largely as a result of budget constraints and operational difficulties (Naves et al. 2008).

The sample frame encompasses all households in villages eligible for the subsistence harvest of migratory birds and their eggs in Alaska. The household is the primary sampling unit and the village is the secondary unit. Grouping villages with similar harvest patterns into subregions allows for the expansion of reported harvests from surveyed villages to nonsurveyed villages in the same subregion. The subregions are grouped into regions, which approximately correspond to the 12 designated migratory bird management regions (figures 1–11) (CFR vol. 68, No. 139, pp. 43010–43030, July 21, 2003). The survey, however, covers only 10 of these regions—the Gulf of Alaska and Cook Inlet regions were combined because of their small numbers of eligible villages, and the Southeast Alaska region was not surveyed. The original survey protocol listed 32 subregions within the 10 regions (Wentworth 2006). Subregions in the Bristol Bay and Interior Alaska regions were revised by the AMBCC Harvest Survey Committee in 2009, which resulted in a total of 29 subregions (Appendix A). Data analysis for this report was based on this revised configuration of subregions so that future results will be comparable.

Rotation of regions based on monitoring priorities has been implemented as a cost reduction measure (Table 1). Two-thirds of the villages in each surveyed region are to be sampled every year (Reynolds 2007). Regional hub villages (Bethel, Dillingham, Kotzebue, Barrow, Nome, Kodiak, Unalaska, and Tok) are to be surveyed each year that their region is surveyed because these larger villages may have different harvest patterns (e.g., fewer harvesters and lower harvests per hunter) than the smaller villages. However, coverage of regions has occasionally been incomplete because of difficulties related to funding and to field operations.

The following organizations participated in data collection from 2004 through 2007:

- Gulf of Alaska–Cook Inlet region: ADF&G Division of Subsistence, Port Graham Village Council;
- Kodiak Archipelago region: Kodiak Area Native Association, Kodiak National Wildlife Refuge, ADF&G Division of Subsistence;
- Aleutian–Pribilof Islands region: Aleut Marine Mammal Commission, ADF&G Division of Subsistence;
- Bristol Bay region: Bristol Bay Native Association;

- Yukon–Kuskokwim delta region: Yukon Delta National Wildlife Refuge, Togiak National Wildlife Refuge, ADF&G Division of Subsistence;
- Bering Strait–Norton Sound: Kawerak Inc.;
- Northwest Arctic: Maniilaq Association, Selawik National Wildlife Refuge;
- North Slope region: North Slope Borough;
- Interior Alaska: Innoko National Wildlife Refuge, Kanuti National Wildlife Refuge, Koyukuk National Wildlife Refuge, Yukon Flats National Wildlife Refuge, ADF&G Division of Subsistence; and
- Upper Copper River region: Cheesh-na Tribal Council. Assist in the development of management plans by state and federal agencies. Regions surveyed from 2004–2007.

Table 1.–Regions surveyed from 2004–2007.

Regions	2004	2005	2006	2007
Gulf of Alaska/Cook Inlet	•	•	•	
Kodiak Archipelago			•	
Aleutian/Pribilof Islands		•		•
Bristol Bay	•	•	•	•
Yukon–Kuskokwim Delta	•	•	•	•
Bering Strait/Norton Sound	•	•		•
Northwest Arctic			•	
North Slope		•		•
Interior Alaska	•	•	•	•
Upper Copper River	•			•
Southeast Alaska				

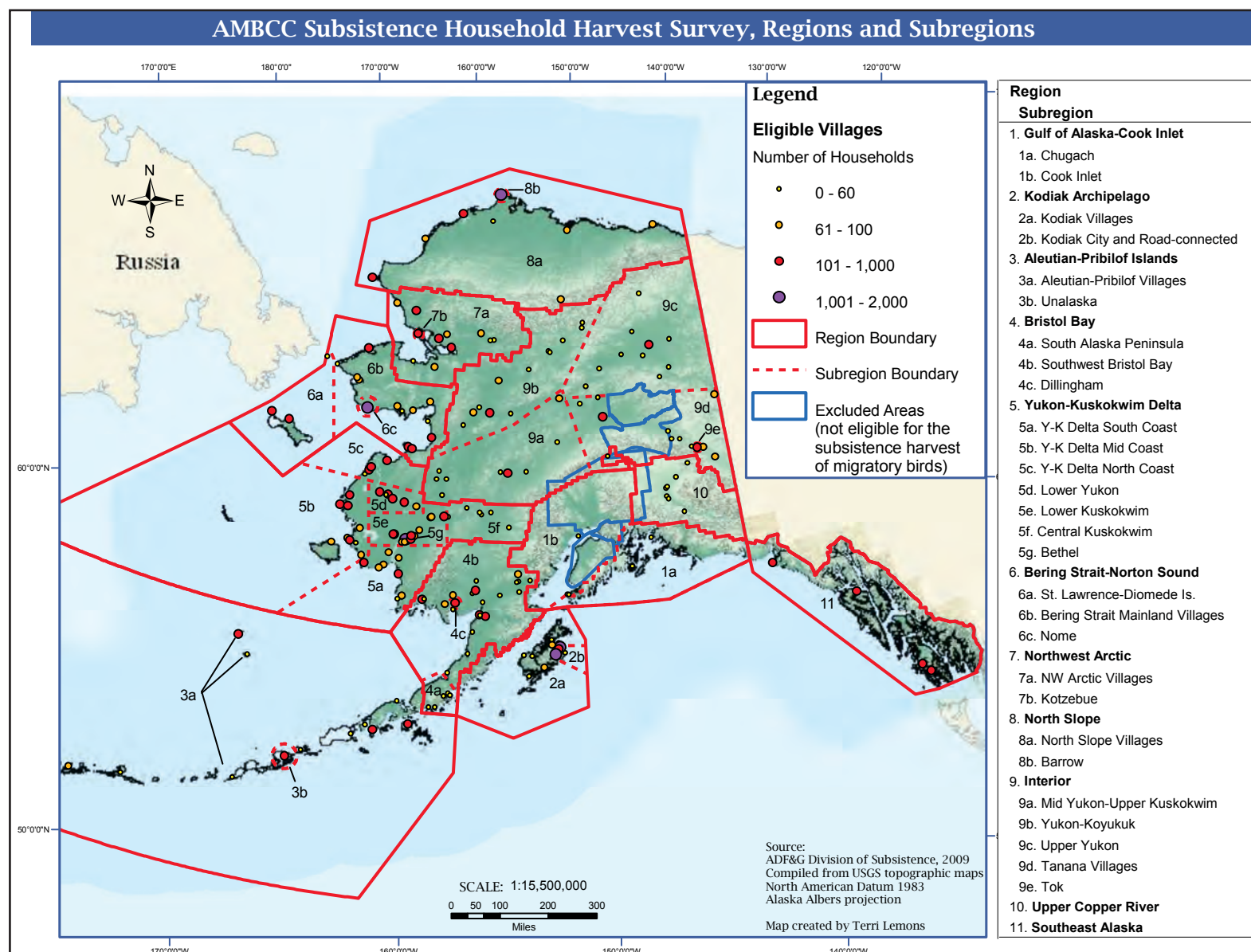


Figure 1.—Regions and subregions of the AMBCC migratory bird subsistence harvest survey.

AMBCC SUBSISTENCE HOUSEHOLD HARVEST SURVEY, GULF OF ALASKA- COOK INLET AND UPPER COPPER RIVER

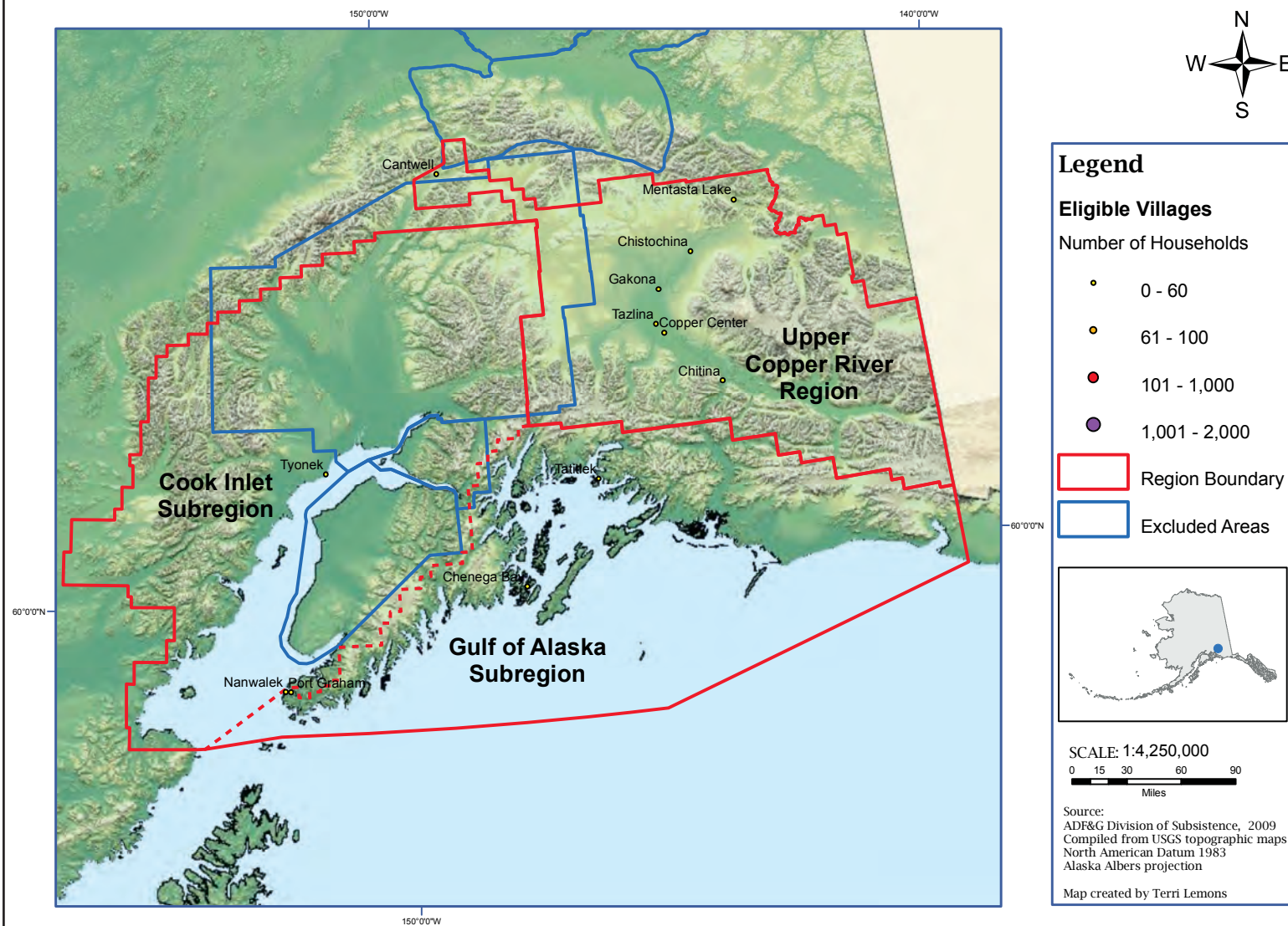


Figure 2.—Gulf of Alaska/Cook Inlet and Upper Copper River regions.

AMBCC SUBSISTENCE HOUSEHOLD HARVEST SURVEY, KODIAK ARCHIPELAGO

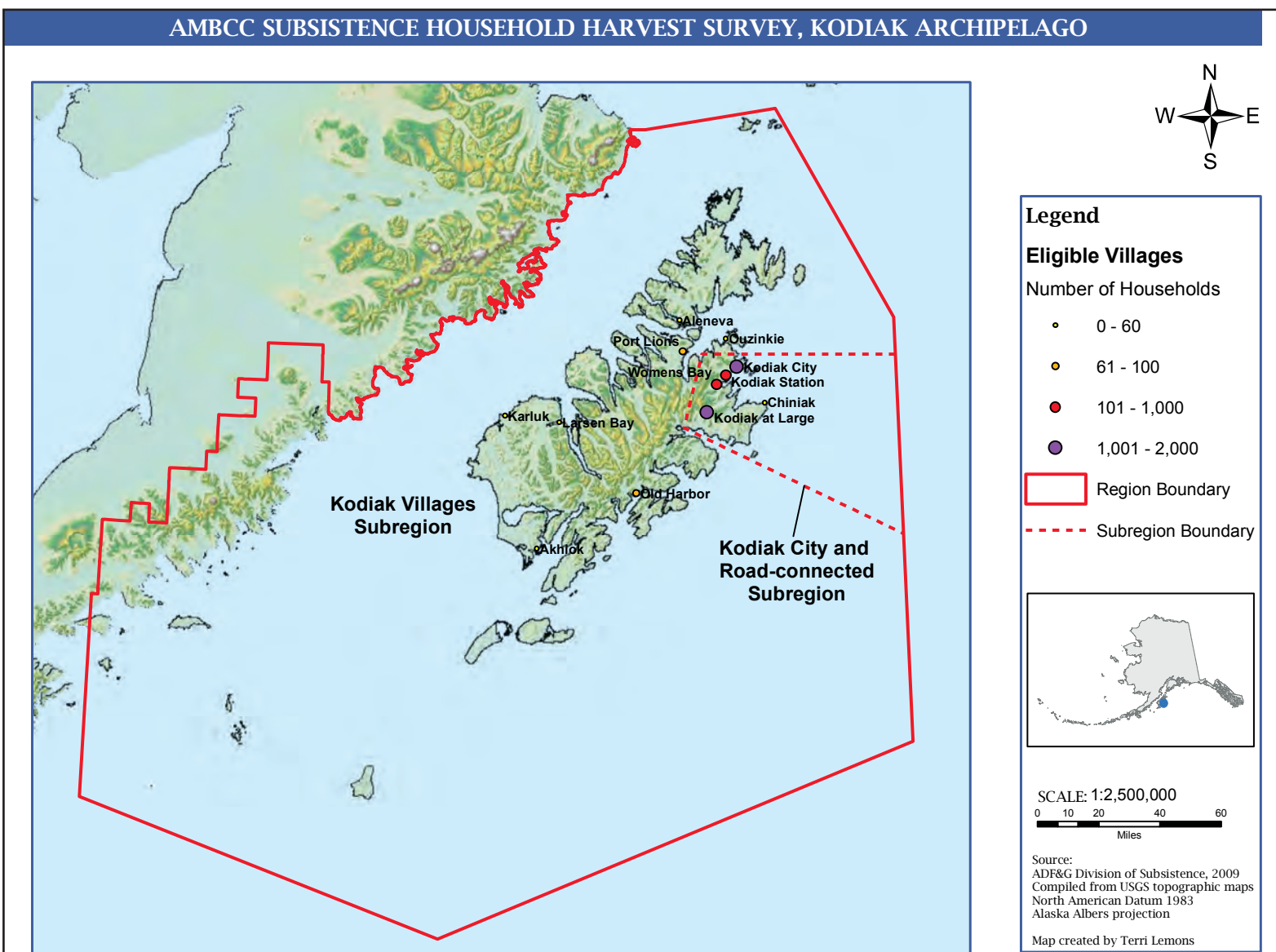


Figure 3.—Kodiak Archipelago region.

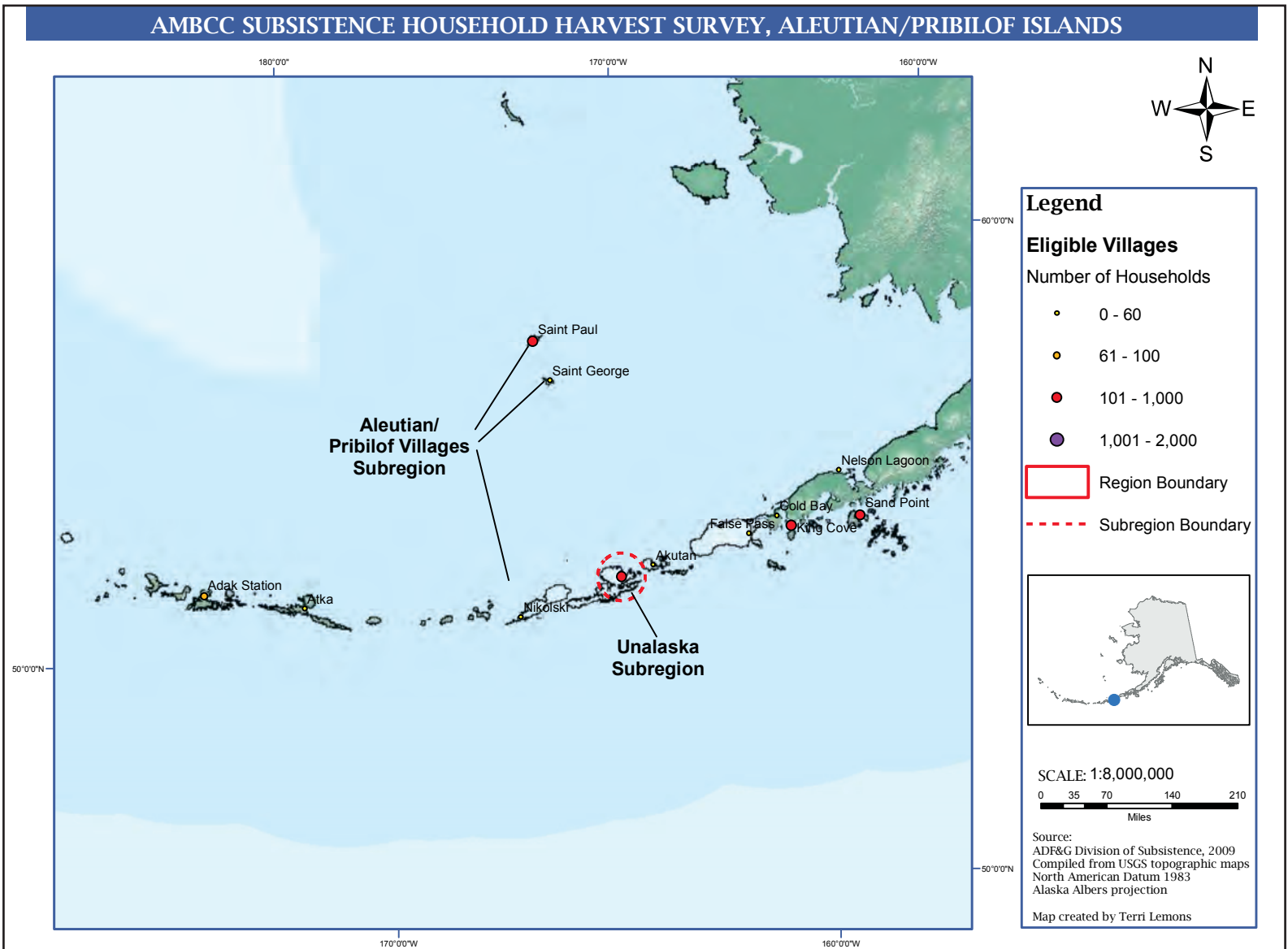


Figure 4.—Aleutian/Pribilof Islands region.

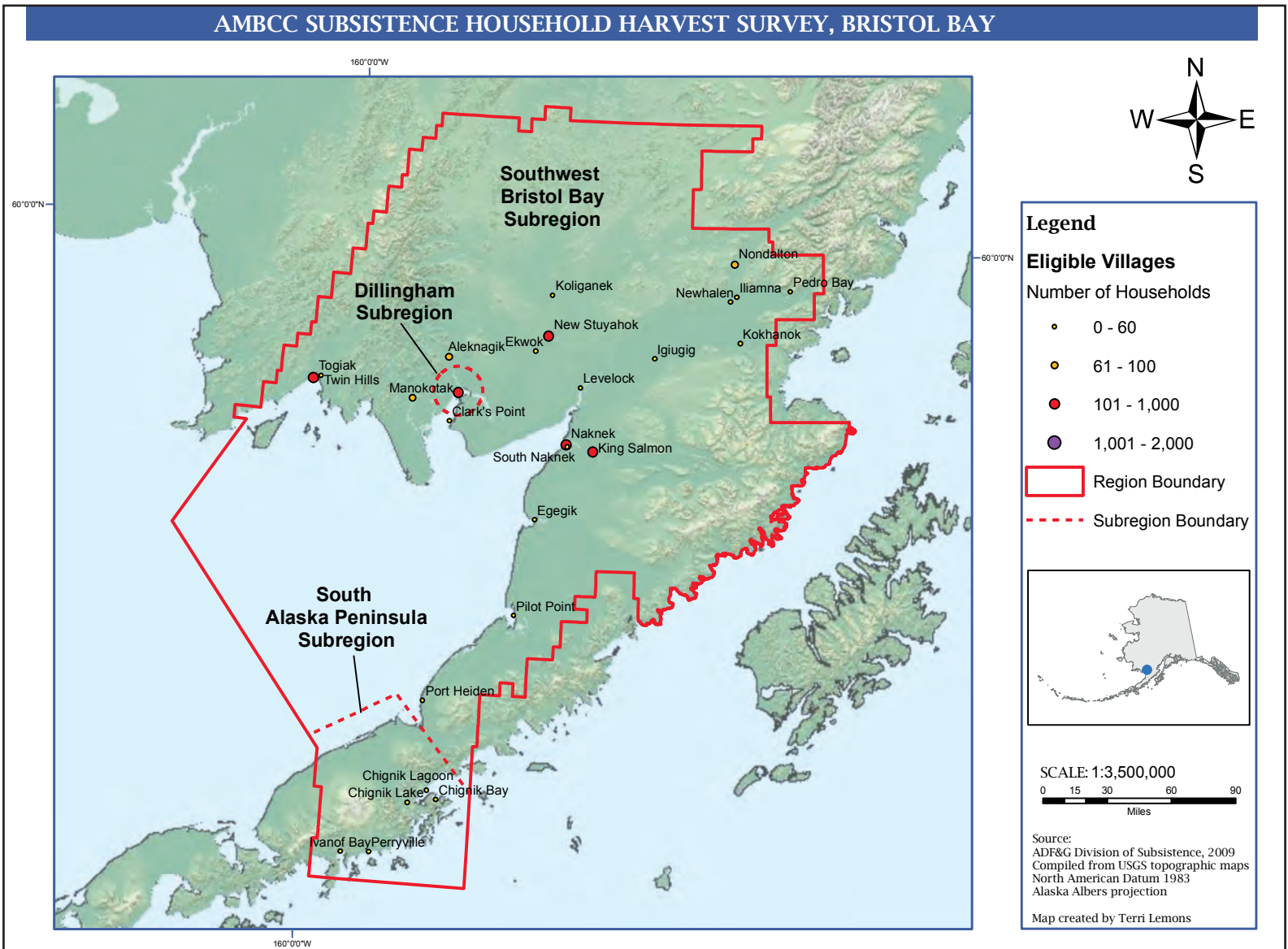


Figure 5.—Bristol Bay region.

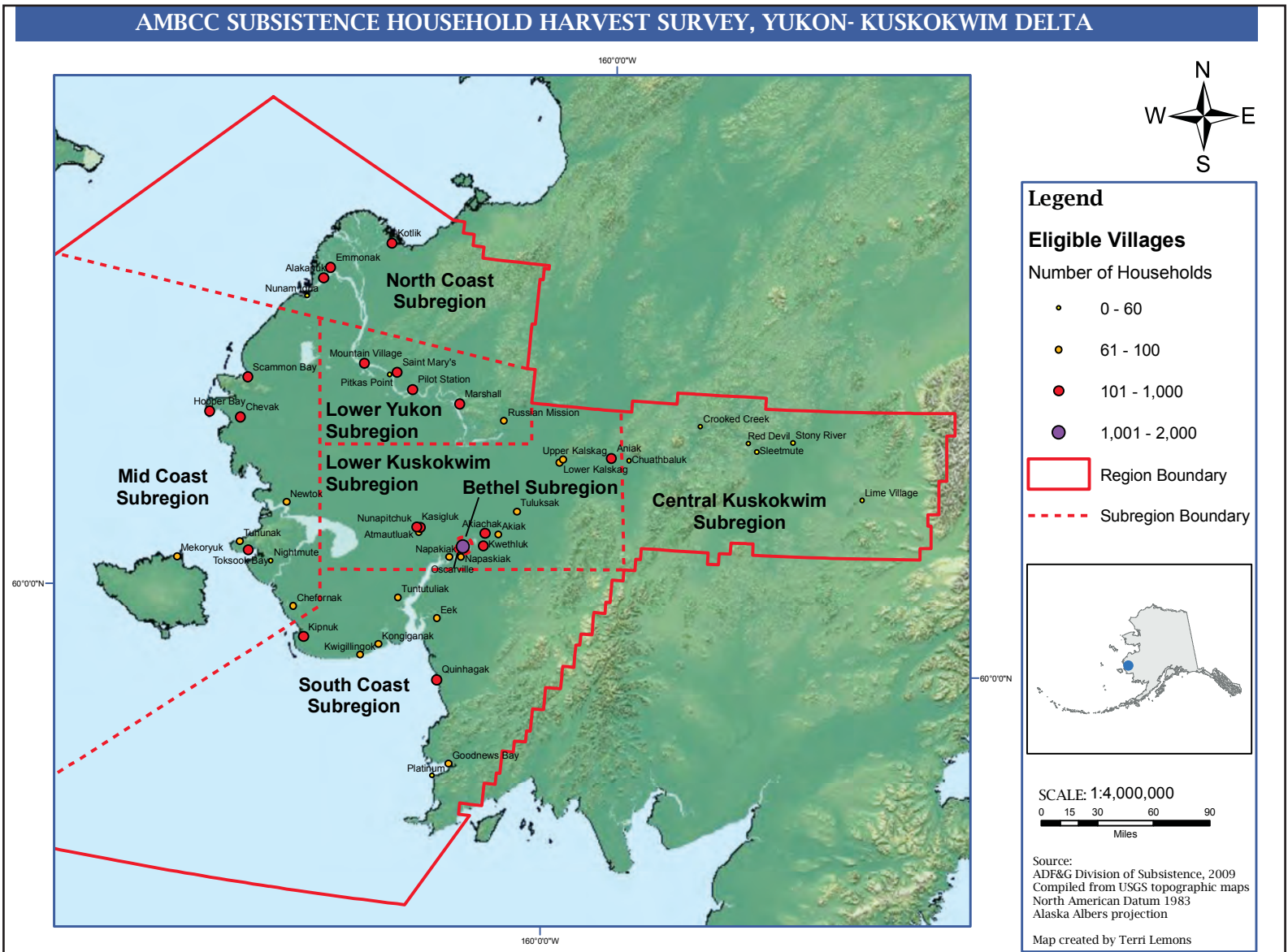


Figure 6.—Yukon-Kuskokwim Delta region.

AMBCC SUBSISTENCE HOUSEHOLD HARVEST SURVEY, BERING STRAIT- NORTON SOUND

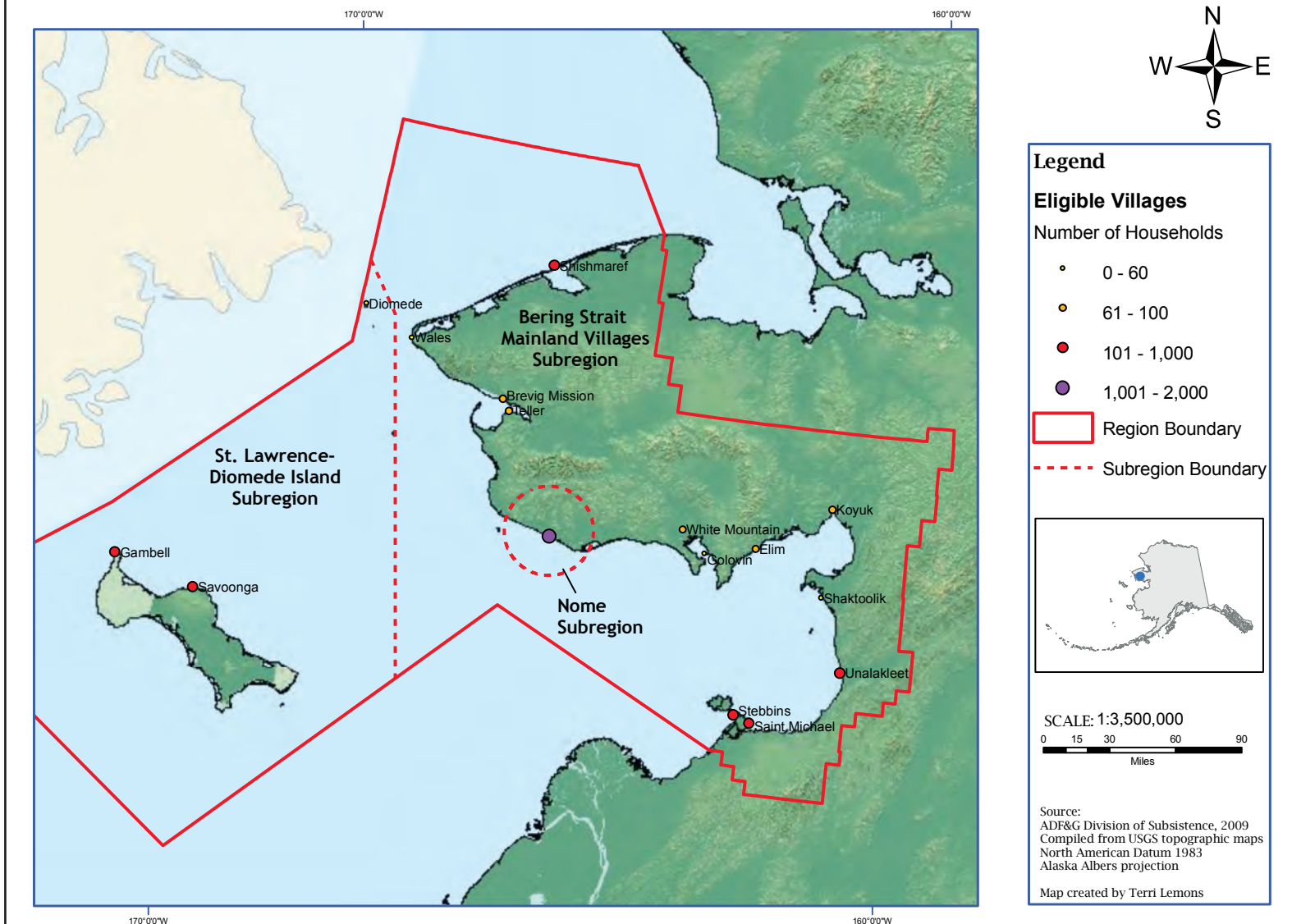


Figure 7.—Bering Strait/Norton Sound region.

AMBCC SUBSISTENCE HOUSEHOLD HARVEST SURVEY, NORTHWEST ARCTIC

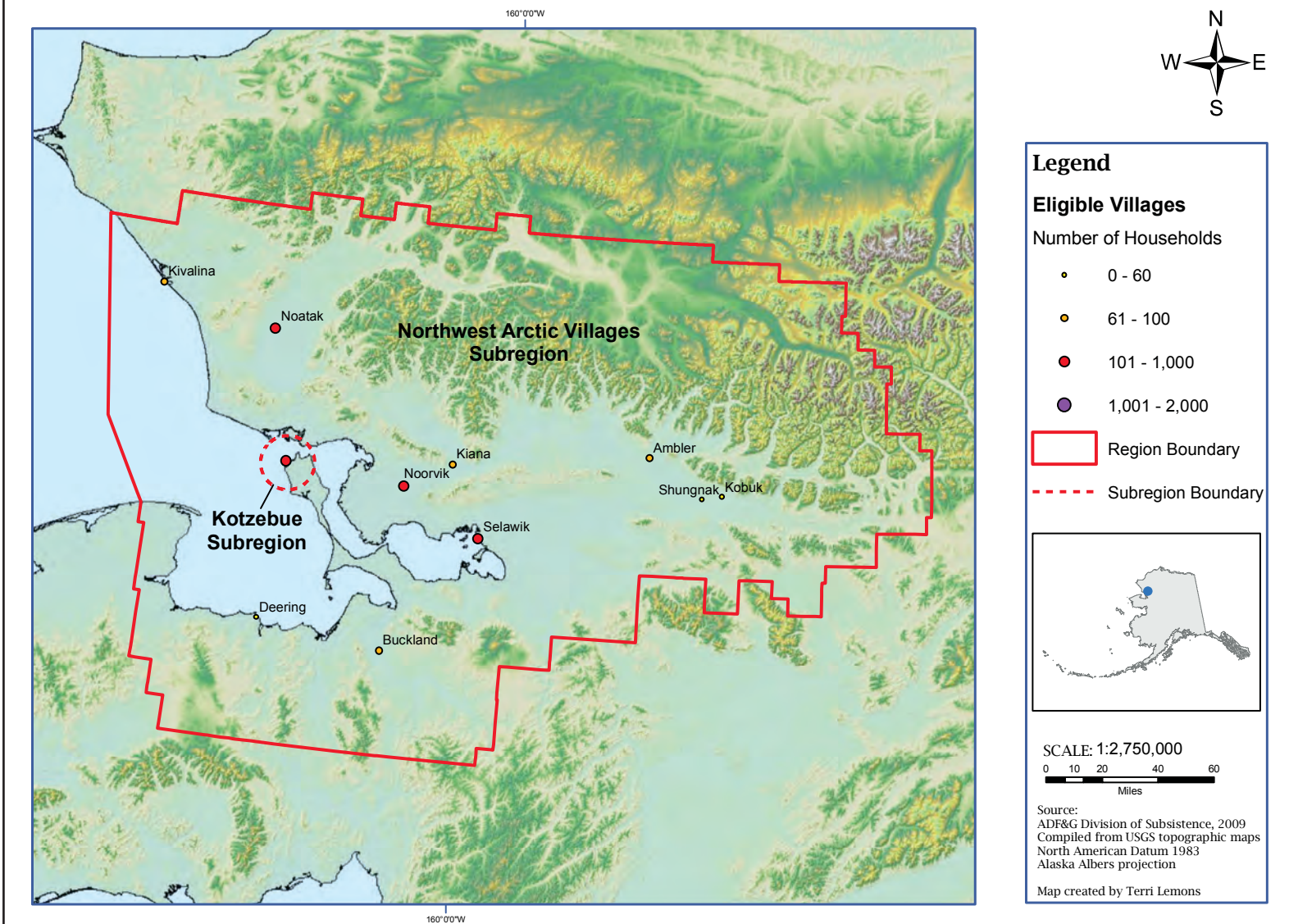


Figure 8.–Northwest Arctic region.

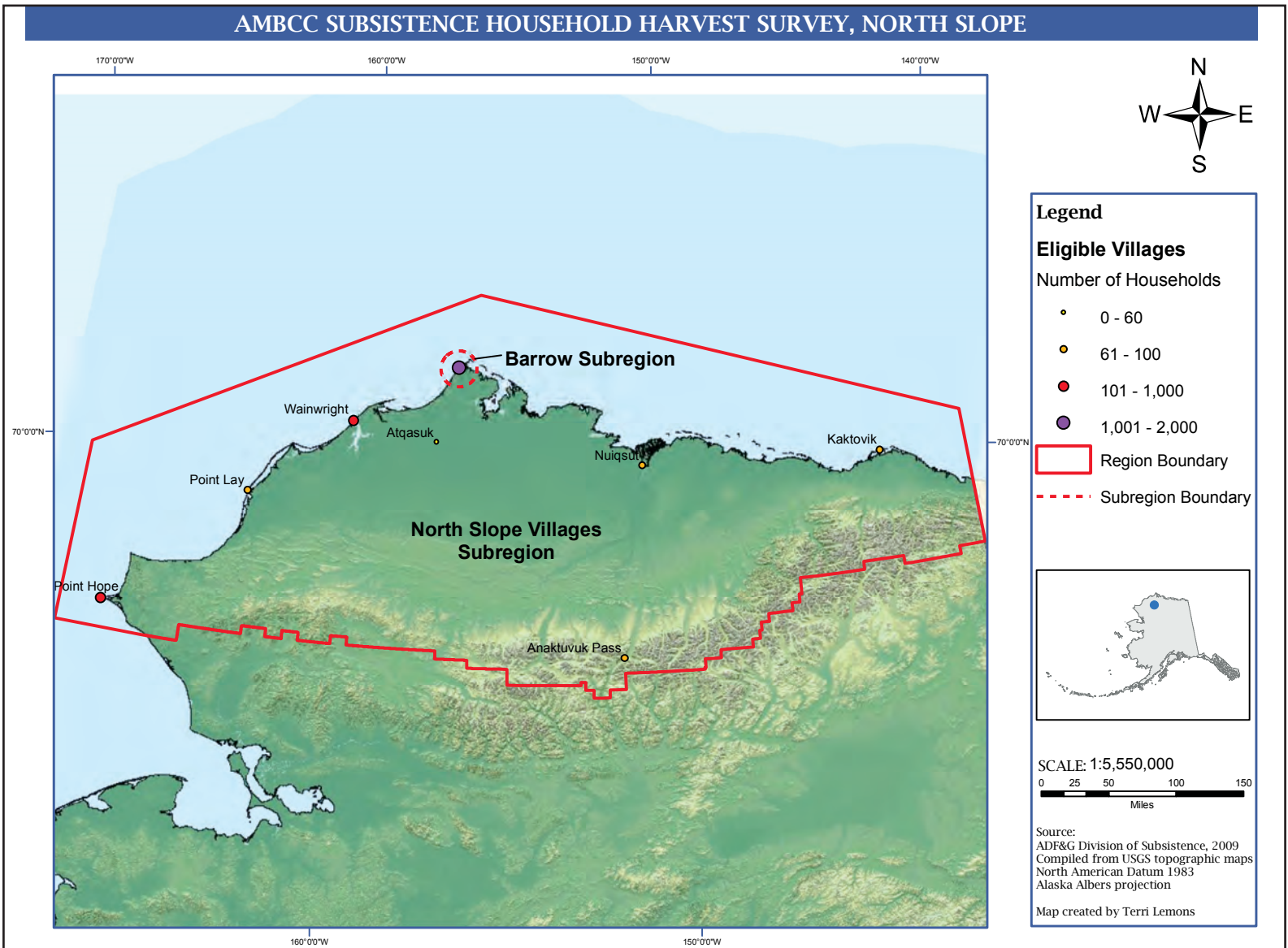


Figure 9.—North Slope region.

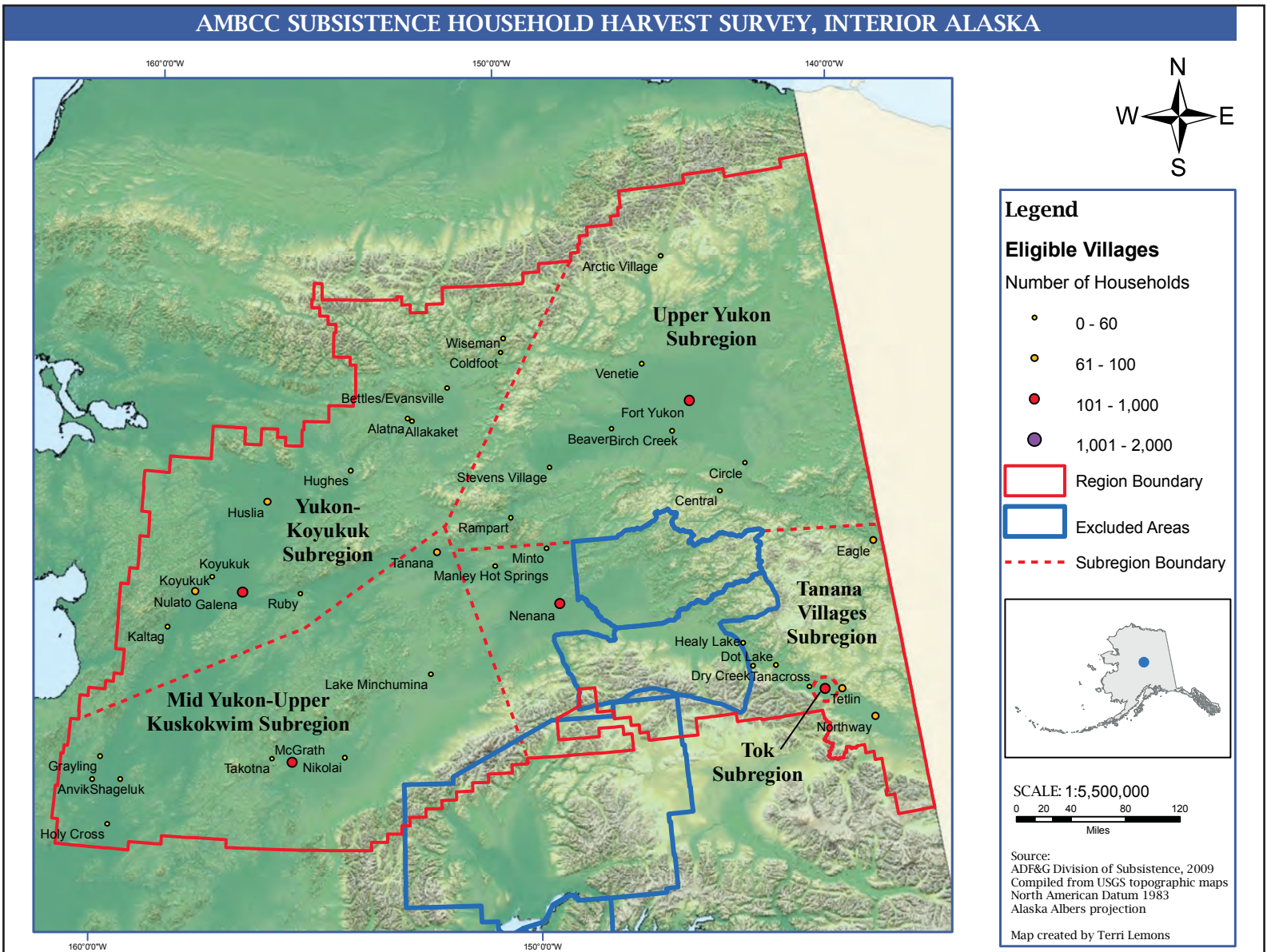


Figure 10.—Interior Alaska region.

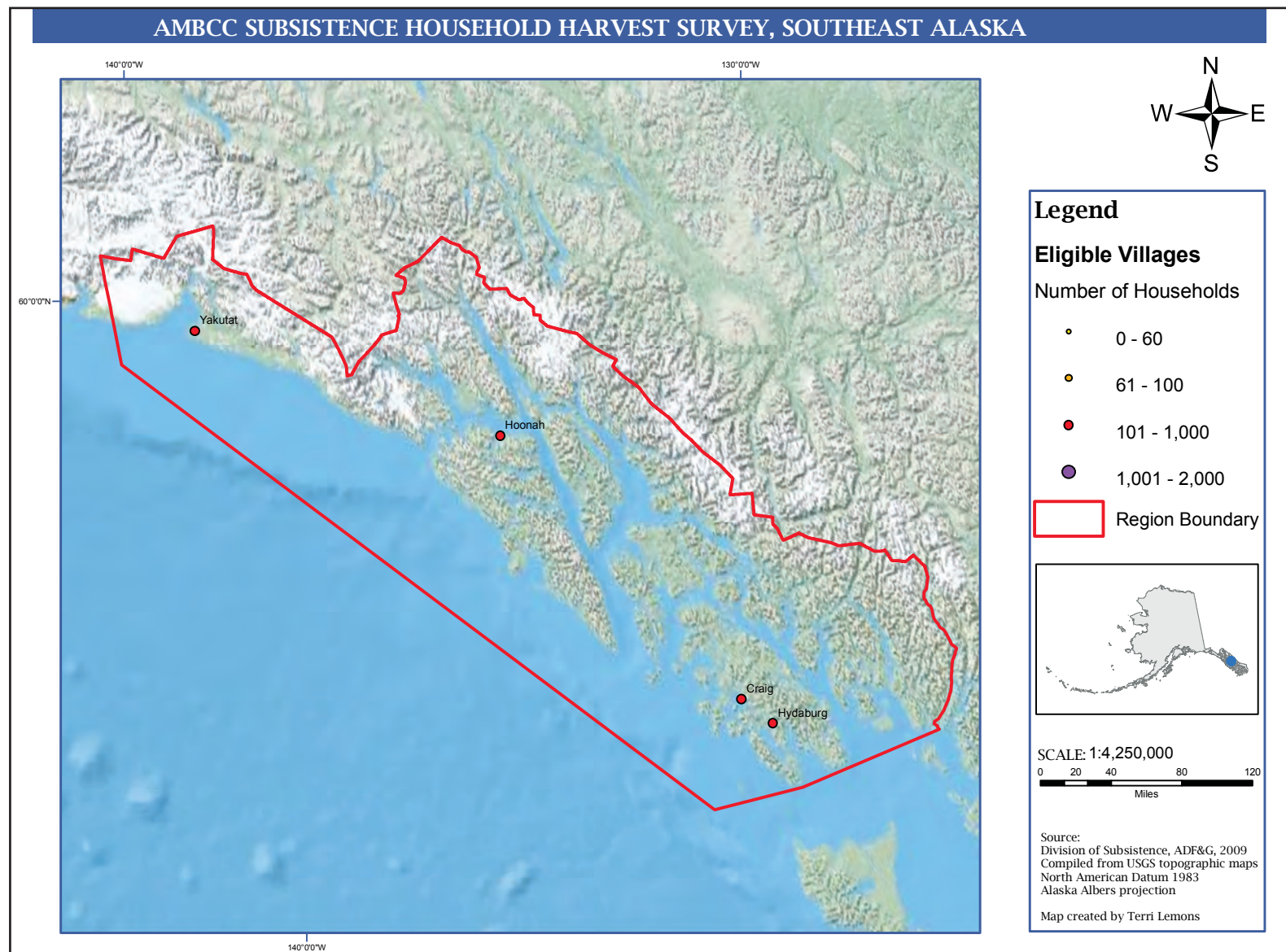


Figure 11.—Southeast Alaska region.

Sampling Methods

The original survey design called for a 3-level stratified sampling (“none, low, high”) of survey households within a village and the evaluation of this sampling method once sufficient statewide data were accumulated (AMBCC 2003; Wentworth 2006). Eligible villages across the state vary from a few households in size to about 2,000 households. Variations in village size led to the application of other sampling methods (Naves et al. 2008).

The current precision goal of the subsistence harvest survey is to provide results comparable to the HIP sport hunting monitoring program—95% confidence intervals within 10% of the estimated harvest. However, there are difficulties in comparing confidence intervals from these 2 surveys: 1) HIP currently does not report confidence intervals for harvest estimates of individual species, 2) some species harvested for subsistence uses are not included in the HIP survey, and 3) different sport and subsistence hunting patterns may have different effects on the precision of harvest estimates.

The subsistence harvest survey covers a large geographic area and a large number of species. Some species are abundant and harvested in large numbers. Other species are harvested only occasionally because they have small populations, restricted distribution, or are not used for subsistence purposes. “Wide coverage” harvest assessment programs cannot address both commonly- and rarely-harvested species with the same level of precision. After the publication of the first spring–summer subsistence harvest regulations in 2003, the public, along with resource managers, expressed strong interest in subsistence takes of nongame bird species, which are sometimes harvested, and in relatively low numbers. Dedicated harvest surveys and studies are required to determine the harvests of species that have small populations, low densities, or limited distributions, and that are less likely to be precisely documented in the statewide subsistence harvest survey.

“None, Low, High” Stratification

The survey relies on a village household list that includes all “resident” households. A household is considered resident if its members live in the village year-round and have lived in the village for at least the 12 previous months. The list of resident households does not include unoccupied dwellings, commercial buildings, and public buildings. Prior to the survey, the surveyor classifies the resident households, according to their general harvest patterns, into only 1 of 3 harvest level strata: “none” (0 birds), “low” (1–10 birds), and “high” (10+ birds). The surveyor then draws a random sample from each harvest level so that 10% of all households in the “none,” 15% of households in the “low,” and 40% in the “high” stratum are sampled.

Census: 100% sampling

Sampling by census (100% sampling) is usually attempted in small villages (up to about 40 households) because of difficulties in implementing 3-level stratification with a small total number of households.

Simple Random Sampling

Random selection of households without harvest level stratification is also used occasionally. Also, if a census has been attempted but some households could not be contacted, sampling is treated as a simple random sampling.

“Harvester, Other” Stratification

In some cases, expansion of reported harvests is based on a 2-level stratification of “harvester, other.” “Harvester” includes all harvester households (“low” and “high” strata in 3-level stratification) and “other” includes nonharvester households (“none” stratum) as well as nonlisted households (“unknown” households). Three-level stratification of “none, low, high” is difficult to implement in large villages because 1) surveyors frequently do not know the general harvest patterns of all households, 2) large rural villages frequently have large turnovers in their populations, and 3) household lists for large villages often do not represent all resident households. It is difficult and costly to keep updated household lists of large villages. In the case of an incomplete household list, it would be inappropriate to assume that sampling of large villages approached a simple random sampling. Most likely, the households included in the household list were harvesters as opposed to nonharvesters, because field coordinator and surveyor training emphasized the importance of surveying a higher proportion of high harvesters (Wentworth 2006). Also, locally hired surveyors were more likely to be familiar with Alaska Native households. Therefore, as of 2008, the “harvester, other” stratification has been adopted for sampling large villages.

The Survey Year and Survey Seasons

As stated earlier, the primary goal of the survey is to document spring–summer subsistence harvests under subsistence regulations. Although open seasons vary on an annual basis according to subsistence harvest regulations, for purposes of this survey, the “survey year” is April 1 through October 31 in most regions, except in Southern Coastal Alaska (the Aleutian–Pribilof Islands, Kodiak Archipelago, Gulf of Alaska–Cook Inlet, and the South Alaska Peninsula of Bristol Bay), where the survey year ends on March 9. The “survey season” refers to the timing and frequency of collection of harvest data. There are 3 survey seasons (or recall periods): spring, summer, and fall or fall–winter (Table 2). The fall (after September 1) migratory bird hunts are managed under early season frameworks in federal regulations selected and adopted as state regulations. Harvests from fall hunts should be captured by the HIP survey; however, the HIP survey is most likely ineffective in documenting fall subsistence harvests in rural Alaska because of low hunter participation in the HIP program. For this reason, the AMBCC subsistence harvest survey also covers fall or fall–winter.

Table 2.–Seasonal survey coverage and household visits.

Region	Spring <i>1 Apr–30 Jun</i>			Summer <i>1 Jul–31 Aug</i>		Fall <i>1 Sep–31 Oct</i>		Winter <i>1 Nov–9 Mar</i>				
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Gulf of Alaska/Cook Inlet	•	•	•	•	•	•	•	•	•	•	•	•
Kodiak Archipelago	•	•	•	•	•	•	•	•	•	•	•	•
Aleutian/Pribilof Islands	•	•	•	•	•	•	•	•	•	•	•	•
South Alaska Peninsula (Bristol Bay)	•	•	•	•	•	•	•	•	•	•	•	•
Bristol Bay (except South Alaska Peninsula)	•	•	•	•	•	•	•					
Yukon–Kuskokwim Delta	•	•	•	•	•	•	•					
Bering Strait/Norton Sound	•	•	•	•	•	•	•					
Northwest Arctic	•	•	•	•	•	•	•					
North Slope	•	•	•	•	•							
Interior Alaska	•	•	•	•	•	•	•					
Upper Copper River	•	•	•	•	•	•	•					

The harvest report form is composed of 3 pages, 1 page for each season. As in the original survey protocol, surveyors make 4 visits to each participating household during a survey year (Wentworth 2006). In April, surveyors distribute survey forms to participating households. After the end of each survey season, surveyors visit each participating household to collect the appropriate page of the survey form (Table 2).

The intent of designing 3 survey recall periods is to help respondents more accurately recall the number and species of birds and eggs they harvest, given the large number of species included on the survey. Increasing the length of the recall period may increase recall bias (Westat Inc. 1989). However, difficulties with survey funding and field operations have prevented seasonal collection of harvest data as originally scheduled. A large proportion of surveys have been done with a single household visit at the end of the survey year (Naves et al. 2008).

Village and Household Consent

The survey is conducted only in villages and households that have agreed to participate. Village consent must be granted in writing, and is often given as a tribal or village council resolution. Individual household consent is documented with permission slips, which also allow calculation of household participation rates. During the first visit to each selected household, the surveyor explains the purpose of the survey to an adult household member, explains how the survey works, and invites the household to participate.

No Contact and Refusals

If after 3 reasonable attempts the surveyor cannot contact a selected household, or if a selected household declines to participate, then an alternate household is selected to replace it. If stratification is used, the alternate household must be at the same harvest level as the no contact–no consent household.

Reporting Harvests

The harvest report form is used to record the subsistence harvest of migratory birds and their eggs (Appendix B). Due to the variation in the availability and distribution of bird species, there are 3 versions of the harvest report form, each with a different set of species. The versions are for Interior Alaska, Southern Coastal Alaska, and the remaining villages (Appendix C). This helps to prevent mistakenly recording bird species as harvested in areas where they do not normally occur.

The harvest report form has 1 sheet for each survey season (spring, summer, and fall or fall–winter). For regions with a winter survey, fall and winter harvest data are collected with a fall–winter form, and cannot be identified by each season individually. Each sheet has color illustrations of bird species in breeding plumage and fields to record the total number of birds harvested and the total number of eggs harvested.

If a household harvests birds or eggs and gives them to another household, the harvest is to be recorded by the household that originally harvested the birds–eggs, and not by the household that received them. If a household does not harvest birds–eggs, any birds or eggs they receive are not to be recorded on their survey form.

Species Represented on the Harvest Report Form

The diverse subsistence cultures and economies across Alaska use a wide variety of migratory bird species, subject to seasonal availability, hunter access, and local traditions. The 2003 federal subsistence regulations allowed spring–summer harvest of about 90 species and subspecies of migratory birds, subject to seasons and restrictions (CFR vol. 68, No. 139, pp. 43010–43030, July

21, 2003). The harvest report form depicts about 50 species. The survey form was designed to record harvests of only those species that are significant to subsistence uses. Harvest of species not represented in the survey form can be reported in the “other bird” field. Identifying birds by subspecies can be difficult and it may be difficult to tell some species from others. The survey form does not differentiate between species and subspecies that are difficult to tell apart. To represent all species open to harvest on the survey forms would also result in an unwieldy, long survey.

Some bird species and eggs that are closed to harvest are depicted on the survey form. The inclusion of species closed to harvest on the survey form is not an endorsement of, nor consent to engage in, the harvest of closed species. Rather, it is an attempt to collect accurate harvest data to aid in the sustainable management of all bird species. Management and conservation bodies, such as the AMBCC, the USFWS, and the flyway councils, need to know the numbers of birds and eggs taken to successfully plan for the sustainable management of bird populations. In order to elicit accurate answers to potentially sensitive questions, it is imperative that information from the survey is not used for punitive enforcement. To aid in this effort, identification of households is strictly confidential. The list of birds and eggs closed to subsistence harvest varies between areas according to the yearly hunting regulations.

Data Transfer

The surveyor is required to check returned survey forms for completeness and correctness before sending them to the field coordinator. Upon receiving each batch of completed forms from surveyors, the field coordinator then organizes and reviews all survey materials before sending them to the survey coordinator. This step allows field coordinators to correct potential inconsistencies in data collection and to manage surveyor payment.

Data Management and Reporting

Data management and archiving is completed by the Information Management Unit of the ADF&G Division of Subsistence. The survey coordinator works closely with the unit to produce and report harvest estimates.

Data are entered in Microsoft Office Access 2003¹ forms that are designed to mimic survey forms. The multiyear raw data are stored in a Microsoft SQL Server 2005 relational database and backups occur on a monthly basis. The structure of the database is documented in appropriate metadata. Double data entry and logical checks help ensure the accuracy of the information stored in the database and of the sampling information provided with completed survey forms (e.g., sampling method used, sample sizes, strata size). Logical checks and data analysis are done with SPSS Statistics 2008.

Original survey forms are scanned and archived as digital files. Archived survey materials do not include household names or other personal information in order to ensure confidentiality of household harvest reports. If household names are inadvertently revealed in the survey forms, the information is obscured prior to archiving.

DATA ANALYSIS

Geographic Scale of Harvest Estimates

Harvest estimates are calculated at the subregional and regional levels. Harvest estimates at the

¹ Product names are given for scientific completeness or because they are established standards for the State of Alaska; they do not constitute product endorsement.

regional level are produced when at least 75% of the households within the region are represented in the sample (see below). Because of issues related to management of species of conservation concern, the North Slope and the Bering Strait–Norton Sound regions have requested harvest estimates to be presented at the regional level only. Appropriate subregional sampling coverage in these 2 regions has supported this method of calculation of regional harvest estimates.

Harvest estimates at the subregional level may vary considerably between years (Table 4 and Table 5). Several factors may be involved:

- Yearly variation in the local abundance of birds;
- Hunter access to productive hunting grounds;
- Yearly variation in hunting effort associated with availability of other subsistence resources, especially salmon *Oncorhynchus* and caribou *Rangifer tarandus*, or with temporary employment in the cash economy;
- Inappropriate subregional sampling coverage; and
- Heterogeneity of harvest patterns in villages within a subregion.

To calculate statewide harvest estimates, this large yearly variation in subregional harvest estimates will require analytical approaches that account for variability in harvest between years as well within subregions. Development of accurate statewide estimates may require more years of data as well as appropriate coverage of infrequently surveyed regions, such as the Northwest Arctic and the Kodiak Archipelago. For a better understanding of yearly variation in subregional estimates, it is important to continue reporting harvest estimates at the subregional level.

Expansion at the Subregional Level

The subsistence harvest survey employs a stratified, clustered sampling approach (Cochran 1977). Harvest estimates are calculated for each season and the annual estimate is calculated as the sum of seasonal harvests, although there are a few difficulties. For example, one or more seasonal pages of the harvest report form may be missing for individual households. As a consequence, the total number of households or sets of households surveyed in a village can vary by season within the same survey year. Furthermore, seasonal data may be missing for an entire harvest level stratum or for an entire village. For these reasons, absolute sample sizes are specific to each harvest level stratum, each season, and each village. Because calculation of annual harvest estimates and confidence intervals requires an annual sample size, the maximum number of households sampled among seasons is used.

The reported harvest is first expanded in each harvest level stratum and village: harvests reported by households sampled in each stratum are expanded to all households in that stratum. The number of harvest level strata may be 3 (“none, low, high”), or 2 (“harvester, other”), or 1 (census or simple random sampling). Thus during the calculation of this first expansion, expansion factors are specific to each harvest level and season in each village surveyed. The following formula is used for the first expansion:

Estimated harvest at harvest level stratum = sum of harvests reported by all households in a stratum * (number of households sampled in the stratum / total number of households in the stratum).

The mean harvest within the subregion is used as a substitute for missing data at the harvest level and the season. The harvest estimates per year, per village, per season, and per species are calculated as the sum of the estimated harvest at each harvest level stratum.

The second expansion calculation expands estimated harvests in surveyed villages to all villages within the subregion. Because the number of households varies widely between villages within a subregion, this second expansion is calculated using the number of households in surveyed and nonsurveyed villages in a subregion. The following formula is used:

Estimated harvest at subregional level = sum of the estimated harvest in surveyed villages * (number of households in surveyed villages / total number of households in the subregion).

Formulas used to estimate harvests and confidence intervals at the subregional level were based on Cochran (1977) and Bernard et al. (1998) (Appendix D). The formula used to calculate estimated harvests accounts for missing data at each harvest level stratum. However, if seasonal data are missing for all harvest level strata in a village, customized analytical approaches are necessary in order to use mean replacement.

The total number of households in the subregion is calculated as the sum of total households in the surveyed villages plus the estimated village size of the nonsurveyed villages. For surveyed villages, the total number of households represents the number of households resident in the village for at least 12 months and excludes unoccupied dwellings and households that recently moved to the village. The total number of resident households in surveyed villages is provided by the field coordinator as part of the sampling information in the “household list.” Village size estimates are obtained by dividing State of Alaska yearly village population estimates from the Alaska Department of Labor and Workforce Development² by the average household size as reported in the 2000 federal census (U. S. Census Bureau 2001) (village population divided by the number of households).

The total number of households provided by field coordinators and village estimated sizes are compared in order to assess whether household lists are complete. Annual village size as recorded in the Division of Subsistence Community Subsistence Information System³ (CSIS) is also used to assess the completeness of household lists. If these sources yield a discrepancy greater than 30–40% in the number of households, efforts are made to contact the field coordinator and obtain local information on village size, such as from lists held by tribal councils. If local information on village size cannot be obtained, CSIS information or estimated village sizes are used in harvest expansions.

Villages for which sampling information is missing (the household list, sampling method, or harvest level strata size are not provided) are not included in the analysis.⁴

Expansion at Regional Level

The third expansion expands the estimated harvest in surveyed subregions to all subregions within a region. Because the number of households in each subregion varies significantly, this third expansion is based on the number of households in both the surveyed and nonsurveyed subregions in a region, and is calculated as follows:

2 <http://almis.labor.state.ak.us/?PAGEID=67&SUBID=171>, accessed June 7, 2009.

3 <http://www.subsistence.adfg.state.ak.us/CSIS>. Hereinafter cited as CSIS.

4 In 2004, this was 12 out of 89 villages surveyed; 6 out of 81 villages surveyed in 2005; 6 out of 68 villages surveyed in 2006; and 7 out of 81 villages surveyed in 2007.

Estimated harvest at regional level = sum of the estimated harvest in surveyed subregions * (number of households in surveyed subregions / total number of households in the region).

Subregional estimates are expanded to the regional level only if at least 75% of the households within the region are represented in the sample (nonsurveyed subregions must not represent more than 25% of the total households in the region). Formulas used to estimate harvest and confidence intervals at the regional level are based on Cochran (1977) and Bernard et al. (1998) (Appendix E). The formula to estimate harvests does account for missing data at the harvest level stratum. However, if seasonal data are missing for a harvest level stratum in a village, customized analytical approaches are necessary in order to use mean replacement.

Conversion of Egg Volume to Numbers of Eggs

Egg harvest is sometimes reported on this survey by volume, such as the number of “5-gallon buckets” or the number of “1-gallon buckets.” Conversion factors for volumes of eggs to numbers of eggs were estimated by comparing the volumes of eggs of wild bird species reported in the *Birds of North America Series* to the volumes of “large” domestic chicken eggs (personal communication, James Magdanz, ADF&G Subsistence Resource Specialist, Kotzebue, Alaska, June 2009). It is known that 48 large chicken eggs (24 oz per dozen, U.S. Department of Agriculture standard) can be arranged in a 1-gallon bucket. This comparison is necessary because eggs of different size and shape arrange differently; i.e., the amount of empty space between eggs is related to the size and shape of the eggs. In the future, actual counts of eggs per gallon should be documented on the egg gathering grounds.

Table 3.—Estimated conversion factors, egg volume to number of eggs.

Species	Number of eggs in 5-gallon bucket	Number of eggs in 1-gallon bucket
Mallard ^a	261	52
Pintail ^b	327	65
Arctic tern ^c	716	143
Mew gull ^d	261	52
Glaucous gull ^e	121	24
Glaucous-winged gull ^f	147	29
Herring gull ^g	147	29
Murre ^h	126	25

Source Personal communication, James Magdanz, ADF&G Subsistence Resource Specialist, Kotzebue, Alaska.

Note Sources for egg volume:
a. Drilling et al. (2002)
b. Austin and Miller (1995)
c. Hatch (2002)
d. Moskoff and Bevier (2002)
e. Gilchrist (2001)
f. Hayward and Verbeek (2008)
g. Pierotti and Good (1994)
h. Ainley et al. (2002)

Reports of Fall Egg Harvest

Harvest reports occasionally include eggs gathered in fall (September 1 through October 31) or fall–winter (September 1 through March 9). However, the nesting period of birds in Alaska is usually only as late as July and there are no records of customary and traditional uses of eggs that have failed to hatch. For these reasons, reports of eggs harvested in fall or fall–winter are considered to be recording inconsistencies in which the surveyor or the household member records the harvest on the wrong seasonal page or in the field reserved for “birds” rather than in the field reserved for “eggs.” Each of these cases are individually assessed and assumed to be harvest of birds in fall or harvest of eggs in spring, based on the harvest patterns of the household and of the village.

Household Participation Rates

Household participation in the survey is voluntary. The original survey method used permission slips to document household participation in the survey. During the first visit, when the surveyor invites each selected household to participate, he or she completes a permission slip for every visited household regardless of whether the household agrees to participate (“yes”) or not (“no”). The following potential issues in the use of these permission slips have been identified:

- Permission slips have not been completed for every household visited;
- Permission slips have been completed incorrectly (“no” could represent “no harvest” or “no contact” rather than “no consent to conduct the survey”); and
- The Information Management unit did not receive all completed permission slips.

Household participation rates at the regional and subregional levels are calculated based on the permission slips available for analysis (see the Results section). Identified instances where “no” could represent “no contact” or “no harvest” rather than “no consent” are not included in the analysis of household participation rate. Household participation rates are calculated as the number of households that agreed to participate in the survey (“yes”) divided by the total number of permission slips available.’

RESULTS

Harvest estimate tables presented in this report include only the bird species represented in the appropriate version of the harvest report form used at each region or subregion (Appendix C). The species categories of “Duck (unidentified)” and “Other/unknown bird” are included in tables only if harvest in these categories is reported.

Information on sampling effort is presented in a footnote to each harvest estimate table. For subregional tables, “sampling effort” refers to the number of villages surveyed and the proportion of subregion households represented in the sample (the number of households in surveyed villages in relation to the total number of households in the subregion). For regional tables, sampling effort refers to the number of villages and of subregions surveyed. Major deviations from survey protocols, such as significantly incomplete geographic coverage or nonstandard village sampling approaches, are also documented in table footnotes.

Regional estimates are not presented if nonsurveyed subregions represented more than 25% of the regional households. If not all subregions were surveyed, regional harvest estimates may be larger than the sum of the surveyed subregions because expanded estimates account for nonsurveyed subregions.

Annual estimates for the total harvests of birds and eggs at the regional and subregional levels are summarized in Table 4 and Table 5. Regional and subregional estimates in these tables indicate that estimates detailed by species are available in the regional and subregional tables that follow. Regional and subregional tables are presented in chronological order: 2004 (tables 6–45), 2005 (tables 46–77), 2006 (tables 78–117), and 2007 (tables 118–153). Within each data year, a regional table precedes the tables for its subregions unless survey coverage was not enough to allow calculation of regional estimates (e.g. Aleutian–Pribilof Islands, 2005 and 2007). Household participation rates for 2004–2007 are presented in Table 154.

Table 4.—Annual harvest estimates, total birds at the subregional and regional levels, 2004–2007. 

Region Sub-Region	2004			2005			2006			2007		
	Number	Confidence Interval		Number	Confidence Interval		Number	Confidence Interval		Number	Confidence Interval	
		95% CI	Low – High		95% CI	Low – High		95% CI	Low – High		95% CI	Low – High
Gulf of Alaska/Cook Inlet	2,995	32%	2,039 – 3,951	**			**			-	-	-
Gulf of Alaska	2,756	17%	2,278 – 3,234	-	-	-	596	42%	343 – 849	-	-	-
Cook Inlet	239	30%	168 – 310	13	57%	5 – 20	-	-	-	-	-	-
Kodiak Archipelago	-	-	-	-	-	-	-	-	-	-	-	-
Kodiak Villages	-	-	-	-	-	-	5,552	28%	3,972 – 7,133	-	-	-
Kodiak City & Road Connected	-	-	-	-	-	-	^a			-	-	-
Aleutian/Pribilof Islands	-	-	-	**			-	-	-	**		
Aleutian/Pribilof Villages	-	-	-	16,876	35%	11,050 – 22,702	-	-	-	(7,371)	(77%)	(1,708 – 13,035)
Unalaska	-	-	-	-	-	-	-	-	-	-	-	-
Bristol Bay	**			47,336	32%	32,026 – 62,645	**			28,285	20%	22,538 – 34,031
South Alaska Peninsula	801	24%	609 – 992	-	-	-	-	-	-	968	50%	488 – 1,449
Southwest Bristol Bay	14,955	10%	13,494 – 16,416	32,769	18%	26,937 – 38,600	(26,715)	(22%)	(20,959 – 32,471)	20,169	15%	17,240 – 23,097
Dillingham	-	-	-	11,769	30%	8,188 – 15,350	-	-	-	7,148	25%	5,395 – 8,901
Yukon-Kuskokwim Delta	130,343	6%	122,107 – 138,578	114,514	8%	105,504 – 123,523	171,856	7%	159,552 – 184,160			
Y-K Delta South Coast	25,764	11%	22,849 – 28,680	35,508	7%	33,144 – 37,873	31,918	8%	29,310 – 34,526	33,927	11%	30,229 – 37,625
Y-K Delta Mid-Coast	34,480	8%	31,870 – 37,090	17,546	11%	15,664 – 19,429	(61,998)	(12%)	(54,306 – 69,689)	43,737	13%	37,837 – 49,638
Y-K Delta North Coast	8,806	17%	7,320 – 10,292	11,206	14%	9,663 – 12,748	4,493	21%	3,545 – 5,440	1,206	31%	829 – 1,584
Lower Yukon	(6,201)	(19%)	(5,012 – 7,390)	6,815	9%	6,206 – 7,424	10,269	12%	9,025 – 11,513	3,988	15%	3,404 – 4,572
Lower Kuskokwim	46,033	15%	39,095 – 52,971	16,557	11%	14,771 – 18,344	48,849	8%	45,095 – 52,604	58,983	7%	54,575 – 63,392
Central Kuskokwim	440	32%	300 – 581	-	-	-	1,167	35%	754 – 1,580	219	79%	46 – 391
Bethel ^c	8,618	17%	7,184 – 10,053	23,954	24%	18,246 – 29,662	13,163	24%	9,969 – 16,357	^b		
Bering Strait/Norton Sound	53,576	8%	49,194 – 57,959	74,115	17%	61,682 – 86,548	-	-	-	123,257	10%	110,419 – 136,094
St. Lawrence/Diomedes Is.	33,600	7%	31,326 – 35,874	30,481	9%	27,876 – 33,087	-	-	-	88,362	8%	81,114 – 95,609
Bering Strait Mainland Villages	17,195	9%	15,567 – 18,822	37,482	18%	30,829 – 44,136	-	-	-	31,169	10%	28,193 – 34,145
Nome	2,782	21%	2,210 – 3,353	6,152	31%	4,234 – 8,069	-	-	-	3,726	37%	2,359 – 5,094
Northwest Arctic	-	-	-	-	-	-	**			-	-	-
Northwest Arctic Villages	-	-	-	-	-	-	9,676	21%	7,631 – 11,722	-	-	-
Kotzebue	-	-	-	-	-	-	-	-	-	-	-	-
North Slope	-	-	-	15,615	11%	13,820 – 17,410	-	-	-	44,270	23%	34,218 – 54,322
North Slope Villages	-	-	-	4,672	12%	4,115 – 5,228	-	-	-	6,118	24%	4,630 – 7,607
Barrow	-	-	-	10,943	10%	9,848 – 12,039	-	-	-	38,152 ^d	15%	32,374 – 43,930
Interior Alaska	50,995	13%	44,216 – 57,774	**			37,068	17%	30,792 – 43,343	**		
Mid-Yukon/Upper Kuskokwim	(3,086)	(43%)	(1,755 – 4,418)	2,744	29%	1,956 – 3,532	697	36%	447 – 948	-	-	-
Yukon/Koyukuk	3,108	18%	2,558 – 3,658	(930)	(44%)	(525 – 1,335)	(1,764)	(60%)	(712 – 2,816)	(3,031)	(72%)	(856 – 5,206)
Upper Yukon	(14,418)	(16%)	(12,095 – 16,742)	-	-	-	10,927	12%	9,576 – 12,277	18,402	14%	15,800 – 21,004
Tanana Villages	20,388	16%	17,197 – 23,579	-	-	-	17,358	14%	14,940 – 19,776	-	-	-
Tok	-	-	-	-	-	-	6,321 ^e	31%	4,385 – 8,258	-	-	-
Upper Copper River^e	1,120	30%	782 – 1,458	-	-	-	-	-	-	247	30%	174 – 321

–: Region/subregion not surveyed. *: 95% CI ≥ 100%. **: Less than 75% of region households represented in sample, harvest estimates not produced at the regional level.
(In parenthesis): Less than 30% of subregion households represented in the sample and/or only 1 out of several subregion villages surveyed.

^a Fall bird harvest data not available for Kodiak City & Road Connected subregion; annual harvest estimates not available.

^b Fall bird harvest data not available for Bethel subregion; annual harvest estimates not available.

^c Bethel harvest expansions assume that harvester households account for 30% of the total village households (village size estimates).

^d Subregional harvest estimates assumed simple random sampling.

^e Sampling and harvest expansions represent Alaska Native households only.

Table 5.—Annual harvest estimates, total bird eggs at the subregional and regional levels, 2004–2007.



Region	2004			2005			2006			2007		
	Number	Confidence Interval		Number	Confidence Interval		Number	Confidence Interval		Number	Confidence Interval	
		95% CI	Low – High		95% CI	Low – High		95% CI	Low – High		95% CI	Low – High
Gulf of Alaska/Cook Inlet	2,178	17%	1,801 – 2,556	**			**			-	-	-
Gulf of Alaska	2,173	24%	1,652 – 2,694	-	-	-	102	115%	* – 220	-	-	-
Cook Inlet	5	75%	1 – 9	0	***		-	-	-	-	-	-
Kodiak Archipelago	-	-	-	-	-	-	5,222	73%	1,403 – 9,041	-	-	-
Kodiak Villages	-	-	-	-	-	-	4,545	56%	2,010 – 7,079	-	-	-
Kodiak City & Road Connected	-	-	-	-	-	-	(677 ^a)	(41%)	(401) – (953)	-	-	-
Aleutian/Pribilof Islands	-	-	-	**			-	-	-	**		
Aleutian/Pribilof Villages	-	-	-	11,733	38%	7,251 – 16,215	-	-	-	6,127	74%	1,590 – 10,664
Unalaska	-	-	-	-	-	-	-	-	-	-	-	-
Bristol Bay	**			47,799	35%	31,274 – 64,324	**			30,801	27%	22,354 – 39,249
South Alaska Peninsula	409	49%	209 – 609	-	-	-	-	-	-	651	81%	122 – 1,181
Southwest Bristol Bay	54,437	20%	43,363 – 65,511	39,206	24%	29,809 – 48,603	(31,292)	(26%)	(23,194 – 39,391)	25,118	21%	19,757 – 30,479
Dillingham	-	-	-	5,768	74%	1,478 – 10,058	-	-	-	5,032	56%	2,215 – 7,850
Yukon-Kuskokwim Delta	27,288	14%	23,433 – 31,143	22,268	11%	19,771 – 24,765	30,723	20%	24,444 – 37,003	19,153	16%	16,033 – 22,274
Y-K Delta South Coast	7,768	20%	6,216 – 9,321	13,424	13%	11,654 – 15,195	7,406	23%	5,717 – 9,095	1,746	28%	1,262 – 2,230
Y-K Delta Mid-Coast	14,598	17%	12,136 – 17,060	2,140	25%	1,595 – 2,684	(21,345)	(27%)	(15,598 – 27,111)	11,930	19%	9,656 – 14,204
Y-K Delta North Coast	2,466	40%	1,474 – 3,459	3,921	43%	2,251 – 5,592	188	50%	95 – 282	22	118%	* – 47
Lower Yukon	(191)	(69%)	(58 – 323)	652	71%	191 – 1,112	232	42%	133 – 330	565	54%	263 – 868
Lower Kuskokwim	2,265	32%	1,537 – 2,993	1,302	31%	900 – 1,703	1,498	27%	1,087 – 1,909	4,891	19%	3,947 – 5,835
Central Kuskokwim	0	***		-	-	-	15	93%	1 – 30	0	***	
Bethel ^b	0	***		261	60%	106 – 416	29	96%	1% – 58%	0	***	
Bering Strait/Norton Sound	99,494	15%	84,180 – 114,808	113,082	19%	91,685 – 134,480	-	-	-	146,557	13%	128,014 – 165,100
St. Lawrence/Diomedes Is.	81,675	17%	68,193 – 95,157	75,373	17%	62,590 – 88,157	-	-	-	129,656	13%	112,327 – 146,985
Bering Strait Mainland Villages	16,467	17%	13,682 – 19,253	29,321	31%	20,363 – 38,280	-	-	-	12,240	16%	10,262 – 14,219
Nome	1,351	26%	996 – 1,706	8,387	28%	6,038 – 10,737	-	-	-	4,661	33%	3,106 – 6,216
Northwest Arctic	-	-	-	-	-	-	**			-	-	-
Northwest Arctic Villages	-	-	-	-	-	-	10,081	51%	4,921 – 15,241	-	-	-
Kotzebue	-	-	-	-	-	-	-	-	-	-	-	-
North Slope	-	-	-	4,705	35%	3,074 – 6,336	-	-	-	2,388	117%	* – 5,189
North Slope Villages	-	-	-	4,672	30%	3,272 – 6,073	-	-	-	606	64%	219 – 993
Barrow	-	-	-	32	78%	7 – 58	-	-	-	1,783 ^c	109%	* – 3,733
Interior Alaska	1,009	104%	* – 2,057	-	-	-	911	58%	381 – 1,442	**		
Mid-Yukon/Upper Kuskokwim	(0)	***		2	149%	* – 6	0	***		-	-	-
Yukon/Koyukuk	11	78%	3 – 20	(0)	***		(0)	***		(0)	***	
Upper Yukon	(40)	(121%)	(* – 89)	-	-	-	0	***		0	***	
Tanana Villages	760	73%	205 – 1,315	-	-	-	875	44%	490 – 1,260	-	-	-
Tok	-	-	-	-	-	-	36 ^c	93%	3 – 70	-	-	-
Upper Copper River^d	82	101%	* – 164	-	-	-	-	-	-	0	***	

-: Region/subregion not surveyed. *: 95% CI ≥ 100%. **: Less than 75% of region households represented in sample, harvest estimates not produced at the regional level. ***: No harvest, no confidence interval (In parenthesis): Less than 30% of subregion households represented in the sample and/or only 1 out of several subregion villages surveyed.

^a Harvest estimates based on a sample of only known harvester households.

^b Bethel harvest expansions assume that harvester households account for 30% of the total village households (village size estimates).

^c Subregional harvest estimates assumed simple random sampling.

^d Sampling and harvest expansions represent Alaska Native households only.

2004 HARVEST ESTIMATES

Table 6.—Estimated harvest of birds, Gulf of Alaska/Cook Inlet Region, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	77	66%	26 – 128	27	131%	0	-	50	52%
Mallard	725	66%	247 – 1,203	256	98%	5	96%	463	53%
Pintail	75	73%	20 – 129	41	106%	0	-	33	131%
Shoveler	4	131%	* – 8	4	131%	0	-	0	-
Black scoter	308	43%	175 – 440	151	76%	0	-	156	50%
Surf scoter	168	37%	106 – 229	36	36%	0	-	132	53%
White-winged scoter	94	29%	67 – 122	35	44%	0	-	59	62%
Bufflehead	27	86%	4 – 50	4	161%	0	-	23	99%
Goldeneye	715	37%	453 – 977	202	63%	0	-	513	43%
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	46	34%	30 – 62	0	-	0	-	46	40%
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	28	107%	* – 59	5	96%	0	-	23	126%
Long-tailed duck	16	96%	1 – 32	11	96%	0	-	5	96%
Common merganser	115	37%	73 – 157	46	29%	0	-	69	58%
Red-breasted merganser	184	53%	86 – 282	90	93%	0	-	93	83%
Total ducks	2,581	32%	1,762 – 3,400	910	48%	5	96%	1,666	32%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	46	91%	4 – 88	20	116%	0	-	26	75%
Lesser Canada goose	22	133%	* – 50	19	152%	0	-	3	96%
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	68	74%	18 – 118	39	95%	0	-	29	71%
Swans									
Tundra swan	2	131%	* – 4	0	-	0	-	2	131%
Cranes									
Sandhill crane	5	175%	* – 14	0	-	0	-	5	175%
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Cormorant	9	163%	* – 23	0	-	9	163%	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	175	163%	* – 460	175	163%	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	117	59%	48 – 187	96	72%	0	-	21	99%
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	34	48%	17 – 50	17	57%	16	42%	0	-
Total seabirds	335	92%	26 – 643	288	102%	25	63%	21	99%
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	5	97%	1 – 10	1	96%	0	-	4	128%
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	5	97%	1 – 10	1	96%	0	-	4	128%
Total birds	2,995	32%	2,039 – 3,951	1,238	41%	31	54%	1,727	32%

Sampling effort (Gulf of Alaska/Cook Inlet, 2004): 4 out of 5 villages in this region were surveyed; 2 out of 2 subregions were surveyed.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 7.—Estimated harvest of eggs, Gulf of Alaska/Cook Inlet Region, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	14	96%	1 – 27	14	96%	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	14	96%	1 – 27	14	96%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	80	112%	* – 169	80	112%	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	80	112%	* – 169	80	112%	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	349	77%	79 – 618	349	77%	0	-	0	-
Black-legged kittiwake	55	70%	16 – 93	55	70%	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	872	35%	568 – 1,176	872	35%	0	-	0	-
Herring gull	619	42%	360 – 879	619	42%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	92	59%	38 – 146	92	59%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	39	42%	23 – 56	13	57%	26	57%	0	-
Total seabirds	2,026	17%	1,685 – 2,367	2,000	17%	26	57%	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	59	115%	* – 127	59	115%	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	59	115%	* – 127	59	115%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	2,178	17%	1,801 – 2,556	2,152	18%	26	57%	0	-

Sampling effort (Gulf of Alaska/Cook Inlet, 2004): 4 out of 5 villages in this region were surveyed; 2 out of 2 subregions were surveyed.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 8.—Estimated harvest of birds, Gulf of Alaska/Cook Inlet Region, Gulf of Alaska Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	618	32%	419 – 817	207	120%	5	96%	406	60%
Pintail	67	52%	32 – 102	41	106%	0	-	26	163%
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	308	29%	217 – 398	151	76%	0	-	156	50%
Surf scoter	168	25%	126 – 209	36	36%	0	-	132	53%
White-winged scoter	94	23%	72 – 116	35	44%	0	-	59	62%
Bufflehead	27	53%	12 – 41	4	161%	0	-	23	99%
Goldeneye	715	24%	546 – 884	202	63%	0	-	513	43%
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	46	26%	34 – 58	0	-	0	-	46	40%
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	28	61%	11 – 46	5	96%	0	-	23	126%
Long-tailed duck	16	50%	8 – 25	11	96%	0	-	5	96%
Common merganser	115	24%	87 – 142	46	29%	0	-	69	58%
Red-breasted merganser	184	37%	116 – 252	90	93%	0	-	93	83%
Total ducks	2,386	18%	1,948 – 2,824	829	52%	5	96%	1,551	34%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	8	59%	3 – 13	0	-	0	-	8	96%
Lesser Canada goose	22	78%	5 – 38	19	152%	0	-	3	96%
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	30	59%	12 – 48	19	152%	0	-	11	86%
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	9	95%	1 – 17	0	-	9	163%	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	175	95%	8 – 342	175	163%	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	117	39%	71 – 163	96	72%	0	-	21	99%
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	34	36%	22 – 46	17	57%	16	42%	0	-
Total seabirds	335	52%	161 – 508	288	102%	25	63%	21	99%
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	5	61%	2 – 8	1	96%	0	-	4	128%
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	5	61%	2 – 8	1	96%	0	-	4	128%
Total birds	2,756	17%	2,278 – 3,234	1,138	44%	31	54%	1,588	34%

Sampling effort (Gulf of Alaska, 2004): 3 out of 4 villages in this subregion were surveyed; 92% of the subregion households were represented in the sample.

--: No reported harvest. *: 95% CI ≥ 100%.

Table 9.—Estimated harvest of eggs, Gulf of Alaska/Cook Inlet Region, Gulf of Alaska Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	14	67%	4 – 23	14	96%	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	14	67%	4 – 23	14	96%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	80	67%	26 – 133	80	112%	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	80	67%	26 – 133	80	112%	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	349	53%	162 – 535	349	77%	0	-	0	-
Black-legged kittiwake	55	53%	26 – 84	55	70%	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	872	26%	643 – 1,101	872	35%	0	-	0	-
Herring gull	614	38%	379 – 849	614	42%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	92	45%	50 – 133	92	59%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	39	42%	23 – 56	13	57%	26	57%	0	-
Total seabirds	2,021	24%	1,528 – 2,513	1,994	17%	26	57%	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	59	74%	15 – 103	59	115%	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	59	74%	15 – 103	59	115%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	2,173	24%	1,652 – 2,694	2,147	18%	26	57%	0	-

Sampling effort (Gulf of Alaska, 2004): 3 out of 4 villages in this subregion were surveyed; 92% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 10.—Estimated harvest of birds, Gulf of Alaska/Cook Inlet Region, Cook Inlet Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	77	34%	51 – 103	27	131%	0	-	50	52%
Mallard	107	29%	76 – 137	50	73%	0	-	57	62%
Pintail	7	75%	2 – 13	0	-	0	-	7	131%
Shoveler	4	75%	1 – 6	4	131%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	195	29%	139 – 250	80	81%	0	-	114	56%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	38	44%	21 – 54	20	116%	0	-	18	101%
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	38	44%	21 – 54	20	116%	0	-	18	101%
Swans									
Tundra swan	2	75%	1 – 3	0	-	0	-	2	131%
Sandhill crane	5	101%	* – 10	0	-	0	-	5	175%
Ptarmigan	0	-	-	0	-	0	-	0	-
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	239	30%	168 – 310	100	87%	0	-	139	58%

Sampling effort (Cook Inlet, 2004): 1 out of 1 village in this subregion was surveyed.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 11.—Estimated harvest of eggs, Gulf of Alaska/Cook Inlet Region, Cook Inlet subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Herring gull	5	75%	1 – 9	5	131%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	5	75%	1 – 9	5	131%	0	-	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	5	75%	1 – 9	5	131%	0	-	0	-

Sampling effort (Cook Inlet, 2004): 1 out of 1 village in this subregion was surveyed.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 12.—Estimated harvest of birds, Bristol Bay Region, South Alaska Peninsula Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	8	67%	3 – 13	0	-	0	-	8	114%
Green-winged teal	89	30%	62 – 117	0	-	5	114%	85	52%
Mallard	86	48%	45 – 128	0	-	6	114%	80	65%
Pintail	25	75%	6 – 44	0	-	0	-	25	99%
Shoveler	9	103%	0 – 18	0	-	0	-	9	133%
Black scoter	29	35%	19 – 40	0	-	0	-	29	57%
Surf scoter	28	34%	18 – 37	3	114%	0	-	25	61%
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	24	41%	14 – 34	0	-	0	-	24	66%
Goldeneye	38	33%	26 – 51	3	114%	0	-	35	51%
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	5	67%	2 – 8	0	-	0	-	5	114%
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	3	47%	2 – 4	2	114%	0	-	2	114%
Harlequin duck	46	37%	29 – 63	0	-	0	-	46	60%
Long-tailed duck	20	33%	13 – 27	3	114%	0	-	17	62%
Common merganser	40	36%	25 – 54	0	-	0	-	40	59%
Red-breasted merganser	8	67%	3 – 13	0	-	8	114%	0	-
Duck (unidentified)	19	30%	13 – 25	10	77%	0	-	10	57%
Total ducks	477	28%	344 – 611	20	70%	18	114%	439	46%
Geese									
Black brant	15	175%	* – 42	0	-	0	-	15	225%
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	39	44%	22 – 57	0	-	0	-	39	68%
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	55	71%	16 – 94	0	-	0	-	55	96%
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	127	34%	84 – 170	20	88%	0	-	107	65%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	137	67%	45 – 230	137	114%	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	137	67%	45 – 230	137	114%	0	-	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	4	46%	2 – 6	0	-	0	-	4	77%
Total birds	801	24%	609 – 992	178	88%	18	114%	605	41%

Sampling effort (South Alaska Peninsula, 2004): 4 out of 5 villages in this subregion were surveyed; 98% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 13.—Estimated harvest of eggs, Bristol Bay Region, South Alaska Peninsula Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	409	49%	209 – 609	409	60%	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	409	49%	209 – 609	409	60%	0	-	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	409	49%	209 – 609	409	60%	0	-	0	-

Sampling effort (South Alaska Peninsula, 2004): 4 out of 5 villages in this subregion were surveyed; 98% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 14.—Estimated harvest of birds, Bristol Bay Region, Southwest Bristol Bay Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	54	61%	21 – 87	0	-	0	-	54	90%
Green-winged teal	316	33%	210 – 422	113	62%	0	-	204	54%
Mallard	3,527	12%	3,111 – 3,943	1,425	21%	288	44%	1,813	20%
Pintail	996	23%	769 – 1,223	380	36%	91	62%	525	63%
Shoveler	217	27%	158 – 277	91	73%	66	57%	60	76%
Goldeneye	150	34%	99 – 200	69	78%	0	-	81	58%
Black scoter	344	42%	201 – 488	282	60%	0	-	63	133%
Surf scoter	15	83%	2 – 28	15	122%	0	-	0	-
White-winged scoter	21	81%	4 – 37	0	-	0	-	21	122%
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	62	64%	22 – 102	41	123%	0	-	21	127%
Common eider	576	25%	433 – 718	202	45%	259	53%	115	70%
King eider	808	34%	536 – 1,081	563	64%	0	-	245	60%
Spectacled eider	236	83%	40 – 432	0	-	0	-	236	137%
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	20	83%	3 – 37	20	122%	0	-	0	-
Harlequin duck	48	75%	12 – 84	5	122%	0	-	43	137%
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	314	48%	163 – 466	164	82%	0	-	150	137%
Red-breasted merganser	97	45%	53 – 141	97	69%	0	-	0	-
Duck (unidentified)	16	90%	2 – 31	16	127%	0	-	0	-
Total ducks	7,818	12%	6,887 – 8,749	3,483	19%	704	43%	3,630	31%
Geese									
Black brant	653	29%	465 – 840	623	41%	0	-	29	87%
Cackling Canada goose	484	25%	363 – 605	279	48%	17	123%	188	49%
Lesser Canada goose	426	29%	303 – 550	418	38%	9	123%	0	-
White-fronted goose	649	25%	490 – 808	630	29%	19	76%	0	-
Emperor goose	76	61%	30 – 122	76	88%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	2,288	20%	1,840 – 2,736	2,026	28%	44	66%	217	43%
Swans									
Tundra swan	314	14%	269 – 359	173	25%	11	124%	130	28%
Cranes									
Sandhill crane	136	44%	76 – 197	40	60%	31	92%	64	137%
Grouse									
Spruce grouse	1,314	19%	1,066 – 1,563	356	74%	12	89%	946	20%
Ptarmigan	2,862	17%	2,370 – 3,355	2,612	24%	165	87%	86	74%
Total grouse	4,177	14%	3,594 – 4,760	2,968	25%	177	81%	1,032	20%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	132	68%	43 – 221	88	123%	44	123%	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	10	83%	2 – 18	10	122%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	142	63%	52 – 231	98	111%	44	123%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	10	83%	2 – 18	10	122%	0	-	0	-
Pacific loon	15	62%	6 – 25	10	122%	0	-	5	122%
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	15	81%	3 – 28	0	-	0	-	15	122%
Total grebes and loons	41	44%	23 – 59	20	86%	0	-	21	96%
Other/unknown bird	39	106%	* – 81	0	-	0	-	39	113%
Total birds	14,955	10%	13,494 – 16,416	8,809	16%	1,013	33%	5,133	24%

Sampling effort (Southwest Bristol Bay, 2004): 10 out of 21 villages in this subregion were surveyed; 51% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 15.—Estimated harvest of eggs, Bristol Bay Region, Southwest Bristol Bay Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	334	52%	159 – 509	334	73%	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	30	83%	5 – 55	30	122%	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	364	48%	188 – 541	364	68%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	91	83%	15 – 166	91	122%	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	91	83%	15 – 166	91	122%	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	6,347	44%	3,575 – 9,120	3,579	59%	2,768	123%	0	-
Kittiwake	391	62%	148 – 633	391	75%	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	24,099	35%	15,635 – 32,562	24,021	46%	77	125%	0	-
Glaucous gull	14,745	19%	11,956 – 17,535	12,538	23%	2,207	72%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	8,379	36%	5,373 – 11,386	8,379	50%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	53,962	20%	42,927 – 64,997	48,909	28%	5,053	96%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	20	83%	3 – 37	20	122%	0	-	0	-
Total shorebirds	20	83%	3 – 37	20	122%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	54,437	20%	43,363 – 65,511	49,384	28%	5,053	96%	0	-

Sampling effort (Southwest Bristol Bay, 2004): 10 out of 21 villages in this subregion were surveyed; 51% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 16.–Estimated harvest of birds, Yukon–Kuskokwim Delta Region, 2004. 

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	2,064	17%	1,708 – 2,420	497	29%	151	52%	1,416	22%
Green-winged teal	1,822	15%	1,556 – 2,089	191	38%	255	42%	1,376	29%
Mallard	8,227	12%	7,266 – 9,189	3,000	24%	1,248	28%	3,980	17%
Pintail	9,522	12%	8,361 – 10,684	3,150	24%	1,725	26%	4,647	16%
Shoveler	2,356	22%	1,844 – 2,867	737	43%	303	32%	1,315	41%
Goldeneye	2,053	23%	1,578 – 2,528	1,237	31%	140	53%	676	37%
Black scoter	7,889	11%	7,012 – 8,765	6,875	13%	353	56%	660	32%
Surf scoter	102	55%	46 – 157	102	59%	0	-	0	-
White-winged scoter	2,277	51%	1,107 – 3,448	2,115	55%	68	98%	94	71%
Bufflehead	457	44%	255 – 660	294	68%	0	-	164	141%
Canvasback	2,013	15%	1,703 – 2,322	1,396	19%	127	53%	489	32%
Common eider	364	30%	255 – 473	276	32%	47	141%	41	87%
King eider	3,482	23%	2,698 – 4,265	3,345	23%	0	-	137	76%
Spectacled eider	55	71%	16 – 93	47	80%	0	-	8	154%
Steller's eider	76	131%	* – 175	10	158%	0	-	65	150%
Scaup	15,517	10%	13,916 – 17,118	12,419	12%	715	54%	2,382	37%
Harlequin duck	322	74%	84 – 560	99	78%	0	-	224	101%
Long-tailed duck	3,152	20%	2,534 – 3,771	2,619	22%	106	68%	427	48%
Common merganser	1,043	36%	667 – 1,420	557	41%	14	104%	472	65%
Red-breasted merganser	368	50%	183 – 553	301	59%	0	-	67	74%
Duck (unidentified)	250	53%	117 – 384	160	75%	75	95%	15	139%
Total ducks	63,411	8%	58,542 – 68,280	39,427	10%	5,329	20%	18,656	17%
Geese									
Black brant	3,968	17%	3,286 – 4,650	2,629	21%	653	36%	686	38%
Cackling Canada goose	12,606	10%	11,345 – 13,868	5,993	13%	1,839	25%	4,774	17%
Lesser Canada goose	7,207	12%	6,339 – 8,074	4,414	15%	1,151	34%	1,642	22%
White-fronted goose	16,117	9%	14,702 – 17,532	9,922	10%	2,476	21%	3,719	20%
Emperor goose	1,151	24%	871 – 1,432	679	27%	361	53%	112	66%
Lesser snow goose	1,343	38%	829 – 1,857	1,143	36%	0	-	200	98%
Total geese	42,392	8%	39,196 – 45,588	24,780	9%	6,480	20%	11,132	14%
Swans									
Tundra swan	6,866	10%	6,157 – 7,574	3,179	13%	403	32%	3,283	16%
Cranes									
Sandhill crane	3,166	13%	2,766 – 3,565	1,773	14%	231	48%	1,162	23%
Grouse									
Spruce grouse	444	31%	305 – 583	211	55%	14	104%	219	37%
Ptarmigan	10,658	13%	9,234 – 12,082	8,727	14%	41	142%	1,890	38%
Total grouse	11,102	13%	9,656 – 12,548	8,939	14%	55	109%	2,108	35%
Seabirds									
Cormorant	4	108%	* – 8	0	-	0	-	4	141%
Arctic tern	20	140%	* – 49	20	140%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	134	81%	26 – 241	115	108%	19	96%	0	-
Glaucous gull	762	38%	473 – 1,050	667	42%	46	108%	49	95%
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	920	34%	609 – 1,230	802	39%	65	81%	53	88%
Shorebirds									
Whimbrel	166	116%	* – 359	0	-	166	128%	0	-
Bristle-thighed curlew	8	120%	* – 18	8	122%	0	-	0	-
Godwit	1,349	39%	819 – 1,878	29	122%	688	48%	632	39%
Golden plover	126	80%	25 – 227	101	128%	0	-	25	116%
Small shorebird	358	80%	71 – 644	300	100%	0	-	57	107%
Total shorebirds	2,006	33%	1,347 – 2,666	438	88%	853	46%	714	37%
Grebes and loons									
Common loon	201	23%	155 – 247	147	26%	54	56%	0	-
Pacific loon	148	47%	79 – 217	148	48%	0	-	0	-
Red-throated loon	66	70%	20 – 112	44	93%	0	-	22	99%
Yellow-billed loon	4	143%	* – 11	4	143%	0	-	0	-
Total grebes and loons	419	25%	315 – 524	343	29%	54	56%	22	99%
Other/unknown bird	61	86%	8 – 114	12	122%	49	104%	0	-
Total birds	130,343	6%	122,107 – 138,578	79,694	8%	13,518	16%	37,131	13%

Sampling effort (Yukon-Kuskokwim Delta, 2004): 23 out of 47 villages in this region were surveyed; 7 out of 7 subregions were surveyed.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 17.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, 2004. 

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	349	44%	196 – 502	349	48%	0	-	0	-
Mallard	388	57%	168 – 608	357	63%	31	158%	0	-
Pintail	673	38%	416 – 929	673	41%	0	-	0	-
Shoveler	185	62%	71 – 299	185	74%	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black scoter	9	126%	* – 21	0	-	9	131%	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	12	100%	0 – 25	3	135%	9	131%	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	115	131%	* – 267	115	131%	0	-	0	-
Common eider	7	135%	* – 17	7	138%	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	117	79%	24 – 210	60	125%	57	128%	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	62	151%	* – 156	62	158%	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	148	95%	8 – 287	148	97%	0	-	0	-
Total ducks	2,065	24%	1,565 – 2,565	1,959	27%	106	85%	0	-
Geese									
Black brant	1,958	38%	1,221 – 2,696	1,958	38%	0	-	0	-
Cackling Canada goose	4,412	17%	3,676 – 5,147	4,370	19%	41	158%	0	-
Lesser Canada goose	2,616	31%	1,797 – 3,434	2,533	33%	83	158%	0	-
White-fronted goose	5,866	25%	4,425 – 7,307	5,783	25%	83	158%	0	-
Emperor goose	396	59%	162 – 631	293	64%	104	158%	0	-
Lesser snow goose	23	180%	* – 65	23	180%	0	-	0	-
Total geese	15,271	19%	12,418 – 18,125	14,960	19%	311	158%	0	-
Swans									
Tundra swan	2,141	22%	1,666 – 2,616	2,079	24%	62	158%	0	-
Cranes									
Sandhill crane	652	33%	440 – 864	652	35%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	585	38%	361 – 809	585	42%	0	-	0	-
Total grouse	585	38%	361 – 809	585	42%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	447	43%	257 – 638	447	44%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	3	133%	* – 7	3	134%	0	-	0	-
Mew gull	3,149	29%	2,224 – 4,074	3,116	33%	33	142%	0	-
Glaucous gull	2,216	33%	1,487 – 2,944	2,187	42%	29	142%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	5,815	23%	4,496 – 7,133	5,753	28%	61	142%	0	-
Shorebirds									
Whimbrel	17	143%	* – 42	17	143%	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	111	64%	40 – 181	111	64%	0	-	0	-
Small shorebird	521	39%	315 – 727	521	42%	0	-	0	-
Total shorebirds	649	40%	390 – 908	649	41%	0	-	0	-
Grebes and loons									
Common loon	42	56%	18 – 66	42	68%	0	-	0	-
Pacific loon	4	135%	* – 8	4	138%	0	-	0	-
Red-throated loon	13	96%	0 – 25	13	128%	0	-	0	-
Yellow-billed loon	32	69%	10 – 53	32	91%	0	-	0	-
Total grebes and loons	90	51%	44 – 136	90	66%	0	-	0	-
Other/unknown bird	20	103%	* – 41	20	106%	0	-	0	-
Total birds	27,288	14%	23,433 – 31,143	26,747	16%	541	120%	0	-

Sampling effort (Yukon-Kuskokwim Delta, 2004): 23 out of 47 villages in this region were surveyed; 7 out of 7 subregions were surveyed.

-. No reported harvest. *: 95% CI ≥ 100%.

Table 18.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	362	39%	222 – 501	0	-	19	88%	343	49%
Green-winged teal	397	42%	231 – 563	6	134%	38	128%	353	49%
Mallard	1,107	18%	910 – 1,305	322	48%	81	65%	704	26%
Pintail	1,627	18%	1,330 – 1,924	298	41%	62	59%	1,266	27%
Shoveler	726	33%	486 – 966	56	72%	31	96%	639	58%
Goldeneye	171	44%	95 – 247	0	-	0	-	171	36%
Black scoter	1,605	23%	1,243 – 1,966	1,305	40%	222	61%	78	83%
Surf scoter	63	51%	31 – 95	63	78%	0	-	0	-
White-winged scoter	258	35%	168 – 347	125	67%	68	98%	65	74%
Bufflehead	17	74%	4 – 30	0	-	0	-	17	121%
Canvasback	72	39%	43 – 100	25	100%	0	-	46	77%
Common eider	0	-	-	0	-	0	-	0	-
King eider	133	54%	61 – 205	20	88%	0	-	112	85%
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	2,000	25%	1,505 – 2,494	1,004	44%	313	80%	682	80%
Harlequin duck	212	76%	52 – 373	0	-	0	-	212	106%
Long-tailed duck	22	73%	6 – 38	0	-	6	131%	16	117%
Common merganser	517	42%	298 – 736	230	86%	0	-	287	106%
Red-breasted merganser	200	48%	103 – 297	133	110%	0	-	67	74%
Total ducks	9,487	15%	8,028 – 10,946	3,588	32%	840	48%	5,059	31%
Geese									
Black brant	605	38%	376 – 835	390	81%	0	-	215	88%
Cackling Canada goose	3,150	15%	2,685 – 3,615	1,253	33%	253	87%	1,645	32%
Lesser Canada goose	1,602	17%	1,330 – 1,875	624	29%	334	65%	644	41%
White-fronted goose	4,187	13%	3,647 – 4,727	1,799	24%	476	61%	1,913	27%
Emperor goose	33	93%	2 – 63	33	100%	0	-	0	-
Lesser snow goose	34	47%	18 – 50	22	76%	0	-	12	116%
Total geese	9,611	12%	8,439 – 10,783	4,119	24%	1,063	53%	4,429	27%
Swans									
Tundra swan	2,689	13%	2,352 – 3,026	770	16%	116	57%	1,804	18%
Cranes									
Sandhill crane	1,129	15%	965 – 1,294	671	19%	103	63%	355	41%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	2,362	23%	1,827 – 2,897	580	58%	0	-	1,782	40%
Total grouse	2,362	23%	1,827 – 2,897	580	58%	0	-	1,782	40%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	19	64%	7 – 31	0	-	19	96%	0	-
Glaucous gull	76	51%	38 – 115	13	128%	38	128%	26	117%
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	95	43%	54 – 136	13	128%	57	90%	26	117%
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	26	91%	2 – 50	0	-	0	-	26	117%
Golden plover	126	62%	48 – 204	101	128%	0	-	25	116%
Small shorebird	186	58%	79 – 293	129	125%	0	-	57	107%
Total shorebirds	338	55%	151 – 525	230	127%	0	-	108	88%
Grebes and loons									
Common loon	12	88%	1 – 23	6	134%	6	131%	0	-
Pacific loon	22	67%	7 – 36	22	112%	0	-	0	-
Red-throated loon	19	82%	3 – 34	0	-	0	-	19	116%
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	53	45%	29 – 76	28	93%	6	131%	19	116%
Total birds	25,764	11%	22,849 – 28,680	9,999	21%	2,185	42%	13,581	24%

Sampling effort (Yukon-Kuskokwim Delta South Coast, 2004): 3 out of 8 villages in this subregion were surveyed; 42% of subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 19.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	111	65%	39 – 183	111	97%	0	-	0	-
Mallard	134	58%	56 – 212	134	83%	0	-	0	-
Pintail	283	40%	171 – 395	283	62%	0	-	0	-
Shoveler	126	56%	56 – 197	126	93%	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black scoter	9	120%	* – 20	0	-	9	131%	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	9	120%	* – 20	0	-	9	131%	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	57	75%	14 – 99	0	-	57	128%	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	75	82%	13 – 137	75	116%	0	-	0	-
Total ducks	804	28%	580 – 1,028	729	44%	75	102%	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	1,252	28%	906 – 1,598	1,252	47%	0	-	0	-
Lesser Canada goose	741	32%	507 – 975	741	47%	0	-	0	-
White-fronted goose	355	30%	249 – 461	355	42%	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	2,348	22%	1,839 – 2,857	2,348	33%	0	-	0	-
Swans									
Tundra swan	802	29%	570 – 1,034	802	43%	0	-	0	-
Cranes									
Sandhill crane	435	32%	294 – 575	435	45%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	273	48%	143 – 403	273	73%	0	-	0	-
Total grouse	273	48%	143 – 403	273	73%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	84	50%	42 – 126	84	81%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	3	127%	* – 7	3	134%	0	-	0	-
Mew gull	1,376	27%	1,001 – 1,752	1,376	51%	0	-	0	-
Glaucous gull	1,376	30%	964 – 1,789	1,376	58%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	2,840	24%	2,161 – 3,519	2,840	48%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	189	46%	102 – 275	189	71%	0	-	0	-
Total shorebirds	189	46%	102 – 275	189	71%	0	-	0	-
Grebes and loons									
Common loon	34	51%	17 – 51	34	79%	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	13	75%	3 – 22	13	128%	0	-	0	-
Yellow-billed loon	32	55%	14 – 49	32	91%	0	-	0	-
Total grebes and loons	78	46%	42 – 114	78	75%	0	-	0	-
Total birds	7,768	20%	6,216 – 9,321	7,693	33%	75	102%	0	-

Sampling effort (Yukon-Kuskokwim Delta South Coast, 2004): 3 out of 8 villages in this subregion were surveyed; 42% of subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 20.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	648	24%	493 – 802	24	135%	93	79%	530	42%
Green-winged teal	221	28%	159 – 284	0	-	134	52%	87	77%
Mallard	1,707	19%	1,386 – 2,028	123	87%	413	37%	1,171	44%
Pintail	2,713	15%	2,308 – 3,119	122	78%	1,202	31%	1,390	32%
Shoveler	294	23%	227 – 360	28	119%	135	47%	130	69%
Black scoter	135	33%	90 – 179	0	-	10	158%	124	53%
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	17	92%	1 – 33	17	143%	0	-	0	-
Goldeneye	73	49%	38 – 109	5	126%	59	97%	10	116%
Canvasback	34	84%	5 – 63	0	-	34	155%	0	-
Scaup	530	32%	358 – 703	21	130%	0	-	510	50%
Common eider	356	22%	279 – 433	268	33%	47	141%	41	87%
King eider	3,349	19%	2,710 – 3,988	3,324	23%	0	-	24	160%
Spectacled eider	55	46%	29 – 80	47	80%	0	-	8	154%
Steller's eider	72	81%	13 – 130	10	158%	0	-	61	160%
Harlequin duck	11	87%	1 – 21	0	-	0	-	11	139%
Long-tailed duck	634	26%	470 – 799	181	76%	88	80%	366	55%
Common merganser	6	89%	1 – 11	0	-	0	-	6	150%
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	151	52%	72 – 230	73	158%	63	111%	15	139%
Total ducks	11,006	10%	9,884 – 12,127	4,243	21%	2,278	25%	4,484	26%
Geese									
Black brant	3,107	12%	2,734 – 3,479	2,093	21%	653	36%	361	46%
Cackling Canada goose	5,236	9%	4,755 – 5,718	1,911	21%	1,411	28%	1,914	26%
Lesser Canada goose	2,659	13%	2,310 – 3,007	1,641	24%	778	41%	240	75%
White-fronted goose	6,082	11%	5,442 – 6,723	4,556	14%	1,190	29%	336	45%
Emperor goose	1,010	18%	829 – 1,190	629	28%	361	53%	20	89%
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	18,094	8%	16,646 – 19,542	10,830	13%	4,393	25%	2,871	23%
Swans									
Tundra swan	779	16%	653 – 906	196	42%	194	48%	389	44%
Cranes									
Sandhill crane	418	17%	346 – 491	339	31%	36	60%	43	84%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	2,402	18%	1,965 – 2,838	2,264	27%	41	142%	97	116%
Total grouse	2,402	18%	1,965 – 2,838	2,264	27%	41	142%	97	116%
Seabirds									
Cormorant	4	72%	1 – 7	0	-	0	-	4	141%
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	12	48%	6 – 18	0	-	8	142%	4	139%
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	16	40%	9 – 22	0	-	8	142%	8	99%
Shorebirds									
Whimbrel	166	70%	49 – 282	0	-	166	128%	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	1,294	24%	986 – 1,602	0	-	688	48%	606	41%
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	167	88%	20 – 315	167	151%	0	-	0	-
Total shorebirds	1,627	22%	1,268 – 1,987	167	151%	853	46%	606	41%
Grebes and loons									
Common loon	69	30%	48 – 89	21	93%	47	61%	0	-
Pacific loon	35	59%	15 – 56	35	99%	0	-	0	-
Red-throated loon	30	77%	7 – 53	26	139%	0	-	4	139%
Yellow-billed loon	4	92%	1 – 8	4	143%	0	-	0	-
Total grebes and loons	138	27%	101 – 175	87	61%	47	61%	4	139%
Total birds	34,480	8%	31,870 – 37,090	18,126	13%	7,852	21%	8,502	22%

Sampling effort (Yukon-Kuskokwim Delta Mid-Coast, 2004): 6 out of 9 villages in this subregion were surveyed; 74% of subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 21.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	33	87%	4 – 63	33	139%	0	-	0	-
Mallard	231	53%	109 – 352	200	95%	31	158%	0	-
Pintail	103	56%	46 – 161	103	88%	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	3	90%	1 – 6	3	135%	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	7	91%	1 – 14	7	138%	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	62	92%	5 – 120	62	158%	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	73	92%	6 – 139	73	158%	0	-	0	-
Total ducks	513	32%	351 – 675	482	54%	31	158%	0	-
Geese									
Black brant	1,958	28%	1,418 – 2,498	1,958	38%	0	-	0	-
Cackling Canada goose	2,245	18%	1,841 – 2,649	2,204	21%	41	158%	0	-
Lesser Canada goose	1,322	35%	866 – 1,779	1,239	56%	83	158%	0	-
White-fronted goose	5,214	21%	4,124 – 6,303	5,131	28%	83	158%	0	-
Emperor goose	363	42%	212 – 515	260	71%	104	158%	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	11,103	20%	8,924 – 13,283	10,792	25%	311	158%	0	-
Swans									
Tundra swan	805	26%	597 – 1,012	743	40%	62	158%	0	-
Cranes									
Sandhill crane	65	76%	16 – 115	65	115%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	67	56%	29 – 105	67	84%	0	-	0	-
Total grouse	67	56%	29 – 105	67	84%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	189	48%	97 – 280	189	78%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	1,325	40%	800 – 1,851	1,293	52%	33	142%	0	-
Glaucous gull	295	45%	164 – 426	266	65%	29	142%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	1,809	31%	1,253 – 2,365	1,748	41%	61	142%	0	-
Shorebirds									
Whimbrel	17	92%	1 – 33	17	143%	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	26	87%	3 – 49	26	139%	0	-	0	-
Small shorebird	175	49%	89 – 260	175	76%	0	-	0	-
Total shorebirds	218	48%	113 – 323	218	75%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	4	91%	1 – 7	4	138%	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	4	91%	1 – 7	4	138%	0	-	0	-
Other/unknown bird	14	91%	1 – 27	14	138%	0	-	0	-
Total birds	14,598	17%	12,136 – 17,060	14,132	22%	466	138%	0	-

Sampling effort (Yukon-Kuskokwim Delta Mid-Coast, 2004): 6 out of 9 villages in this subregion were surveyed; 74% of subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 22.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	146	39%	89 – 204	38	99%	0	-	109	63%
Green-winged teal	364	24%	275 – 453	28	103%	0	-	336	37%
Mallard	1,029	18%	840 – 1,218	189	80%	0	-	840	19%
Pintail	1,327	42%	773 – 1,880	1,004	54%	0	-	323	53%
Shoveler	147	34%	97 – 197	47	82%	0	-	100	51%
Black scoter	12	142%	* – 28	12	180%	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	60	54%	28 – 93	44	130%	0	-	16	85%
Scaup	4	142%	* – 9	4	180%	0	-	0	-
Common eider	8	87%	1 – 15	8	122%	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	4	87%	1 – 8	0	-	0	-	4	122%
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	29	87%	4 – 54	0	-	0	-	29	122%
Common merganser	255	23%	197 – 313	191	44%	0	-	64	44%
Red-breasted merganser	4	87%	1 – 8	4	122%	0	-	0	-
Duck (unidentified)	72	27%	52 – 91	72	42%	0	-	0	-
Total ducks	3,461	20%	2,772 – 4,151	1,640	35%	0	-	1,821	17%
Geese									
Black brant	148	29%	105 – 192	39	117%	0	-	109	56%
Cackling Canada goose	729	34%	485 – 974	292	61%	0	-	437	37%
Lesser Canada goose	980	17%	814 – 1,147	222	47%	0	-	759	24%
White-fronted goose	285	32%	193 – 378	174	45%	4	180%	108	54%
Emperor goose	91	45%	51 – 132	0	-	0	-	91	78%
Lesser snow goose	1,185	40%	707 – 1,663	998	40%	0	-	187	104%
Total geese	3,419	23%	2,637 – 4,202	1,725	32%	4	180%	1,691	19%
Swans									
Tundra swan	486	16%	406 – 565	143	36%	7	128%	335	24%
Cranes									
Sandhill crane	417	18%	342 – 492	92	54%	4	122%	321	28%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	164	73%	44 – 285	153	98%	0	-	12	180%
Total grouse	164	73%	44 – 285	153	98%	0	-	12	180%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	15	142%	* – 37	15	180%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	115	64%	42 – 188	115	108%	0	-	0	-
Glaucous gull	664	28%	478 – 849	644	44%	0	-	19	180%
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	794	26%	591 – 996	775	40%	0	-	19	180%
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	8	87%	1 – 15	8	122%	0	-	0	-
Godwit	29	87%	4 – 54	29	122%	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	4	87%	1 – 8	4	122%	0	-	0	-
Total shorebirds	41	65%	15 – 67	41	89%	0	-	0	-
Grebes and loons									
Common loon	4	142%	* – 9	4	180%	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	8	142%	* – 19	8	180%	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	12	107%	* – 24	12	133%	0	-	0	-
Other/unknown bird	12	87%	2 – 23	12	122%	0	-	0	-
Total birds	8,806	17%	7,320 – 10,292	4,591	21%	15	83%	4,200	14%

Sampling effort (Yukon-Kuskokwim Delta North Coast, 2004): 2 out of 4 villages in this subregion were surveyed; 53% of subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 23.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	23	142%	* – 56	23	180%	0	-	0	-
Pintail	119	103%	* – 242	119	128%	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	143	90%	15 – 270	143	110%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	636	49%	325 – 946	636	49%	0	-	0	-
Lesser Canada goose	405	64%	144 – 665	405	73%	0	-	0	-
White-fronted goose	235	89%	25 – 445	235	109%	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	23	142%	* – 56	23	180%	0	-	0	-
Total geese	1,298	47%	686 – 1,911	1,298	46%	0	-	0	-
Swans									
Tundra swan	166	59%	68 – 263	166	65%	0	-	0	-
Cranes									
Sandhill crane	62	85%	9 – 114	62	103%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	59	89%	6 – 111	59	114%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	195	63%	73 – 317	195	75%	0	-	0	-
Glaucous gull	544	67%	180 – 908	544	80%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	798	53%	371 – 1,225	798	61%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	2,466	40%	1,474 – 3,459	2,466	36%	0	-	0	-

Sampling effort (Yukon-Kuskokwim Delta North Coast, 2004): 2 out of 4 villages in this subregion were surveyed; 53% of subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 24.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	412	26%	306 – 517	38	103%	19	95%	355	28%
Green-winged teal	331	22%	258 – 404	65	84%	0	-	266	23%
Mallard	829	34%	549 – 1,109	505	54%	324	58%	0	-
Pintail	657	22%	511 – 804	90	66%	290	53%	278	20%
Shoveler	342	45%	188 – 495	188	85%	102	61%	52	40%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	13	95%	1 – 25	0	-	13	103%	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	65	66%	22 – 108	0	-	65	84%	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	2,648	19%	2,150 – 3,145	886	44%	812	46%	950	22%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	169	33%	114 – 225	104	47%	65	56%	0	-
Lesser Canada goose	570	60%	226 – 913	570	76%	0	-	0	-
White-fronted goose	1,486	19%	1,210 – 1,762	220	47%	794	33%	472	22%
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	124	61%	48 – 200	124	73%	0	-	0	-
Total geese	2,349	23%	1,799 – 2,898	1,018	56%	859	32%	472	22%
Swans									
Tundra swan	536	30%	377 – 696	420	45%	65	84%	52	40%
Cranes									
Sandhill crane	84	42%	49 – 120	0	-	39	93%	46	23%
Grouse									
Spruce grouse	65	66%	22 – 108	65	84%	0	-	0	-
Ptarmigan	519	66%	176 – 862	519	84%	0	-	0	-
Total grouse	584	66%	198 – 969	584	84%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	6,201	19%	5,012 – 7,390	2,908	40%	1,774	36%	1,519	18%

Sampling effort (Lower Yukon, 2004): 2 out of 6 villages in this subregion were surveyed; 18% of subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 25.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	89	95%	5 – 173	89	103%	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	89	95%	5 – 173	89	103%	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	76	95%	4 – 149	76	103%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	25	95%	1 – 50	25	103%	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	102	95%	5 – 198	102	103%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	191	69%	58 – 323	191	74%	0	-	0	-

Sampling effort (Lower Yukon, 2004): 2 out of 6 villages in this subregion were surveyed; 18% of subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 26.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	496	20%	395 – 597	397	33%	21	76%	79	45%
Green-winged teal	509	13%	445 – 573	92	41%	83	77%	334	97%
Mallard	2,262	14%	1,951 – 2,573	1,103	30%	361	61%	798	28%
Pintail	1,904	13%	1,652 – 2,155	902	30%	68	105%	935	33%
Shoveler	795	29%	561 – 1,029	387	67%	35	73%	373	99%
Black scoter	6,069	19%	4,887 – 7,252	5,516	14%	121	117%	432	43%
Surf scoter	39	61%	15 – 62	39	88%	0	-	0	-
White-winged scoter	962	50%	479 – 1,445	933	61%	0	-	29	157%
Bufflehead	423	38%	261 – 585	276	71%	0	-	146	157%
Goldeneye	1,438	22%	1,126 – 1,749	1,128	33%	42	51%	267	31%
Canvasback	1,764	16%	1,478 – 2,049	1,286	19%	93	45%	385	33%
Scaup	12,856	26%	9,510 – 16,202	11,329	12%	338	86%	1,190	54%
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	78	58%	32 – 123	78	84%	0	-	0	-
Long-tailed duck	2,467	22%	1,921 – 3,014	2,438	23%	12	117%	17	83%
Common merganser	266	22%	206 – 325	136	50%	14	104%	116	39%
Red-breasted merganser	143	47%	76 – 211	143	66%	0	-	0	-
Total ducks	32,471	17%	26,946 – 37,996	26,182	14%	1,188	56%	5,101	46%
Geese									
Black brant	108	69%	34 – 181	108	102%	0	-	0	-
Cackling Canada goose	2,845	15%	2,410 – 3,279	2,287	18%	69	85%	488	24%
Lesser Canada goose	1,382	19%	1,118 – 1,646	1,354	19%	28	104%	0	-
White-fronted goose	1,857	14%	1,592 – 2,122	1,763	14%	12	117%	82	56%
Emperor goose	18	82%	3 – 32	18	123%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	6,209	14%	5,358 – 7,059	5,529	14%	110	60%	570	25%
Swans									
Tundra swan	1,172	12%	1,029 – 1,314	883	17%	21	76%	268	28%
Cranes									
Sandhill crane	577	17%	478 – 676	485	21%	7	104%	86	32%
Grouse									
Spruce grouse	112	74%	29 – 195	98	84%	14	104%	0	-
Ptarmigan	5,212	17%	4,317 – 6,106	5,212	18%	0	-	0	-
Total grouse	5,324	17%	4,427 – 6,220	5,310	18%	14	104%	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	5	102%	* – 10	5	121%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	10	102%	* – 20	10	121%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	15	76%	4 – 26	15	90%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	117	69%	36 – 198	117	26%	0	-	0	-
Pacific loon	91	55%	41 – 141	91	64%	0	-	0	-
Red-throated loon	10	102%	* – 20	10	121%	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	217	47%	115 – 320	217	36%	0	-	0	-
Other/unknown bird	49	69%	15 – 83	0	-	49	104%	0	-
Total birds	46,033	15%	39,095 – 52,971	38,621	12%	1,388	53%	6,024	40%

Sampling effort (Lower Kuskokwim, 2004): 6 out of 13 villages in this subregion were surveyed; 50% of subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 27.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	205	50%	102 – 307	205	57%	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	167	61%	65 – 269	167	72%	0	-	0	-
Shoveler	59	102%	* – 119	59	121%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	115	108%	* – 240	115	131%	0	-	0	-
Scaup	60	125%	* – 135	60	125%	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	606	40%	366 – 846	606	46%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	190	47%	100 – 280	190	58%	0	-	0	-
Lesser Canada goose	148	58%	62 – 234	148	75%	0	-	0	-
White-fronted goose	62	79%	13 – 111	62	90%	0	-	0	-
Emperor goose	33	79%	7 – 59	33	126%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	433	36%	276 – 590	433	46%	0	-	0	-
Swans									
Tundra swan	368	46%	201 – 536	368	55%	0	-	0	-
Cranes									
Sandhill crane	90	54%	41 – 139	90	63%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	245	46%	133 – 357	245	56%	0	-	0	-
Total grouse	245	46%	133 – 357	245	56%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	39	102%	* – 79	39	121%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	227	99%	2 – 452	227	113%	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	266	86%	37 – 494	266	98%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	85	63%	31 – 138	85	72%	0	-	0	-
Small shorebird	158	58%	66 – 250	158	67%	0	-	0	-
Total shorebirds	243	59%	100 – 386	243	68%	0	-	0	-
Grebes and loons									
Common loon	8	79%	2 – 15	8	126%	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	8	79%	2 – 15	8	126%	0	-	0	-
Other/unknown bird	6	131%	* – 13	6	131%	0	-	0	-
Total birds	2,265	32%	1,537 – 2,993	2,265	37%	0	-	0	-

Sampling effort (Lower Kuskokwim, 2004): 6 out of 13 villages in this subregion were surveyed; 50% of subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 28.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Central Kuskokwim Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	59	53%	28 – 90	53	62%	6	122%	0	-
Pintail	29	82%	5 – 53	29	86%	0	-	0	-
Shoveler	11	98%	1 – 21	11	121%	0	-	0	-
Black scoter	27	98%	1 – 53	0	-	0	-	27	121%
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	6	93%	1 – 12	0	-	6	122%	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	28	78%	6 – 49	16	123%	12	122%	0	-
Total ducks	159	44%	89 – 230	109	59%	24	122%	27	121%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	14	79%	3 – 25	3	122%	11	121%	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	14	79%	3 – 25	3	122%	11	121%	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	267	36%	172 – 363	49	123%	0	-	219	37%
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	267	36%	172 – 363	49	123%	0	-	219	37%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	440	32%	300 – 581	160	66%	35	92%	245	40%

Sampling effort (Central Kuskokwim, 2004): 3 out of 6 villages in this subregion were surveyed; 58% of subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 29.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Central Kuskokwim Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	0	-	-	0	-	0	-	0	-

Sampling effort (Central Kuskokwim, 2004): 3 out of 6 villages in this subregion were surveyed; 58% of subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 30.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	1,234	30%	867 – 1,601	705	73%	62	191%	467	70%
Pintail	1,265	26%	942 – 1,589	705	57%	104	191%	456	67%
Shoveler	41	78%	9 – 74	21	191%	0	-	21	191%
Black scoter	41	110%	* – 87	41	191%	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	1,058	58%	450 – 1,666	1,058	96%	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	353	42%	204 – 501	104	96%	21	191%	228	101%
Canvasback	83	78%	19 – 147	41	191%	0	-	41	191%
Scaup	62	82%	11 – 113	62	140%	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	21	110%	* – 44	21	191%	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	21	110%	* – 44	21	191%	0	-	0	-
Total ducks	4,179	23%	3,227 – 5,132	2,779	50%	187	191%	1,213	41%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	477	42%	276 – 679	145	108%	41	191%	290	103%
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	2,219	21%	1,751 – 2,688	1,411	40%	0	-	809	61%
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	2,696	19%	2,182 – 3,211	1,556	37%	41	191%	1,099	53%
Swans									
Tundra swan	1,203	23%	927 – 1,479	767	36%	0	-	436	77%
Cranes									
Sandhill crane	539	28%	387 – 691	187	81%	41	191%	311	62%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	8,618	17%	7,184 – 10,053	5,289	34%	270	163%	3,059	36%

Sampling effort (Bethel, 2004): 1 out of 1 village in this subregion was surveyed. Harvest expansion assumed that harvesters account for 30% of the village size estimate (total households).

–: No reported harvest. *: 95% CI $\geq$ 100%.

Table 31.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	0	-	-	0	-	0	-	0	-

Sampling effort (Bethel, 2004): 1 out of 1 village in this subregion was surveyed. *Harvest expansion assumed that harvesters account for 30% of the village size estimate (total households).*

—: No reported harvest. *: 95% CI $\geq$ 100%.

Table 32.—Estimated harvest of birds, Bering Strait/Norton Sound Region, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	99	66%	33 – 165	51	55%	0	-	49	87%
Green-winged teal	205	44%	116 – 294	121	58%	0	-	84	66%
Mallard	385	39%	235 – 535	193	40%	48	78%	145	73%
Pintail	5,557	16%	4,642 – 6,472	2,873	23%	1,660	44%	1,024	42%
Shoveler	274	49%	140 – 407	141	45%	53	149%	80	72%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	30	85%	4 – 55	30	85%	0	-	0	-
Bufflehead	2	115%	* – 4	2	115%	0	-	0	-
Goldeneye	33	143%	* – 79	0	-	0	-	33	143%
Canvasback	31	161%	* – 82	31	161%	0	-	0	-
Scaup	82	101%	* – 164	82	101%	0	-	0	-
Common eider	2,265	12%	1,990 – 2,540	991	19%	512	29%	763	17%
King eider	506	21%	397 – 614	255	28%	99	37%	152	30%
Spectacled eider	6	145%	* – 15	6	145%	0	-	0	-
Steller's eider	30	179%	* – 84	0	-	0	-	30	179%
Harlequin duck	279	43%	160 – 399	6	145%	75	68%	198	46%
Long-tailed duck	43	73%	12 – 74	32	92%	11	101%	0	-
Common merganser	8	149%	* – 19	8	149%	0	-	0	-
Red-breasted merganser	145	57%	62 – 228	0	-	42	75%	102	73%
Total ducks	9,978	11%	8,913 – 11,044	4,820	16%	2,500	31%	2,658	20%
Geese									
Black brant	3,194	20%	2,548 – 3,839	2,232	20%	359	60%	602	48%
Cackling Canada goose	671	50%	334 – 1,007	509	55%	15	112%	147	72%
Lesser Canada goose	2,859	21%	2,272 – 3,445	1,794	22%	229	67%	836	32%
White-fronted goose	400	53%	190 – 610	328	47%	0	-	72	94%
Emperor goose	1,860	13%	1,610 – 2,110	717	26%	310	27%	833	12%
Lesser snow goose	3,207	13%	2,798 – 3,616	1,422	19%	142	72%	1,643	15%
Total geese	12,190	13%	10,624 – 13,756	7,002	16%	1,055	29%	4,133	14%
Swans									
Tundra swan	676	22%	526 – 826	377	32%	147	42%	152	44%
Cranes									
Sandhill crane	686	21%	542 – 830	392	29%	198	28%	95	59%
Grouse									
Spruce grouse	283	62%	107 – 460	0	-	106	154%	177	55%
Ptarmigan	3,097	32%	2,112 – 4,083	1,274	41%	323	50%	1,500	52%
Total grouse	3,381	30%	2,380 – 4,381	1,274	41%	429	53%	1,677	47%
Seabirds									
Cormorant	3,559	17%	2,962 – 4,157	8	78%	278	65%	3,274	19%
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	774	33%	516 – 1,032	0	-	161	115%	613	34%
Sabine's gull	7	163%	* – 17	0	-	0	-	7	163%
Mew gull	106	89%	12 – 200	106	89%	0	-	0	-
Glaucous gull	752	21%	591 – 913	0	-	42	77%	710	22%
Auklet	7,671	16%	6,418 – 8,924	5,004	15%	2,667	21%	0	-
Murre	11,996	22%	9,346 – 14,647	9,258	27%	2,721	29%	17	110%
Guillemot	478	55%	217 – 738	0	-	24	155%	453	57%
Puffin	24	131%	* – 54	2	136%	0	-	21	145%
Total seabirds	25,366	14%	21,933 – 28,800	14,379	18%	5,892	18%	5,095	16%
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	59	156%	* – 151	0	-	0	-	59	156%
Total shorebirds	59	156%	* – 151	0	-	0	-	59	156%
Grebes and loons									
Common loon	404	39%	246 – 561	32	117%	58	78%	313	47%
Pacific loon	495	14%	425 – 566	143	33%	48	80%	304	24%
Red-throated loon	26	78%	6 – 46	3	139%	0	-	23	86%
Yellow-billed loon	315	21%	248 – 382	99	29%	63	51%	153	36%
Total grebes and loons	1,240	14%	1,062 – 1,419	276	19%	170	37%	793	20%
Total birds	53,576	8%	49,194 – 57,959	28,521	11%	10,393	14%	14,663	11%

Sampling effort (Bering Strait/Norton Sound, 2004): 11 out of 16 villages in this region were surveyed; 3 out of 3 subregions were represented in the sample. Harvest estimates are presented only at the regional level as per request of regional partners.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 33.—Estimated harvest of eggs, Bering Strait/Norton Sound Region, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	92	92%	7 – 176	92	92%	0	-	0	-
Pintail	1,234	57%	532 – 1,937	869	60%	365	149%	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	17	129%	* – 40	17	129%	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	3,069	46%	1,666 – 4,472	2,233	42%	836	132%	0	-
King eider	242	132%	* – 559	242	132%	0	-	0	-
Spectacled eider	23	144%	* – 55	23	144%	0	-	0	-
Steller's eider	40	155%	* – 102	40	155%	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	1,134	80%	231 – 2,036	1,123	80%	10	139%	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	152	151%	* – 383	152	151%	0	-	0	-
Total ducks	6,003	44%	3,372 – 8,634	4,792	42%	1,211	102%	0	-
Geese									
Black brant	464	72%	130 – 797	388	85%	76	149%	0	-
Cackling Canada goose	93	110%	* – 195	93	110%	0	-	0	-
Lesser Canada goose	285	52%	137 – 433	285	52%	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	139	83%	23 – 255	93	109%	46	149%	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	981	41%	582 – 1,380	859	45%	122	149%	0	-
Swans									
Tundra swan	466	46%	253 – 679	302	44%	164	103%	0	-
Cranes									
Sandhill crane	173	97%	6 – 340	170	99%	3	163%	0	-
Grouse									
Spruce grouse	20	163%	* – 52	0	-	20	163%	0	-
Ptarmigan	148	97%	5 – 292	148	97%	0	-	0	-
Total grouse	168	88%	21 – 315	148	97%	20	163%	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	615	51%	299 – 930	615	51%	0	-	0	-
Kittiwake	60	145%	* – 148	0	-	60	145%	0	-
Sabine's gull	20	163%	* – 52	20	163%	0	-	0	-
Mew gull	1,828	32%	1,247 – 2,409	1,744	32%	84	179%	0	-
Glaucous gull	4,871	27%	3,569 – 6,172	3,842	31%	1,029	56%	0	-
Auklet	135	145%	* – 332	135	145%	0	-	0	-
Murre	81,342	18%	66,552 – 96,132	28,283	45%	53,059	25%	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	88,871	17%	73,984 – 103,758	34,638	37%	54,233	25%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	103	132%	* – 240	91	149%	12	145%	0	-
Small shorebird	2,254	68%	717 – 3,791	1,870	78%	384	123%	0	-
Total shorebirds	2,358	65%	822 – 3,894	1,961	74%	397	120%	0	-
Grebes and loons									
Common loon	229	57%	99 – 359	227	57%	3	127%	0	-
Pacific loon	169	110%	* – 354	169	110%	0	-	0	-
Red-throated loon	56	123%	* – 126	56	123%	0	-	0	-
Yellow-billed loon	20	96%	1 – 39	11	127%	9	145%	0	-
Total grebes and loons	474	47%	252 – 697	463	48%	12	115%	0	-
Total birds	99,494	15%	84,180 – 114,808	43,333	30%	56,160	24%	0	-

Sampling effort (Bering Strait/Norton Sound, 2004): 11 out of 16 villages in this region were surveyed; 3 out of 3 subregions were represented in the sample. Bering Strait/Norton Sound harvest estimates are presented only at region level as per request of regional partners.

–: No reported harvest. *: 95% CI $\geq$ 100%.

Table 34.—Estimated harvest of birds, Interior Alaska Region, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	4,035	17%	3,345 – 4,724	3,158	17%	62	90%	815	35%
Green-winged teal	1,440	29%	1,021 – 1,860	678	32%	0	-	762	47%
Mallard	9,546	16%	8,036 – 11,057	5,560	14%	208	66%	3,779	25%
Pintail	3,957	21%	3,130 – 4,784	2,998	17%	0	-	959	57%
Shoveler	1,169	31%	809 – 1,529	699	34%	0	-	470	43%
Black scoter	332	69%	104 – 560	202	94%	0	-	130	125%
Surf scoter	737	58%	309 – 1,165	551	71%	0	-	186	93%
White-winged scoter	4,009	20%	3,208 – 4,810	3,294	20%	0	-	715	52%
Bufflehead	1,264	41%	752 – 1,777	541	43%	0	-	723	53%
Goldeneye	1,182	37%	746 – 1,618	771	34%	0	-	411	64%
Canvasback	1,191	26%	878 – 1,504	878	25%	0	-	313	50%
Scaup	780	55%	350 – 1,210	316	59%	0	-	464	67%
Harlequin duck	38	82%	7 – 69	20	67%	0	-	18	154%
Long-tailed duck	396	42%	230 – 562	376	44%	0	-	20	95%
Common merganser	93	122%	* – 207	93	122%	0	-	0	-
Red-breasted merganser	87	131%	* – 200	87	131%	0	-	0	-
Duck (unidentified)	275	76%	66 – 485	137	64%	0	-	139	107%
Total ducks	30,531	15%	25,920 – 35,143	20,359	14%	270	60%	9,902	26%
Geese									
Black brant	307	94%	19 – 596	295	94%	0	-	12	131%
Lesser Canada goose	5,184	16%	4,376 – 5,992	4,729	16%	111	67%	344	31%
White-fronted goose	6,142	14%	5,261 – 7,023	5,840	14%	141	88%	161	48%
Lesser snow goose	1,024	23%	786 – 1,262	993	22%	0	-	31	106%
Total geese	12,657	13%	11,007 – 14,307	11,856	13%	252	70%	549	33%
Swans									
Tundra swan	170	115%	* – 365	79	103%	0	-	91	125%
Cranes									
Sandhill crane	296	72%	83 – 510	169	67%	13	141%	115	100%
Grouse									
Grouse (unidentified)	5,815	26%	4,298 – 7,331	845	36%	251	63%	4,719	31%
Ptarmigan	1,404	32%	957 – 1,851	571	52%	57	94%	776	31%
Total grouse	7,219	24%	5,512 – 8,926	1,416	35%	308	60%	5,495	28%
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	12	118%	* – 27	0	-	12	118%	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	8	118%	* – 18	0	-	8	118%	0	-
Total shorebirds	21	118%	* – 45	0	-	21	118%	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	100	85%	15 – 185	0	-	0	-	100	85%
Total birds	50,995	13%	44,216 – 57,774	33,880	13%	863	40%	16,252	20%

Sampling effort (Interior, 2004): 19 out of 42 villages in this region were surveyed; 4 out of 5 subregions were represented in the sample; 80% of the region households were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 35.—Estimated harvest of eggs, Interior Alaska Region, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	161	131%	* – 372	161	131%	0	-	0	-
Pintail	161	131%	* – 372	161	131%	0	-	0	-
Shoveler	99	131%	* – 229	99	131%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	50	118%	* – 109	50	118%	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	470	118%	* – 1,025	470	118%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	194	94%	13 – 375	194	94%	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	194	94%	13 – 375	194	94%	0	-	0	-
Swans									
Tundra swan	49	131%	* – 114	49	131%	0	-	0	-
Cranes									
Sandhill crane	198	131%	* – 457	198	131%	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	30	121%	* – 66	30	121%	0	-	0	-
Mew gull	33	118%	* – 72	0	-	33	118%	0	-
Glaucous gull	14	126%	* – 32	14	126%	0	-	0	-
Herring gull	20	121%	* – 44	20	121%	0	-	0	-
Total seabirds	98	76%	23 – 172	64	98%	33	118%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	1,009	104%	* – 2,057	976	107%	33	118%	0	-

Sampling effort (Interior, 2004): 19 out of 42 villages in this region were surveyed; 4 out of 5 subregions were represented in the sample; 80% of the region households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 36.—Estimated harvest of birds, Interior Alaska Region, Mid Yukon/Upper Kuskokwim Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	525	52%	254 – 795	428	61%	0	-	96	75%
Green-winged teal	278	48%	144 – 411	209	62%	0	-	69	86%
Mallard	366	49%	186 – 546	243	61%	7	165%	116	79%
Pintail	401	72%	112 – 690	401	70%	0	-	0	-
Shoveler	40	160%	* – 104	40	162%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	44	147%	* – 108	0	-	0	-	44	148%
White-winged scoter	16	160%	* – 42	16	162%	0	-	0	-
Bufflehead	72	104%	* – 147	72	103%	0	-	0	-
Goldeneye	60	160%	* – 156	60	162%	0	-	0	-
Canvasback	4	160%	* – 10	4	162%	0	-	0	-
Scaup	8	160%	* – 21	8	162%	0	-	0	-
Harlequin duck	19	139%	* – 45	4	162%	0	-	15	170%
Long-tailed duck	8	160%	* – 21	0	-	0	-	8	162%
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	1,840	51%	908 – 2,771	1,485	59%	7	165%	348	58%
Geese									
Black brant	22	174%	* - 60	22	173%	0	-	0	-
Lesser Canada goose	503	41%	295 – 710	482	41%	0	-	21	165%
White-fronted goose	450	48%	232 – 668	450	54%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	975	41%	580 – 1,370	954	42%	0	-	21	165%
Swans									
Tundra swan	4	160%	* – 10	4	162%	0	-	0	-
Cranes									
Sandhill crane	44	147%	* – 108	44	148%	0	-	0	-
Grouse									
Grouse (unidentified)	224	76%	54 – 393	4	162%	70	165%	150	80%
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	224	76%	54 – 393	4	162%	70	165%	150	80%
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	3,086	43%	1,755 – 4,418	2,490	50%	77	151%	519	49%

Sampling effort (Mid-Yukon/Upper Kuskokwim, 2004): 4 out of 9 villages in this subregion were surveyed; 29% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 37.—Estimated harvest of eggs, Interior Alaska Region, Mid Yukon/Upper Kuskokwim Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	0	-	-	0	-	0	-	0	-

Sampling effort (Mid-Yukon/Upper Kuskokwim, 2004): 4 out of 9 villages in this subregion were surveyed; 29% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 38.—Estimated harvest of birds, Interior Alaska Region, Yukon/Koyukuk Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	275	31%	189 – 361	233	49%	18	150%	23	120%
Green-winged teal	40	42%	23 – 56	28	88%	0	-	12	120%
Mallard	384	22%	302 – 467	271	35%	42	157%	71	74%
Pintail	227	27%	165 – 289	225	31%	0	-	2	143%
Shoveler	59	48%	31 – 88	59	81%	0	-	0	-
Black scoter	7	66%	2 – 12	2	132%	0	-	5	146%
Surf scoter	87	64%	31 – 142	87	110%	0	-	0	-
White-winged scoter	90	50%	45 – 134	64	100%	0	-	26	154%
Bufflehead	3	223%	* – 10	3	208%	0	-	0	-
Goldeneye	15	72%	4 – 26	15	109%	0	-	0	-
Canvasback	36	62%	14 – 58	34	86%	0	-	2	143%
Scaup	30	78%	7 – 54	30	131%	0	-	0	-
Harlequin duck	6	45%	3 – 9	6	45%	0	-	0	-
Long-tailed duck	109	51%	53 – 164	109	86%	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	18	70%	6 – 31	14	153%	0	-	5	143%
Total ducks	1,386	24%	1,047 – 1,724	1,179	41%	61	119%	146	77%
Geese									
Black brant	106	102%	* – 213	106	176%	0	-	0	-
Lesser Canada goose	737	25%	555 – 918	733	36%	4	162%	0	-
White-fronted goose	370	21%	293 – 446	357	32%	0	-	12	169%
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	1,212	22%	940 – 1,484	1,196	33%	4	162%	12	169%
Swans									
Tundra swan	6	42%	4 – 9	6	68%	0	-	0	-
Cranes									
Sandhill crane	26	48%	14 – 39	16	103%	11	150%	0	-
Grouse									
Grouse (unidentified)	469	31%	326 – 613	60	137%	0	-	409	55%
Parmigan	8	223%	* – 27	8	208%	0	-	0	-
Total grouse	478	30%	333 – 623	68	123%	0	-	409	55%
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	3,108	18%	2,558 – 3,658	2,465	30%	75	91%	568	46%

Sampling effort (Yukon/Koyukuk, 2004): 9 out of 12 villages in this subregion were surveyed; 95% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 39.—Estimated harvest of eggs, Interior Alaska Region, Yukon/Koyukuk Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	11	78%	3 – 20	11	130%	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	11	78%	3 – 20	11	130%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	11	78%	3 – 20	11	130%	0	-	0	-

Sampling effort (Yukon/Koyukuk, 2004): 9 out of 12 villages in this subregion were surveyed; 95% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 40.—Estimated harvest of birds, Interior Alaska Region, Upper Yukon Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	1,681	21%	1,326 – 2,036	1,520	22%	0	-	161	81%
Green-winged teal	142	39%	86 – 198	102	43%	0	-	40	97%
Mallard	2,066	19%	1,667 – 2,465	1,765	20%	0	-	301	52%
Pintail	1,256	21%	998 – 1,514	1,127	21%	0	-	129	77%
Shoveler	164	45%	90 – 237	148	51%	0	-	16	130%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	19	105%	* – 39	19	113%	0	-	0	-
White-winged scoter	2,437	23%	1,885 – 2,988	2,195	24%	0	-	242	72%
Bufflehead	46	58%	19 – 72	32	70%	0	-	13	130%
Goldeneye	219	43%	124 – 314	214	48%	0	-	5	130%
Canvasback	434	33%	291 – 577	391	40%	0	-	43	122%
Scaup	38	75%	9 – 66	16	75%	0	-	22	130%
Harlequin duck	5	121%	* – 12	5	130%	0	-	0	-
Long-tailed duck	102	72%	28 – 176	94	83%	0	-	8	130%
Common merganser	5	121%	* – 12	5	130%	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	8,614	18%	7,103 – 10,124	7,633	17%	0	-	981	53%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	1,466	21%	1,164 – 1,767	1,425	21%	0	-	40	72%
White-fronted goose	3,361	18%	2,750 – 3,973	3,294	19%	0	-	67	85%
Lesser snow goose	744	23%	574 – 913	738	23%	0	-	5	130%
Total geese	5,571	17%	4,630 – 6,512	5,458	16%	0	-	113	76%
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	202	58%	84 – 319	94	79%	0	-	108	94%
Ptarmigan	32	85%	5 – 60	5	130%	0	-	27	107%
Total grouse	234	54%	108 – 360	99	76%	0	-	134	82%
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	14,418	16%	12,095 – 16,742	13,190	15%	0	-	1,228	56%

Sampling effort (Upper Yukon, 2004): 1 out of 10 villages in this subregion were surveyed; 46% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 41.—Estimated harvest of eggs, Interior Alaska Region, Upper Yukon Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	-	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	24	121%	* – 53	24	130%	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	16	121%	* – 36	16	130%	0	-	0	-
Total seabirds	40	121%	* – 89	40	130%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds									
	40	121%	* – 89	40	130%	0	-	0	-

Sampling effort (Upper Yukon, 2004): 1 out of 10 villages in this subregion were surveyed; 46% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 42.—Estimated harvest of birds, Interior Alaska Region, Tanana Villages Subregion, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	764	24%	582 – 946	358	52%	31	126%	374	54%
Green-winged teal	698	32%	477 – 919	207	64%	0	-	491	63%
Mallard	4,859	17%	4,031 – 5,687	2,191	25%	118	86%	2,550	31%
Pintail	1,298	29%	926 – 1,669	658	34%	0	-	639	72%
Shoveler	677	25%	509 – 844	315	57%	0	-	361	49%
Black scoter	260	51%	127 – 393	160	105%	0	-	99	146%
Surf scoter	444	55%	199 – 688	338	97%	0	-	106	129%
White-winged scoter	681	32%	462 – 900	373	52%	0	-	307	88%
Bufflehead	896	30%	625 – 1,166	328	58%	0	-	568	60%
Goldeneye	656	30%	461 – 852	331	54%	0	-	325	72%
Canvasback	484	27%	356 – 612	277	41%	0	-	207	60%
Scaup	551	38%	341 – 761	200	80%	0	-	351	78%
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	100	51%	49 - 150	100	75%	0	-	0	-
Common merganser	70	87%	9 - 130	70	146%	0	-	0	-
Red-breasted merganser	70	87%	9 - 130	70	146%	0	-	0	-
Duck (unidentified)	203	51%	100 - 306	96	77%	0	-	107	120%
Total ducks	12,709	18%	10,466 - 14,951	6,073	30%	149	82%	6,486	33%
Geese									
Black brant	119	80%	24 – 214	109	146%	0	-	10	146%
Lesser Canada goose	1,463	25%	1,096 – 1,830	1,162	43%	85	75%	215	38%
White-fronted goose	757	28%	549 – 965	593	49%	113	96%	50	61%
Lesser snow goose	80	68%	25 – 134	60	146%	0	-	20	146%
Total geese	2,419	24%	1,827 – 3,010	1,925	44%	199	77%	295	44%
Swans									
Tundra swan	126	58%	53 – 200	53	136%	0	-	73	139%
Cranes									
Sandhill crane	168	45%	93 – 244	76	98%	0	-	92	111%
Grouse									
Grouse (unidentified)	3,780	24%	2,859 – 4,702	521	47%	132	59%	3,127	40%
Ptarmigan	1,089	21%	860 – 1,318	446	59%	46	102%	597	35%
Total grouse	4,869	21%	3,852 – 5,886	967	44%	177	63%	3,725	35%
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	10	88%	1 – 19	0	-	10	128%	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	7	88%	1 – 13	0	-	7	128%	0	-
Total shorebirds	17	88%	2 – 31	0	-	17	128%	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	80	65%	28 – 133	0	-	0	-	80	92%
Total birds	20,388	16%	17,197 – 23,579	9,094	33%	542	50%	10,752	26%

Sampling effort (Tanana Villages, 2004): 5 out of 10 villages in this subregion were surveyed; 64% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 43.—Estimated harvest of eggs, Interior Alaska Region, Tanana Villages Subregion, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	129	87%	17 – 241	129	146%	0	-	0	-
Pintail	129	87%	17 – 241	129	146%	0	-	0	-
Shoveler	80	87%	11 – 148	80	146%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	40	88%	5 – 75	40	128%	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	378	78%	83 – 673	378	131%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	156	64%	57 – 255	156	103%	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	156	64%	57 – 255	156	103%	0	-	0	-
Swans									
Tundra swan	40	87%	5 – 74	40	146%	0	-	0	-
Cranes									
Sandhill crane	159	87%	21 – 297	159	146%	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	27	88%	3 – 50	0	-	27	128%	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	27	88%	3 – 50	0	-	27	128%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	760	73%	205 – 1,315	733	127%	27	128%	0	-

Sampling effort (Tanana Villages, 2004): 5 out of 10 villages in this subregion were surveyed; 64% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 44.—Estimated harvest of birds, Upper Copper River Region, 2004.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	13	102%	* – 26	0	-	0	-	13	99%
Green-winged teal	42	52%	20 – 63	24	59%	4	130%	14	94%
Mallard	288	34%	189 – 387	174	38%	29	88%	85	57%
Pintail	20	74%	5 – 35	16	82%	0	-	4	130%
Shoveler	9	96%	1 – 18	5	130%	0	-	4	130%
Black scoter	36	132%	* – 84	0	-	0	-	36	130%
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	109	77%	25 – 193	36	130%	36	130%	36	130%
Bufflehead	24	74%	6 – 41	14	82%	0	-	9	130%
Goldeneye	14	82%	3 – 26	11	96%	4	130%	0	-
Canvasback	4	132%	* – 8	4	130%	0	-	0	-
Scaup	13	83%	1 – 23	7	102%	0	-	5	130%
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	5	99%	1 – 11	2	130%	0	-	4	130%
Total ducks	576	37%	365 – 788	294	34%	72	100%	210	64%
Geese									
Black brant	11	99%	1 – 22	4	130%	0	-	7	130%
Lesser Canada goose	9	109%	* – 19	9	107%	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	20	74%	5 – 35	13	84%	0	-	7	130%
Swans									
Tundra swan	4	132%	* – 8	4	130%	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	225	45%	123 – 326	71	88%	11	130%	143	46%
Ptarmigan	138	51%	67 – 208	43	81%	36	123%	58	73%
Total grouse	362	37%	229 – 496	114	66%	47	99%	201	38%
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	13	95%	1 – 25	5	130%	0	-	7	130%
Total shorebirds	13	95%	1 – 25	5	130%	0	-	7	130%
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	145	55%	66 – 224	93	84%	0	-	52	79%
Total birds	1,120	30%	782 – 1,458	523	32%	120	72%	478	39%

Sampling effort (Upper Copper River, 2004): 6 out of 8 villages in this region were surveyed; sampling and expansion of reported harvest represent Alaska Native households only. Upper Copper River AMBCC Alaska Native regional partner noted that "small shorebirds" are not usually harvested for subsistence uses; data entry and analysis were reviewed, no mistakes were found.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 45.—Estimated harvest of eggs, Upper Copper River Region, 2004.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	9	132%	* – 21	9	130%	0	-	0	-
Mallard	18	132%	* – 42	18	130%	0	-	0	-
Pintail	29	97%	1 – 57	29	94%	0	-	0	-
Shoveler	9	132%	* – 21	9	130%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	5	132%	* – 13	5	130%	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	71	114%	* – 151	71	112%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	11	132%	* – 25	11	130%	0	-	0	-
Total grouse	11	132%	* – 25	11	130%	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	82	101%	* – 164	82	98%	0	-	0	-

Sampling effort (Upper Copper River, 2004): 6 out of 8 villages in this region were surveyed; sampling and expansion of reported harvest represent Alaska Native households only.

–: No reported harvest. *: 95% CI ≥ 100%.

2005 HARVEST ESTIMATES

Table 46.—Estimated harvest of birds, Gulf of Alaska/Cook Inlet Region, Cook Inlet Subregion, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	2	69%	1 – 3	2	120%	0	-	0	-
Pintail	2	69%	1 – 3	2	120%	0	-	0	-
Shoveler	3	69%	1 – 5	3	120%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	2	69%	1 – 3	2	120%	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	8	69%	2 – 14	8	120%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	5	101%	* – 10	0	-	0	-	5	174%
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	5	101%	* – 10	0	-	0	-	5	174%
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	13	57%	5 – 20	8	120%	0	-	5	174%

Sampling effort (Cook Inlet, 2005): 1 out of 1 village in this subregion was surveyed.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 47.—Estimated harvest of eggs, Gulf of Alaska/Cook Inlet Region, Cook Inlet Subregion, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	0	-	-	0	-	0	-	0	-

Sampling effort (Cook Inlet, 2005): 1 out of 1 village in this subregion was surveyed.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 48.—Estimated harvest of birds, Aleutian/Pribilof Islands Region, Aleutian Pribilof/Villages Subregion, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	257	81%	50 – 465	39	197%	0	-	218	110%
Green-winged teal	1,844	50%	929 – 2,759	301	121%	0	-	1,543	50%
Mallard	1,795	40%	1,073 – 2,517	234	115%	102	83%	1,459	36%
Pintail	983	44%	554 – 1,413	111	150%	140	79%	733	48%
Shoveler	78	124%	* – 175	39	197%	0	-	39	197%
Black scoter	143	72%	40 – 246	33	197%	0	-	110	81%
Surf scoter	15	119%	* – 32	10	164%	0	-	5	134%
White-winged scoter	123	103%	* – 248	0	-	0	-	123	108%
Bufflehead	242	69%	75 – 408	33	197%	0	-	209	78%
Goldeneye	879	42%	513 – 1,246	104	142%	160	139%	615	42%
Canvasback	185	78%	41 – 329	33	197%	81	175%	72	139%
Scaup	214	63%	79 – 349	0	-	39	197%	175	77%
Common eider	72	109%	* – 149	13	197%	0	-	59	139%
King eider	80	140%	* – 193	67	164%	0	-	13	197%
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	775	55%	350 – 1,201	130	197%	160	139%	485	69%
Long-tailed duck	39	172%	* – 106	0	-	0	-	39	197%
Common merganser	81	119%	* – 179	39	197%	0	-	42	182%
Red-breasted merganser	162	82%	30 – 294	72	139%	0	-	90	111%
Duck (unidentified)	39	172%	* – 106	0	-	0	-	39	197%
Total ducks	8,007	39%	4,915 – 11,099	1,257	115%	682	92%	6,068	35%
Geese									
Black brant	1,450	43%	831 – 2,069	189	114%	296	124%	965	44%
Cackling Canada goose	495	72%	140 – 849	130	138%	117	146%	247	102%
Lesser Canada goose	3,713	43%	2,116 – 5,310	534	135%	586	123%	2,593	39%
White-fronted goose	13	172%	* – 35	0	-	0	-	13	197%
Emperor goose	213	76%	51 – 376	13	197%	26	197%	174	89%
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	5,884	37%	3,726 – 8,041	866	103%	1,025	88%	3,993	31%
Swans									
Tundra swan	7	172%	* – 18	0	-	0	-	7	197%
Cranes									
Sandhill crane	59	113%	* – 125	13	197%	0	-	46	151%
Grouse									
Ptarmigan	1,591	54%	734 – 2,447	130	197%	230	82%	1,231	65%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	78	172%	* – 213	78	197%	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	731	55%	326 – 1,135	131	94%	599	64%	0	-
Total seabirds	809	53%	383 – 1,235	209	94%	599	64%	0	-
Shorebirds									
Black oystercatcher	39	172%	* – 106	0	-	39	197%	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	156	124%	* – 350	156	138%	0	-	0	-
Small shorebird	325	172%	* – 886	0	-	0	-	325	197%
Total shorebirds	521	117%	* – 1,132	156	138%	39	197%	325	197%
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	16,876	35%	11,050 – 22,702	2,632	86%	2,575	59%	11,669	32%

Sampling effort (Aleutian/Pribilof Villages, 2005): 4 out of 11 villages in this subregion were surveyed; 30% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 49.—Estimated harvest of eggs, Aleutian/Pribilof Islands Region, Aleutian Pribilof/Villages Subregion, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	51	164%	* – 133	51	164%	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	51	164%	* – 133	51	164%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	977	91%	89 – 1,865	873	147%	104	197%	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	65	172%	* – 177	65	197%	0	-	0	-
Black-legged kittiwake	117	131%	* – 270	78	197%	39	197%	0	-
Red-legged kittiwake	39	172%	* – 106	0	-	39	197%	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	3,912	50%	1,974 – 5,850	2,805	62%	1,108	72%	0	-
Glaucous gull	4,795	56%	2,104 – 7,486	4,639	55%	156	197%	0	-
Herring gull	1,226	71%	350 – 2,102	905	122%	321	139%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	156	124%	* – 350	78	197%	78	197%	0	-
Total seabirds	10,311	39%	6,312 – 14,309	8,570	45%	1,741	67%	0	-
Shorebirds									
Black oystercatcher	294	105%	* – 602	107	146%	187	166%	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	101	164%	* – 267	101	164%	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	395	89%	45 – 744	208	109%	187	166%	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	11,733	38%	7,251 – 16,215	9,701	42%	2,031	76%	0	-

Sampling effort (Aleutian/Pribilof Villages, 2005): 4 out of 11 villages in this subregion were surveyed; 30% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 50.–Estimated harvest of birds, Bristol Bay Region, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	1,206	82%	218 – 2,193	597	40%	304	107%	304	160%
Green-winged teal	3,778	73%	1,023 – 6,532	1,968	71%	995	91%	814	77%
Mallard	7,230	28%	5,189 – 9,270	3,806	26%	1,218	59%	2,206	31%
Pintail	4,721	34%	3,116 – 6,327	3,040	33%	1,076	60%	606	25%
Shoveler	1,331	44%	741 – 1,920	523	34%	667	82%	141	47%
Goldeneye	1,386	64%	497 – 2,275	602	59%	672	121%	112	49%
Black scoter	601	34%	396 – 805	394	37%	0	-	207	59%
Surf scoter	423	65%	149 – 697	201	128%	0	-	222	50%
White-winged scoter	172	41%	102 – 242	98	67%	0	-	75	34%
Bufflehead	40	61%	16 – 64	24	80%	0	-	16	95%
Canvasback	241	57%	102 – 379	107	67%	19	121%	114	63%
Common eider	14	88%	2 – 27	0	-	0	-	14	99%
King eider	394	41%	233 – 556	385	42%	0	-	9	99%
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	17	120%	* – 38	17	120%	0	-	0	-
Scaup	345	124%	* – 772	243	102%	34	187%	68	178%
Harlequin duck	239	38%	148 – 331	239	38%	0	-	0	-
Long-tailed duck	61	74%	16 – 106	30	116%	0	-	31	114%
Common merganser	22	39%	14 – 31	3	120%	0	-	19	45%
Red-breasted merganser	217	142%	* – 524	170	178%	0	-	47	113%
Duck (unidentified)	298	49%	152 – 444	103	70%	123	64%	72	79%
Total ducks	22,736	39%	13,934 – 31,539	12,551	34%	5,108	70%	5,078	38%
Geese									
Black brant	945	96%	36 – 1,853	762	119%	80	73%	102	74%
Cackling Canada goose	2,131	16%	1,782 – 2,480	1,223	18%	41	97%	868	23%
Lesser Canada goose	1,341	20%	1,070 – 1,613	936	18%	194	66%	212	49%
White-fronted goose	1,287	46%	700 – 1,874	1,209	48%	12	94%	66	77%
Emperor goose	47	81%	9 – 86	47	81%	0	-	0	-
Lesser snow goose	8	84%	1 – 14	8	84%	0	-	0	-
Total geese	5,758	27%	4,196 – 7,321	4,185	36%	326	45%	1,248	21%
Swans									
Tundra swan	536	39%	325 – 747	382	29%	137	132%	17	68%
Cranes									
Sandhill crane	794	48%	410 – 1,177	189	24%	589	64%	15	84%
Grouse									
Spruce grouse	7,977	36%	5,128 – 10,825	2,023	70%	1,812	49%	4,142	38%
Ptarmigan	8,269	35%	5,402 – 11,136	5,604	40%	1,666	45%	999	39%
Total grouse	16,246	32%	10,985 – 21,507	7,627	47%	3,478	43%	5,141	33%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	116	85%	18 – 215	110	89%	6	157%	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Glaucous gull	97	157%	* – 249	65	157%	32	157%	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	213	85%	33 – 394	175	80%	39	133%	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Whimbrel	13	128%	* – 30	0	-	13	128%	0	-
Bristle-thighed curlew	125	66%	43 – 208	10	157%	116	70%	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	692	132%	* – 1,609	556	164%	37	94%	100	102%
Total shorebirds	831	112%	* – 1,759	565	161%	165	62%	100	102%
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	221	82%	40 – 403	126	96%	79	80%	16	112%
Total birds	47,336	32%	32,026 – 62,645	25,800	35%	9,922	54%	11,614	24%

Sampling effort (Bristol Bay, 2005): 14 out of 27 villages in this region were surveyed; 2 out of 3 subregions and 94% of households in the region were represented in the sample.

–: No reported harvest. *: 95% CI $\geq$ 100%.

Table 51.—Estimated harvest of eggs, Bristol Bay Region, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	41	124%	* – 93	41	124%	0	-	0	-
Green-winged teal	6	131%	* – 13	6	131%	0	-	0	-
Mallard	1,143	67%	378 – 1,908	1,130	68%	13	128%	0	-
Pintail	658	102%	* – 1,327	653	102%	6	128%	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	1,848	53%	870 – 2,826	1,829	53%	19	128%	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	61	134%	* – 142	61	134%	0	-	0	-
Lesser Canada goose	21	120%	* – 46	21	120%	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	9	128%	* – 21	9	128%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	91	96%	4 – 178	91	96%	0	-	0	-
Swans									
Tundra swan	32	187%	* – 93	32	187%	0	-	0	-
Cranes									
Sandhill crane	7	77%	2 – 13	7	86%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	109	89%	12 – 206	109	89%	0	-	0	-
Total grouse	109	89%	12 – 206	109	89%	0	-	0	-
Seabirds									
Cormorant	15	128%	* – 34	0	-	15	128%	0	-
Arctic tern	750	97%	19 – 1,481	685	106%	65	99%	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Kittiwake	11	128%	* – 26	11	128%	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	27,302	47%	14,513 – 40,091	18,982	51%	8,320	119%	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Glaucous gull	12,294	49%	6,322 – 18,265	11,934	50%	360	77%	0	-
Herring gull	366	102%	* – 741	366	102%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	841	92%	69 – 1,613	822	119%	19	128%	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	41,580	34%	27,476 – 55,684	32,801	35%	8,779	112%	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Whimbrel	436	43%	247 – 625	0	-	436	43%	0	-
Bristle-thighed curlew	3,557	127%	* – 8,073	1,965	138%	1,592	114%	0	-
Godwit	32	187%	* – 93	32	187%	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	4,025	112%	* – 8,548	1,998	136%	2,028	90%	0	-
Grebes and loons									
Common loon	73	123%	* – 163	73	123%	0	-	0	-
Pacific loon	7	120%	* – 15	7	120%	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	80	112%	* – 171	80	112%	0	-	0	-
Other/unknown bird	26	98%	* – 51	20	123%	6	122%	0	-
Total birds	47,799	35%	31,274 – 64,324	36,968	36%	10,831	93%	0	-

Sampling effort (Bristol Bay, 2005): 14 out of 27 villages in this region were surveyed; 2 out of 3 subregions and 94% of households in the region were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 52.—Estimated harvest of birds, Bristol Bay Region, Southwest Bristol Bay Subregion, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	526	21%	416 – 635	400	29%	125	50%	0	-
Green-winged teal	2,051	30%	1,444 – 2,658	1,125	58%	544	113%	381	36%
Mallard	5,289	14%	4,557 – 6,022	2,999	28%	915	68%	1,375	11%
Pintail	3,758	20%	3,017 – 4,498	2,516	37%	790	68%	451	21%
Shoveler	1,130	35%	738 – 1,523	376	26%	627	85%	127	50%
Goldeneye	1,094	52%	522 – 1,666	402	43%	632	125%	60	35%
Black scoter	565	25%	422 – 708	371	37%	0	-	195	61%
Surf scoter	273	34%	181 – 364	64	133%	0	-	209	51%
White-winged scoter	162	33%	108 – 216	92	68%	0	-	70	35%
Bufflehead	38	51%	18 – 57	22	82%	0	-	15	96%
Canvasback	220	32%	149 – 292	95	73%	18	124%	107	64%
Common eider	13	68%	4 – 22	0	-	0	-	13	101%
King eider	371	36%	239 – 503	362	42%	0	-	9	101%
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	16	93%	1 – 31	16	123%	0	-	0	-
Scaup	107	42%	62 – 152	107	43%	0	-	0	-
Harlequin duck	177	34%	116 – 237	177	35%	0	-	0	-
Long-tailed duck	54	57%	23 – 85	25	133%	0	-	29	118%
Common merganser	21	47%	11 – 31	3	123%	0	-	18	45%
Red-breasted merganser	21	58%	9 – 34	8	125%	0	-	13	101%
Duck (unidentified)	205	44%	115 – 295	97	71%	85	67%	22	83%
Total ducks	16,091	17%	13,376 – 18,806	9,258	26%	3,738	82%	3,095	16%
Geese									
Black brant	889	70%	264 – 1,514	717	122%	76	74%	96	76%
Cackling Canada goose	1,802	12%	1,589 – 2,015	1,065	18%	38	98%	699	23%
Lesser Canada goose	1,019	16%	858 – 1,179	814	19%	115	63%	90	66%
White-fronted goose	1,165	34%	764 – 1,566	1,101	51%	11	95%	53	88%
Emperor goose	38	65%	13 – 63	38	93%	0	-	0	-
Lesser snow goose	7	70%	2 – 12	7	86%	0	-	0	-
Total geese	4,920	22%	3,851 – 5,988	3,742	39%	240	43%	938	20%
Swans									
Tundra swan	462	31%	317 – 607	323	27%	129	136%	10	88%
Cranes									
Sandhill crane	728	37%	460 – 997	169	25%	555	66%	5	105%
Grouse									
Spruce grouse	3,933	27%	2,861 – 5,005	1,590	84%	1,011	73%	1,332	22%
Ptarmigan	6,117	24%	4,654 – 7,580	4,122	46%	1,430	49%	565	52%
Total grouse	10,050	24%	7,608 – 12,493	5,712	56%	2,441	56%	1,897	27%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	42	129%	* – 97	42	129%	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	42	129%	* – 97	42	129%	0	-	0	-
Shorebirds									
Whimbrel	12	129%	* – 28	0	-	12	129%	0	-
Bristle-thighed curlew	109	59%	45 – 173	0	-	109	72%	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	161	47%	85 – 237	50	73%	16	95%	94	105%
Total shorebirds	282	41%	168 – 396	50	73%	137	68%	94	105%
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	193	67%	63 – 323	119	97%	74	81%	0	-
Total birds	32,769	18%	26,937 – 38,600	19,415	36%	7,315	67%	6,039	17%

Sampling effort (Southwest Bristol Bay, 2005): 16 out of 21 villages in this subregion were surveyed; 57% of the subregion households were represented in the sample.

-. No reported harvest. *: 95% CI ≥ 100%.

Table 53.—Estimated harvest of eggs, Bristol Bay Region, Southwest Bristol Bay Subregion, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	39	91%	4 – 74	39	127%	0	-	0	-
Green-winged teal	5	92%	1 – 10	5	135%	0	-	0	-
Mallard	1,075	51%	523 – 1,628	1,063	69%	12	129%	0	-
Pintail	619	81%	118 – 1,120	614	105%	5	129%	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	1,739	45%	965 – 2,513	1,721	54%	18	129%	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	9	87%	1 – 16	9	93%	0	-	0	-
Lesser Canada goose	20	93%	1 – 38	20	123%	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	9	129%	* – 20	9	129%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	37	70%	11 – 63	37	82%	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	7	61%	3 – 11	7	88%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	102	65%	35 – 169	102	91%	0	-	0	-
Total grouse	102	65%	35 – 169	102	91%	0	-	0	-
Seabirds									
Cormorant	14	129%	* – 32	0	-	14	129%	0	-
Arctic tern	706	78%	158 – 1,253	644	109%	61	99%	0	-
Kittiwake	11	129%	* – 24	11	129%	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	20,342	35%	13,318 – 27,367	12,514	47%	7,828	122%	0	-
Glaucous gull	11,285	37%	7,155 – 15,416	11,020	52%	265	89%	0	-
Herring gull	345	78%	76 – 613	345	105%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	761	80%	153 – 1,369	743	127%	18	129%	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	33,464	25%	25,239 – 41,689	25,277	33%	8,187	117%	0	-
Shorebirds									
Whimbrel	410	39%	250 – 570	0	-	410	44%	0	-
Bristle-thighed curlew	3,347	63%	1,245 – 5,449	1,849	142%	1,498	117%	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	3,757	56%	1,644 – 5,870	1,849	142%	1,908	93%	0	-
Grebes and loons									
Common loon	69	105%	* – 141	69	125%	0	-	0	-
Pacific loon	7	93%	1 – 13	7	123%	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	76	96%	3 – 148	76	114%	0	-	0	-
Other/unknown bird	24	84%	4 – 45	19	125%	6	124%	0	-
Total birds	39,206	24%	29,809 – 48,603	29,088	35%	10,118	96%	0	-

Sampling effort (Southwest Bristol Bay, 2005): 16 out of 21 villages in this subregion were surveyed; 57% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 54.—Estimated harvest of birds, Bristol Bay Region, Dillingham Subregion, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	609	56%	270 – 948	161	125%	161	193%	286	165%
Green-winged teal	1,503	55%	675 – 2,331	726	162%	392	159%	385	153%
Mallard	1,513	33%	1,011 – 2,016	582	85%	231	137%	700	93%
Pintail	685	35%	444 – 926	344	79%	222	142%	119	91%
Shoveler	122	67%	41 – 203	116	120%	0	-	6	161%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	125	110%	* – 262	125	188%	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	210	83%	37 – 384	165	179%	0	-	46	107%
Canvasback	6	65%	2 – 10	6	113%	0	-	0	-
Scaup	218	71%	63 – 373	122	193%	32	193%	64	184%
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	49	75%	12 – 85	49	129%	0	-	0	-
Long-tailed duck	3	93%	1 – 6	3	161%	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	183	95%	9 – 356	152	193%	0	-	30	161%
Duck (unidentified)	76	54%	35 – 117	0	-	30	161%	46	113%
Total ducks	5,301	44%	2,968 – 7,635	2,551	130%	1,068	152%	1,682	106%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	203	37%	128 – 278	86	90%	0	-	117	88%
Lesser Canada goose	244	32%	166 – 322	67	69%	67	147%	110	74%
White-fronted goose	46	61%	18 – 74	37	127%	0	-	9	161%
Emperor goose	6	93%	1 – 12	6	161%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	498	26%	368 – 628	196	64%	67	147%	236	68%
Swans									
Tundra swan	43	81%	8 – 77	37	162%	0	-	6	113%
Cranes									
Sandhill crane	18	43%	10 – 26	9	92%	0	-	9	119%
Grouse									
Spruce grouse	3,572	26%	2,630 – 4,514	313	99%	694	61%	2,565	59%
Ptarmigan	1,663	38%	1,031 – 2,295	1,151	91%	137	114%	375	62%
Total grouse	5,235	23%	4,053 – 6,417	1,465	85%	831	56%	2,939	52%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	67	67%	22 – 112	61	125%	6	161%	0	-
Glaucous gull	91	69%	28 – 154	61	161%	30	161%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	158	49%	81 – 236	122	102%	37	136%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	9	93%	1 – 18	9	161%	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	491	105%	* – 1,004	472	187%	18	161%	0	-
Total shorebirds	500	103%	* – 1,014	481	183%	18	161%	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	15	67%	5 – 25	0	-	0	-	15	115%
Total birds	11,769	30%	8,188 – 15,350	4,860	113%	2,021	84%	4,888	51%

Sampling effort (Dillingham, 2005): 1 out of village in this subregion was surveyed.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 55.—Estimated harvest of eggs, Bristol Bay Region, Dillingham Subregion, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	49	93%	4 – 94	49	161%	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	49	93%	4 – 94	49	161%	0	-	0	-
Swans									
Tundra swan	30	112%	* – 65	30	193%	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	5,346	79%	1,105 – 9,587	5,346	137%	0	-	0	-
Glaucous gull	282	66%	97 – 466	209	143%	73	161%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	30	93%	2 – 59	30	161%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	5,658	75%	1,414 – 9,903	5,585	131%	73	161%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	30	112%	* – 65	30	193%	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	30	112%	* – 65	30	193%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	5,768	74%	1,478 – 10,058	5,695	130%	73	161%	0	-

Sampling effort (Dillingham, 2005): 1 out of village in this subregion was surveyed.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 56.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	3,383	45%	1,863 – 4,903	921	25%	1,160	141%	1,302	34%
Green-winged teal	2,956	33%	1,994 – 3,918	559	33%	792	125%	1,605	24%
Mallard	7,141	10%	6,459 – 7,824	2,702	14%	1,069	47%	3,370	13%
Pintail	9,236	11%	8,201 – 10,270	3,298	15%	1,424	52%	4,514	14%
Shoveler	2,600	17%	2,164 – 3,037	775	26%	257	97%	1,568	23%
Goldeneye	504	31%	349 – 659	319	44%	28	69%	158	62%
Black scoter	3,695	29%	2,630 – 4,760	2,769	27%	170	77%	756	94%
Surf scoter	1,007	51%	488 – 1,525	869	89%	0	-	137	92%
White-winged scoter	842	37%	533 – 1,151	535	40%	36	152%	271	97%
Bufflehead	138	29%	98 – 178	92	36%	2	121%	44	74%
Canvasback	943	50%	475 – 1,412	666	113%	31	85%	246	50%
Common eider	87	47%	46 – 127	37	70%	13	121%	36	94%
King eider	3,399	21%	2,684 – 4,114	2,840	23%	80	124%	479	76%
Spectacled eider	26	50%	13 – 39	21	88%	0	-	5	121%
Steller's eider	66	67%	22 – 110	0	-	9	159%	58	75%
Scaup	3,296	26%	2,433 – 4,158	2,342	19%	47	67%	906	90%
Harlequin duck	84	59%	34 – 133	44	80%	0	-	40	81%
Long-tailed duck	1,833	97%	62 – 3,603	805	82%	1,022	191%	5	121%
Common merganser	138	50%	69 – 208	67	89%	11	128%	60	58%
Red-breasted merganser	174	42%	102 – 247	84	56%	15	128%	75	76%
Duck (unidentified)	98	52%	47 – 149	11	113%	0	-	87	58%
Total ducks	41,645	13%	36,191 – 47,100	19,755	16%	6,168	67%	15,722	16%
Geese									
Black brant	4,383	13%	3,826 – 4,940	3,163	16%	604	46%	616	43%
Cackling Canada goose	15,538	7%	14,403 – 16,673	6,588	12%	1,517	27%	7,433	11%
Lesser Canada goose	8,218	9%	7,461 – 8,975	4,480	15%	745	34%	2,993	88%
White-fronted goose	18,528	8%	17,030 – 20,025	12,424	10%	1,740	59%	4,363	13%
Emperor goose	815	18%	669 – 962	550	24%	181	43%	84	56%
Lesser snow goose	1,758	35%	1,147 – 2,369	1,681	36%	16	78%	61	56%
Total geese	49,240	6%	46,427 – 52,053	28,886	8%	4,804	31%	15,550	19%
Swans									
Tundra swan	4,554	8%	4,211 – 4,898	2,786	14%	460	27%	1,309	16%
Cranes									
Sandhill crane	2,637	9%	2,388 – 2,885	1,856	14%	299	31%	482	20%
Grouse									
Spruce grouse	388	69%	121 – 655	0	-	0	-	388	75%
Ptarmigan	15,098	21%	11,924 – 18,272	14,454	32%	99	139%	546	64%
Total grouse	15,487	21%	12,305 – 18,668	14,454	32%	99	139%	934	48%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	173	62%	65 – 280	173	96%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	96	124%	* – 214	0	-	96	124%	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	269	59%	109 – 428	173	96%	96	124%	0	-
Shorebirds									
Whimbrel	21	75%	5 – 37	0	-	10	91%	11	121%
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	26	96%	1 – 50	8	160%	0	-	18	119%
Golden plover	59	122%	* – 131	59	122%	0	-	0	-
Small shorebird	11	149%	* – 28	11	154%	0	-	0	-
Total shorebirds	117	68%	38 – 196	78	96%	10	91%	29	87%
Grebes and loons									
Common loon	93	38%	57 – 128	55	61%	6	122%	32	64%
Pacific loon	128	83%	22 – 233	65	64%	63	124%	0	-
Red-throated loon	70	79%	14 – 125	46	127%	0	-	23	95%
Yellow-billed loon	19	71%	6 – 33	14	96%	2	114%	4	126%
Total grebes and loons	309	53%	146 – 472	180	58%	70	112%	59	60%
Other/unknown bird	256	67%	85 – 427	85	125%	0	-	171	84%
Total birds	114,514	8%	105,504 – 123,523	68,253	12%	12,005	45%	34,256	12%

Sampling effort (Yukon-Kuskokwim Delta, 2005): 26 out of 47 villages in this region were surveyed; 6 out of 7 subregions and 87% of households in the region were represented in the sample.

-.: No reported harvest. *: 95% CI $\geq$ 100%.

Table 57.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, 2005.



Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	63	72%	18 – 109	63	123%	0	-	0	-
Green-winged teal	336	42%	196 – 476	336	65%	0	-	0	-
Mallard	684	33%	458 – 911	659	37%	26	159%	0	-
Pintail	1,748	22%	1,362 – 2,134	1,687	26%	61	103%	0	-
Shoveler	447	44%	251 – 643	447	46%	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	15	122%	* – 33	15	122%	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	23	149%	* – 57	23	154%	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	3,316	20%	2,666 – 3,966	3,230	24%	86	116%	0	-
Geese									
Black brant	128	97%	4 – 252	128	108%	0	-	0	-
Cackling Canada goose	2,600	16%	2,180 – 3,020	2,389	21%	211	92%	0	-
Lesser Canada goose	2,694	14%	2,317 – 3,071	2,694	17%	0	-	0	-
White-fronted goose	3,131	15%	2,662 – 3,600	3,099	17%	32	124%	0	-
Emperor goose	145	61%	57 – 234	145	63%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	8,698	11%	7,762 – 9,635	8,455	14%	243	89%	0	-
Swans									
Tundra swan	1,002	20%	802 – 1,203	875	22%	128	131%	0	-
Cranes									
Sandhill crane	816	19%	658 – 974	791	28%	25	90%	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	475	80%	97 – 853	475	89%	0	-	0	-
Total grouse	475	80%	97 – 853	475	89%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	943	34%	619 – 1,268	892	36%	51	159%	0	-
Kittiwake	73	69%	23 – 124	73	118%	0	-	0	-
Sabine's gull	59	62%	23 – 96	59	65%	0	-	0	-
Mew gull	3,046	18%	2,486 – 3,606	2,995	21%	52	133%	0	-
Glaucous gull	1,295	32%	881 – 1,710	1,235	35%	60	137%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	852	126%	* – 1,926	852	130%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	6,269	22%	4,888 – 7,651	6,107	24%	163	142%	0	-
Shorebirds									
Whimbrel	25	114%	* – 53	25	127%	0	-	0	-
Bristle-thighed curlew	42	72%	12 – 72	42	123%	0	-	0	-
Godwit	92	56%	40 – 143	92	89%	0	-	0	-
Golden plover	244	49%	124 – 364	244	72%	0	-	0	-
Small shorebird	998	36%	634 – 1,362	998	48%	0	-	0	-
Total shorebirds	1,401	34%	931 – 1,870	1,401	47%	0	-	0	-
Common loon	37	92%	3 – 71	37	121%	0	-	0	-
Pacific loon	172	39%	104 – 240	163	53%	9	159%	0	-
Red-throated loon	71	62%	27 – 115	71	101%	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	280	37%	177 – 383	272	55%	9	159%	0	-
Other/unknown bird	11	64%	4 – 17	11	69%	0	-	0	-
Total birds	22,268	11%	19,771 – 24,765	21,615	14%	653	81%	0	-

Sampling effort (Yukon-Kuskokwim Delta, 2005): 26 out of 47 villages in this region were surveyed; 6 out of 7 subregions and 87% of households in the region were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 58.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	400	23%	309 – 491	144	63%	78	99%	178	45%
Green-winged teal	330	21%	263 – 398	82	69%	20	147%	228	42%
Mallard	2,073	10%	1,872 – 2,273	453	32%	218	94%	1,402	16%
Pintail	3,288	9%	2,978 – 3,597	685	34%	241	61%	2,361	14%
Shoveler	1,000	14%	860 – 1,140	249	51%	4	161%	746	21%
Goldeneye	66	46%	36 – 96	14	108%	0	-	52	153%
Black scoter	441	20%	353 – 528	218	39%	54	53%	169	48%
Surf scoter	47	82%	9 – 85	0	-	0	-	47	131%
White-winged scoter	134	46%	72 – 196	30	129%	30	180%	74	106%
Bufflehead	32	51%	16 – 49	7	124%	0	-	25	117%
Canvasback	56	44%	31 – 80	12	106%	6	113%	37	104%
Common eider	33	53%	16 – 50	14	125%	0	-	19	99%
King eider	2,432	19%	1,967 – 2,896	1,887	28%	78	125%	466	76%
Spectacled eider	14	58%	6 – 22	14	125%	0	-	0	-
Steller's eider	8	83%	1 – 15	0	-	8	161%	0	-
Scaup	495	26%	366 – 624	324	51%	0	-	171	48%
Harlequin duck	50	50%	25 – 74	18	130%	0	-	31	94%
Long-tailed duck	52	34%	34 – 70	52	144%	0	-	0	-
Common merganser	105	43%	60 – 150	55	106%	11	130%	39	73%
Red-breasted merganser	153	33%	102 – 203	76	61%	15	130%	62	88%
Total ducks	11,207	8%	10,295 – 12,118	4,335	19%	764	50%	6,108	15%
Geese									
Black brant	1,861	15%	1,589 – 2,133	1,655	24%	87	113%	118	82%
Cackling Canada goose	7,114	9%	6,461 – 7,766	1,533	21%	369	71%	5,212	13%
Lesser Canada goose	1,758	11%	1,559 – 1,957	1,029	26%	183	79%	546	32%
White-fronted goose	7,664	8%	7,084 – 8,244	4,546	15%	398	51%	2,720	14%
Emperor goose	185	27%	134 – 236	185	45%	0	-	0	-
Lesser snow goose	10	62%	4 – 16	6	108%	4	161%	0	-
Total geese	18,591	7%	17,352 – 19,831	8,953	14%	1,041	63%	8,597	11%
Swans									
Tundra swan	1,271	10%	1,139 – 1,404	486	23%	188	52%	597	22%
Cranes									
Sandhill crane	1,473	10%	1,320 – 1,626	1,014	20%	139	57%	320	26%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	2,857	24%	2,169 – 3,545	2,478	44%	83	161%	296	109%
Total grouse	2,857	24%	2,169 – 3,545	2,478	44%	83	161%	296	109%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	17	98%	1 – 35	0	-	0	-	17	119%
Golden plover	57	76%	14 – 101	57	124%	0	-	0	-
Small shorebird	11	125%	* – 25	11	156%	0	-	0	-
Total shorebirds	86	57%	37 – 135	68	106%	0	-	17	119%
Grebes and loons									
Common loon	14	68%	4 – 23	14	113%	0	-	0	-
Pacific loon	6	89%	1 – 10	6	108%	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	4	86%	1 – 7	4	130%	0	-	0	-
Total grebes and loons	23	48%	12 – 34	23	75%	0	-	0	-
Total birds	35,508	7%	33,144 – 37,873	17,358	14%	2,214	51%	15,936	11%

Sampling effort (Yukon-Kuskokwim Delta South Coast, 2005): 5 out of 8 villages in this subregion were surveyed; 64% of households in the subregion were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 59.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	62	58%	26 – 98	62	125%	0	-	0	-
Green-winged teal	159	53%	74 – 244	159	109%	0	-	0	-
Mallard	425	28%	308 – 543	401	48%	25	161%	0	-
Pintail	1,219	17%	1,011 – 1,427	1,159	29%	59	104%	0	-
Shoveler	331	37%	208 – 453	331	53%	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	14	76%	3 – 25	14	124%	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	22	125%	* – 50	22	156%	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	2,232	18%	1,841 – 2,623	2,148	30%	84	117%	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	2,120	13%	1,836 – 2,404	1,914	23%	206	93%	0	-
Lesser Canada goose	661	24%	504 – 818	661	47%	0	-	0	-
White-fronted goose	2,093	14%	1,791 – 2,394	2,061	21%	31	125%	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	4,874	12%	4,270 – 5,477	4,637	21%	237	90%	0	-
Swans									
Tundra swan	759	17%	629 – 889	635	26%	124	132%	0	-
Cranes									
Sandhill crane	621	18%	507 – 735	596	34%	24	91%	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	86	64%	31 – 141	86	85%	0	-	0	-
Total grouse	86	64%	31 – 141	86	85%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	672	38%	415 – 929	622	43%	50	161%	0	-
Kittiwake	71	56%	31 – 112	71	120%	0	-	0	-
Sabine's gull	23	92%	2 – 45	23	120%	0	-	0	-
Mew gull	1,316	20%	1,058 – 1,573	1,265	32%	50	135%	0	-
Glaucous gull	604	25%	455 – 753	545	40%	59	138%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	830	107%	* – 1,715	830	131%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	3,516	29%	2,498 – 4,534	3,358	38%	159	144%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	41	58%	17 – 65	41	125%	0	-	0	-
Godwit	84	49%	43 – 125	84	96%	0	-	0	-
Golden plover	238	39%	146 – 330	238	73%	0	-	0	-
Small shorebird	750	28%	540 – 959	750	48%	0	-	0	-
Total shorebirds	1,112	28%	800 – 1,425	1,112	51%	0	-	0	-
Grebes and loons									
Common loon	13	73%	4 – 22	13	100%	0	-	0	-
Pacific loon	153	31%	106 – 200	145	58%	8	161%	0	-
Red-throated loon	55	58%	23 – 87	55	125%	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	221	32%	151 – 290	212	64%	8	161%	0	-
Other/unknown bird	3	117%	* – 7	3	117%	0	-	0	-
Total birds	13,424	13%	11,654 – 15,195	12,787	20%	637	82%	0	-

Sampling effort (Yukon-Kuskokwim Delta South Coast, 2005): 5 out of 8 villages in this subregion were surveyed; 64% of households in the subregion were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 60.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	105	37%	66 – 143	0	-	16	91%	88	63%
Green-winged teal	458	36%	293 – 623	30	65%	77	62%	351	70%
Mallard	609	24%	465 – 753	83	63%	177	89%	349	44%
Pintail	669	26%	498 – 839	19	85%	162	80%	488	49%
Shoveler	96	36%	62 – 131	28	71%	6	125%	62	77%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	39	58%	17 – 62	8	122%	5	123%	26	132%
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	5	84%	1 – 10	0	-	0	-	5	123%
Scaup	73	49%	37 – 108	33	65%	0	-	39	132%
Common eider	30	50%	15 – 44	16	97%	13	122%	0	-
King eider	785	31%	539 – 1,031	785	41%	0	-	0	-
Spectacled eider	12	53%	5 – 18	6	85%	0	-	5	123%
Steller's eider	34	64%	12 – 55	0	-	0	-	34	94%
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	45	48%	23 – 67	40	79%	0	-	5	123%
Common merganser	13	81%	2 – 24	0	-	0	-	13	132%
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	2,972	16%	2,494 – 3,450	1,050	32%	455	44%	1,466	39%
Geese									
Black brant	2,124	14%	1,824 – 2,423	1,207	23%	460	55%	457	52%
Cackling Canada goose	3,672	14%	3,172 – 4,172	1,899	25%	820	32%	952	37%
Lesser Canada goose	965	18%	795 – 1,134	399	35%	376	49%	191	66%
White-fronted goose	2,812	15%	2,383 – 3,242	2,200	23%	261	41%	350	72%
Emperor goose	568	16%	479 – 656	322	30%	165	46%	80	58%
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	10,140	11%	9,073 – 11,206	6,027	18%	2,083	28%	2,030	33%
Swans									
Tundra swan	249	26%	183 – 315	78	38%	32	70%	139	69%
Cranes									
Sandhill crane	357	22%	279 – 435	271	34%	45	57%	40	67%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	3,343	28%	2,416 – 4,270	3,297	45%	13	122%	33	130%
Total grouse	3,343	28%	2,416 – 4,270	3,297	45%	13	122%	33	130%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	117	62%	44 – 189	117	134%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	93	84%	15 – 172	0	-	93	125%	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	210	51%	103 – 317	117	134%	93	125%	0	-
Shorebirds									
Whimbrel	16	62%	6 – 25	0	-	5	123%	10	123%
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	16	62%	6 – 25	0	-	5	123%	10	123%
Grebes and loons									
Common loon	5	80%	1 – 10	0	-	5	123%	0	-
Pacific loon	109	44%	61 – 157	48	83%	61	126%	0	-
Red-throated loon	56	59%	23 – 90	43	133%	0	-	13	132%
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	171	41%	102 – 240	91	106%	66	116%	13	132%
Other/unknown bird	89	79%	18 – 159	0	-	0	-	89	130%
Total birds	17,546	11%	15,664 – 19,429	10,931	20%	2,793	29%	3,822	29%

Sampling effort (Yukon-Kuskokwim Delta Mid-Coast, 2005): 5 out of 9 villages in this subregion were surveyed; 51% of households in the subregion were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 61.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	61	59%	25 – 98	61	85%	0	-	0	-
Mallard	10	72%	3 – 16	10	90%	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	71	52%	34 – 108	71	75%	0	-	0	-
Geese									
Black brant	117	64%	42 – 193	117	116%	0	-	0	-
Cackling Canada goose	152	61%	60 – 245	152	99%	0	-	0	-
Lesser Canada goose	16	96%	1 – 31	16	122%	0	-	0	-
White-fronted goose	360	50%	181 – 539	360	70%	0	-	0	-
Emperor goose	142	45%	78 – 205	142	63%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	788	34%	518 – 1,057	788	53%	0	-	0	-
Swans									
Tundra swan	15	74%	4 – 26	15	99%	0	-	0	-
Cranes									
Sandhill crane	56	65%	20 – 93	56	106%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	304	73%	81 – 527	304	133%	0	-	0	-
Total grouse	304	73%	81 – 527	304	133%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	65	80%	13 – 117	65	123%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	646	31%	443 – 849	646	42%	0	-	0	-
Glaucous gull	166	57%	72 – 260	166	93%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	876	27%	642 – 1,111	876	39%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	14	73%	4 – 25	14	133%	0	-	0	-
Red-throated loon	14	73%	4 – 25	14	133%	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	29	73%	8 – 50	29	133%	0	-	0	-
Total birds	2,140	25%	1,595 – 2,684	2,140	41%	0	-	0	-

Sampling effort (Yukon-Kuskokwim Delta Mid-Coast, 2005): 5 out of 9 villages in this subregion were surveyed; 51% of households in the subregion were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 62.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	395	23%	304 – 486	261	37%	0	-	133	58%
Green-winged teal	202	29%	144 – 259	90	71%	19	74%	93	61%
Mallard	1,026	20%	816 – 1,235	414	21%	225	31%	387	22%
Pintail	1,736	17%	1,446 – 2,027	987	22%	381	53%	368	29%
Shoveler	119	30%	83 – 154	33	57%	18	66%	67	67%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	4	98%	1 – 7	4	126%	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	6	74%	1 – 10	6	85%	0	-	0	-
Common merganser	2	103%	* – 4	0	-	0	-	2	115%
Red-breasted merganser	2	98%	1 – 4	2	126%	0	-	0	-
Total ducks	3,489	14%	2,990 – 3,988	1,796	20%	643	34%	1,050	26%
Geese									
Black brant	163	27%	119 – 206	109	44%	42	55%	12	98%
Cackling Canada goose	1,117	13%	966 – 1,268	594	25%	206	29%	317	32%
Lesser Canada goose	1,590	18%	1,298 – 1,882	1,013	16%	56	53%	521	29%
White-fronted goose	1,322	19%	1,073 – 1,572	1,029	18%	185	37%	108	49%
Emperor goose	30	37%	19 – 41	17	54%	11	77%	2	115%
Lesser snow goose	1,625	35%	1,053 – 2,197	1,558	39%	11	89%	56	59%
Total geese	5,847	17%	4,857 – 6,838	4,321	18%	512	27%	1,015	22%
Swans									
Tundra swan	737	20%	586 – 888	395	16%	184	28%	159	31%
Cranes									
Sandhill crane	370	15%	316 – 424	198	23%	103	34%	69	43%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	717	29%	510 – 924	610	40%	0	-	107	62%
Total grouse	717	29%	510 – 924	610	40%	0	-	107	62%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	37	99%	1 – 73	37	115%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	37	99%	1 – 73	37	115%	0	-	0	-
Shorebirds									
Whimbrel	5	88%	1 – 9	0	-	5	138%	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	5	88%	1 – 9	0	-	5	138%	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	2	113%	* – 3	2	127%	0	-	0	-
Yellow-billed loon	2	113%	* – 3	0	-	2	113%	0	-
Total grebes and loons	3	80%	1 – 5	2	127%	2	113%	0	-
Total birds	11,206	14%	9,663 – 12,748	7,359	14%	1,447	23%	2,399	20%

Sampling effort (Yukon-Kuskokwim Delta North Coast, 2005): 3 out of 4 villages in this subregion were surveyed; 67% of households in the subregion were represented in the sample.

—: No reported harvest. *: 95% CI $\geq$ 100%.

Table 63.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	48	72%	13 – 82	48	83%	0	-	0	-
Mallard	51	58%	21 – 81	51	70%	0	-	0	-
Pintail	192	43%	109 – 275	192	55%	0	-	0	-
Shoveler	26	99%	1 – 51	26	115%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	316	39%	191 – 441	316	47%	0	-	0	-
Geese									
Black brant	7	98%	1 – 14	7	126%	0	-	0	-
Cackling Canada goose	187	48%	96 – 278	187	70%	0	-	0	-
Lesser Canada goose	1,820	57%	778 – 2,862	1,820	16%	0	-	0	-
White-fronted goose	573	68%	182 – 964	573	22%	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	2,587	56%	1,151 – 4,023	2,587	17%	0	-	0	-
Swans									
Tundra swan	69	42%	40 – 98	69	52%	0	-	0	-
Cranes									
Sandhill crane	108	35%	71 – 146	108	43%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	18	99%	1 – 37	18	115%	0	-	0	-
Total grouse	18	99%	1 – 37	18	115%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	26	80%	5 – 46	26	92%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	26	73%	7 – 44	26	84%	0	-	0	-
Mew gull	437	50%	218 – 656	437	32%	0	-	0	-
Glaucous gull	260	40%	155 – 364	260	58%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	748	35%	488 – 1,009	748	30%	0	-	0	-
Shorebirds									
Whimbrel	24	113%	* – 51	24	127%	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	6	99%	1 – 11	6	115%	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	37	93%	3 – 72	37	105%	0	-	0	-
Total shorebirds	67	93%	5 – 129	67	104%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	7	70%	2 – 12	7	85%	0	-	0	-
Total birds	3,921	43%	2,251 – 5,592	3,921	15%	0	-	0	-

Sampling effort (Yukon-Kuskokwim Delta North Coast, 2005): 3 out of 4 villages in this subregion were surveyed; 67% of households in the subregion were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 64.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	320	21%	252 – 389	186	77%	46	119%	88	88%
Green-winged Teal	144	30%	101 – 188	107	114%	0	-	37	82%
Mallard	837	13%	728 – 946	468	34%	71	86%	298	41%
Pintail	596	23%	461 – 730	499	52%	0	-	96	66%
Shoveler	193	30%	135 – 250	143	66%	14	167%	36	107%
Black Scoter	469	30%	330 – 608	454	69%	0	-	15	162%
Surf Scoter	35	35%	23 – 48	35	78%	0	-	0	-
White-winged Scoter	34	54%	15 – 52	12	132%	0	-	22	107%
Bufflehead	5	98%	1 – 10	5	169%	0	-	0	-
Goldeneye	89	84%	14 – 164	74	154%	0	-	15	127%
Canvasback	65	41%	38 – 92	10	110%	0	-	55	88%
Scaup	0	-	-	0	-	0	-	0	-
Common Eider	0	-	-	0	-	0	-	0	-
King Eider	0	-	-	0	-	0	-	0	-
Spectacled Eider	0	-	-	0	-	0	-	0	-
Steller's Eider	0	-	-	0	-	0	-	0	-
Harlequin Duck	0	-	-	0	-	0	-	0	-
Long-tailed Duck	18	43%	10 – 26	18	95%	0	-	0	-
Common Merganser	4	69%	1 – 7	0	-	0	-	4	166%
Red-breasted Merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	11	44%	6 – 15	11	114%	0	-	0	-
Total Ducks	2,820	12%	2,487 – 3,153	2,023	28%	131	95%	666	33%
Geese									
Black Brant	18	79%	4 – 33	5	168%	0	-	14	167%
Cackling Canada Goose	641	14%	552 – 731	364	30%	16	95%	262	41%
Lesser Canada Goose	541	16%	454 – 627	410	44%	36	103%	94	72%
White-fronted Goose	1,350	15%	1,152 – 1,548	818	33%	153	72%	379	44%
Emperor Goose	0	-	-	0	-	0	-	0	-
Lesser Snow Goose	75	26%	56 – 94	75	64%	0	-	0	-
Total Geese	2,625	10%	2,367 – 2,884	1,671	27%	205	70%	749	28%
Swans									
Tundra Swan	1,151	10%	1,032 – 1,270	936	32%	27	139%	189	35%
Cranes									
Sandhill Crane	28	41%	16 – 40	24	101%	4	166%	0	-
Grouse									
Spruce Grouse	16	89%	2 – 30	0	-	0	-	16	141%
Ptarmigan	129	37%	81 – 176	60	112%	0	-	68	112%
Total Grouse	145	34%	95 – 194	60	112%	0	-	84	94%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic Tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's Gull	0	-	-	0	-	0	-	0	-
Mew Gull	0	-	-	0	-	0	-	0	-
Glaucous Gull	15	94%	1 – 29	15	162%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total Seabirds	15	94%	1 – 29	15	162%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed Curlew	0	-	-	0	-	0	-	0	-
Godwit	8	94%	1 – 15	8	162%	0	-	0	-
Golden Plover	0	-	-	0	-	0	-	0	-
Small Shorebird	0	-	-	0	-	0	-	0	-
Total Shorebirds	8	94%	1 – 15	8	162%	0	-	0	-
Grebes & Loons									
Common Loon	23	52%	11 – 36	19	130%	0	-	4	165%
Pacific Loon	0	-	-	0	-	0	-	0	-
Red-throated Loon	0	-	-	0	-	0	-	0	-
Yellow-billed Loon	0	-	-	0	-	0	-	0	-
Total Grebes & Loons	23	52%	11 – 36	19	130%	0	-	4	165%
Total Birds	6,815	9%	6,206 – 7,424	4,757	22%	367	70%	1,692	23%

Sampling effort (Lower Yukon, 2005): 5 out of 6 villages in this subregion were surveyed; 95% of households in the subregion were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 65.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged Teal	0	-	-	0	-	0	-	0	-
Mallard	76	101%	* – 153	76	174%	0	-	0	-
Pintail	195	72%	56 – 335	195	115%	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black Scoter	0	-	-	0	-	0	-	0	-
Surf Scoter	0	-	-	0	-	0	-	0	-
White-winged Scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common Eider	0	-	-	0	-	0	-	0	-
King Eider	0	-	-	0	-	0	-	0	-
Spectacled Eider	0	-	-	0	-	0	-	0	-
Steller's Eider	0	-	-	0	-	0	-	0	-
Harlequin Duck	0	-	-	0	-	0	-	0	-
Long-tailed Duck	0	-	-	0	-	0	-	0	-
Common Merganser	0	-	-	0	-	0	-	0	-
Red-breasted Merganser	0	-	-	0	-	0	-	0	-
Total Ducks	271	73%	73 – 470	271	122%	0	-	0	-
Geese									
Black Brant	0	-	-	0	-	0	-	0	-
Cackling Canada Goose	25	101%	* – 51	25	174%	0	-	0	-
Lesser Canada Goose	0	-	-	0	-	0	-	0	-
White-fronted Goose	19	101%	* – 38	19	174%	0	-	0	-
Emperor Goose	0	-	-	0	-	0	-	0	-
Lesser Snow Goose	0	-	-	0	-	0	-	0	-
Total Geese	44	101%	* – 89	44	174%	0	-	0	-
Swans									
Tundra Swan	29	63%	11 – 48	29	111%	0	-	0	-
Cranes									
Sandhill Crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce Grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total Grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic Tern	76	101%	* – 153	76	174%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's Gull	9	101%	* – 18	9	154%	0	-	0	-
Mew Gull	198	74%	51 – 345	198	125%	0	-	0	-
Glaucous Gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total Seabirds	283	77%	65 – 500	283	131%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed Curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden Plover	0	-	-	0	-	0	-	0	-
Small Shorebird	0	-	-	0	-	0	-	0	-
Total Shorebirds	0	-	-	0	-	0	-	0	-
Grebes & Loons									
Common Loon	23	85%	3 – 43	23	182%	0	-	0	-
Pacific Loon	0	-	-	0	-	0	-	0	-
Red-throated Loon	0	-	-	0	-	0	-	0	-
Yellow-billed Loon	0	-	-	0	-	0	-	0	-
Total Grebes & Loons	23	85%	3 – 43	23	182%	0	-	0	-
Total Birds	652	71%	191 – 1,112	652	120%	0	-	0	-

Sampling effort (Lower Yukon, 2005): 5 out of 6 villages in this subregion were surveyed; 95% of households in the subregion were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 66.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	345	24%	263 – 426	235	36%	44	87%	65	78%
Green-winged teal	799	23%	615 – 983	181	48%	55	77%	563	42%
Mallard	1,130	14%	970 – 1,291	895	22%	21	92%	215	35%
Pintail	927	17%	768 – 1,085	673	29%	103	69%	151	42%
Shoveler	252	24%	191 – 314	153	49%	32	128%	68	66%
Black scoter	1,230	19%	995 – 1,465	1,102	29%	60	133%	68	67%
Surf scoter	371	33%	249 – 493	361	47%	0	-	10	102%
White-winged scoter	370	29%	261 – 479	370	47%	0	-	0	-
Bufflehead	97	25%	73 – 122	77	40%	2	122%	18	74%
Goldeneye	303	22%	238 – 369	223	35%	27	70%	53	55%
Canvasback	298	26%	221 – 375	189	36%	24	105%	86	105%
Scaup	2,021	17%	1,680 – 2,363	1,892	22%	46	68%	84	78%
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	22	100%	* – 45	0	-	0	-	22	127%
Harlequin duck	6	90%	1 – 12	6	116%	0	-	0	-
Long-tailed duck	295	25%	222 – 368	295	34%	0	-	0	-
Common merganser	10	58%	4 – 16	10	89%	0	-	0	-
Red-breasted merganser	15	62%	6 – 25	5	113%	0	-	11	125%
Duck (unidentified)	85	44%	48 – 122	0	-	0	-	85	59%
Total ducks	8,580	11%	7,652 – 9,507	6,667	15%	415	45%	1,498	26%
Geese									
Black brant	76	40%	45 – 107	76	64%	0	-	0	-
Cackling Canada goose	1,658	17%	1,373 – 1,942	1,580	29%	0	-	77	48%
Lesser Canada goose	964	18%	794 – 1,133	880	27%	30	133%	53	55%
White-fronted goose	2,272	15%	1,940 – 2,605	2,079	21%	12	133%	182	35%
Emperor goose	6	57%	2 – 9	6	115%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	4,975	13%	4,312 – 5,639	4,621	19%	42	98%	312	26%
Swans									
Tundra swan	713	14%	613 – 814	630	19%	18	95%	66	65%
Cranes									
Sandhill crane	192	24%	145 – 238	188	36%	0	-	3	126%
Grouse									
Spruce grouse	200	29%	142 – 257	0	-	0	-	200	33%
Ptarmigan	1,656	29%	1,171 – 2,141	1,628	47%	0	-	28	99%
Total grouse	1,856	26%	1,368 – 2,344	1,628	47%	0	-	228	32%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	47	33%	32 – 63	20	74%	0	-	27	70%
Pacific loon	10	55%	4 – 15	10	86%	0	-	0	-
Red-throated loon	10	83%	2 – 18	0	-	0	-	10	139%
Yellow-billed loon	14	62%	5 – 22	10	124%	0	-	4	127%
Total grebes and loons	81	29%	57 – 104	40	52%	0	-	41	73%
Other/unknown bird	161	53%	76 – 246	83	127%	0	-	78	105%
Total birds	16,557	11%	14,771 – 18,344	13,857	16%	475	47%	2,225	22%

Sampling effort (Lower Kuskokwim, 2005): 7 out of 13 villages in this subregion were surveyed; 58% of households in the subregion were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 67.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	104	20%	84 – 125	104	44%	0	-	0	-
Pintail	98	58%	41 – 154	98	90%	0	-	0	-
Shoveler	79	78%	17 – 140	79	124%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	281	31%	195 – 367	281	49%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	49	65%	17 – 81	49	101%	0	-	0	-
Lesser Canada goose	128	57%	55 – 201	128	89%	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	177	45%	97 – 258	177	68%	0	-	0	-
Swans									
Tundra swan	104	51%	51 – 156	104	78%	0	-	0	-
Cranes									
Sandhill crane	10	78%	2 – 18	10	124%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	54	71%	16 – 93	54	113%	0	-	0	-
Total grouse	54	71%	16 – 93	54	113%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	69	58%	29 – 109	69	91%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	354	42%	204 – 504	354	65%	0	-	0	-
Glaucous gull	233	79%	49 – 417	233	129%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	656	39%	401 – 911	656	59%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	20	78%	4 – 35	20	124%	0	-	0	-
Total shorebirds	20	78%	4 – 35	20	124%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	1,302	31%	900 – 1,703	1,302	46%	0	-	0	-

Sampling effort (Lower Kuskokwim, 2005): 7 out of 13 villages in this subregion were surveyed; 58% of households in the subregion were represented in the sample.

—: No reported harvest. *: 95% CI $\geq$ 100%.

Table 68.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	1,733	81%	323 – 3,143	71	113%	946	170%	715	57%
Green-winged teal	947	88%	114 – 1,781	53	94%	601	162%	293	45%
Mallard	1,284	32%	874 – 1,695	320	68%	330	125%	634	43%
Pintail	1,785	36%	1,136 – 2,433	350	47%	500	133%	935	49%
Shoveler	874	32%	596 – 1,152	148	64%	177	136%	549	55%
Black scoter	1,460	39%	897 – 2,023	925	64%	52	188%	484	144%
Surf scoter	528	67%	176 – 879	450	165%	0	-	77	139%
White-winged scoter	243	74%	64 – 422	101	113%	0	-	142	170%
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	33	88%	4 – 61	0	-	0	-	33	124%
Canvasback	496	69%	151 – 840	439	169%	0	-	57	90%
Scaup	619	91%	58 – 1,180	30	128%	0	-	589	135%
Common eider	22	91%	2 – 42	6	179%	0	-	16	170%
King eider	95	78%	21 – 168	95	168%	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	26	56%	11 – 41	18	133%	0	-	8	170%
Long-tailed duck	1,369	123%	* – 3,050	373	170%	996	193%	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	11,513	35%	7,527 – 15,500	3,378	80%	3,603	112%	4,532	49%
Geese									
Black brant	30	68%	9 – 50	30	147%	0	-	0	-
Cackling Canada goose	940	24%	713 – 1,166	450	54%	66	193%	423	54%
Lesser Canada goose	2,191	23%	1,690 – 2,692	634	75%	46	149%	1,511	172%
White-fronted goose	2,633	34%	1,734 – 3,532	1,434	43%	686	143%	512	51%
Emperor goose	6	83%	1 – 11	6	179%	0	-	0	-
Lesser snow goose	4	120%	* – 9	0	-	0	-	4	170%
Total geese	5,803	21%	4,569 – 7,037	2,555	43%	799	147%	2,450	107%
Swans									
Tundra swan	316	25%	236 – 395	190	73%	0	-	126	53%
Cranes									
Sandhill crane	149	29%	106 – 193	113	73%	0	-	37	81%
Grouse									
Spruce grouse	163	120%	* – 358	0	-	0	-	163	170%
Ptarmigan	6,010	32%	4,071 – 7,949	6,010	69%	0	-	0	-
Total grouse	6,173	32%	4,226 – 8,120	6,010	69%	0	-	163	170%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	23,954	24%	18,246 – 29,662	12,245	57%	4,402	115%	7,307	49%

Sampling effort (Bethel, 2005): 1 out of 1 village in this subregion was surveyed. Harvest expansion assumed that harvesters account for 30% of the village size estimate (total households).

–: No reported harvest. *: 95% CI ≥ 100%.

Table 69.—Estimated harvest of eggs, Yukon-Kuskokwim Delta Region, Bethel Subregion, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-		0	-	0	-	0	-
Green-winged teal	59	83%	10 – 108	59	179%	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	59	83%	10 – 108	59	179%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	6	83%	1 – 11	6	179%	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	6	83%	1 – 11	6	179%	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	12	83%	2 – 22	12	179%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	18	83%	3 – 32	18	179%	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	30	59%	12 – 47	30	128%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	166	83%	29 – 303	166	179%	0	-	0	-
Total shorebirds	166	83%	29 – 303	166	179%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	261	60%	106 – 416	261	128%	0	-	0	-

Sampling effort (Bethel, 2005): 1 out of 1 village in this subregion was surveyed. *Harvest expansion assumed that harvesters account for 30% of the village size estimate (total households).*

-. No reported harvest. *: 95% CI ≥ 100%.

Table 70.—Estimated harvest of birds, Bering Strait/Norton Sound Region, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	565	40%	339 – 791	226	50%	0	-	339	52%
Green-winged teal	750	46%	403 – 1,097	474	55%	10	129%	265	51%
Mallard	890	41%	527 – 1,252	527	49%	46	94%	317	43%
Pintail	15,225	60%	6,033 – 24,418	3,686	19%	8,693	107%	2,846	30%
Shoveler	645	33%	434 – 855	423	42%	41	89%	181	40%
Black scoter	191	74%	49 – 333	176	80%	0	-	15	122%
Surf scoter	111	117%	* – 241	111	117%	0	-	0	-
White-winged scoter	73	107%	* – 152	73	107%	0	-	0	-
Bufflehead	103	190%	* – 299	103	190%	0	-	0	-
Goldeneye	29	133%	* – 67	29	133%	0	-	0	-
Canvasback	12	90%	1 – 23	5	122%	7	127%	0	-
Scaup	241	52%	116 – 366	163	53%	0	-	78	103%
Common eider	3,522	16%	2,947 – 4,096	2,085	21%	590	24%	847	24%
King eider	1,060	24%	803 – 1,316	516	33%	323	34%	221	32%
Spectacled eider	68	81%	13 – 122	62	84%	0	-	5	154%
Steller's eider	48	76%	12 – 84	22	112%	20	129%	6	116%
Harlequin duck	1,209	22%	943 – 1,475	418	36%	475	35%	316	63%
Long-tailed duck	538	68%	173 – 902	206	70%	0	-	332	84%
Common merganser	5	151%	* – 12	5	151%	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	33	101%	* – 67	20	129%	0	-	13	164%
Total ducks	25,317	37%	16,052 – 34,582	9,329	12%	10,206	91%	5,782	21%
Black brant	3,876	26%	2,873 – 4,879	2,581	26%	169	119%	1,127	48%
Cackling Canada goose	1,613	24%	1,226 – 2,000	1,118	30%	26	90%	469	35%
Lesser Canada goose	3,723	28%	2,699 – 4,748	2,288	25%	127	59%	1,308	46%
White-fronted goose	957	33%	645 – 1,270	792	36%	48	109%	117	54%
Emperor goose	1,487	18%	1,223 – 1,751	644	33%	253	20%	590	24%
Lesser snow goose	6,049	22%	4,743 – 7,355	4,419	28%	130	81%	1,500	19%
Total geese	17,706	17%	14,769 – 20,642	11,842	19%	753	34%	5,111	23%
Swans									
Tundra swan	891	25%	672 – 1,109	548	28%	133	58%	210	47%
Cranes									
Sandhill crane	1,214	18%	995 – 1,433	574	24%	110	48%	530	30%
Grouse									
Spruce grouse	487	64%	177 – 798	0	-	0	-	487	64%
Ptarmigan	3,671	38%	2,293 – 5,048	2,616	48%	7	164%	1,048	47%
Total grouse	4,158	34%	2,744 – 5,572	2,616	48%	7	164%	1,535	38%
Seabirds									
Cormorant	4,244	54%	1,935 – 6,553	95	79%	56	81%	4,093	56%
Arctic tern	60	122%	* – 134	60	122%	0	-	0	-
Kittiwake	2,361	20%	1,879 – 2,843	16	123%	0	-	2,345	21%
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	18	91%	2 – 34	18	91%	0	-	0	-
Glaucous gull	1,245	29%	881 – 1,608	329	75%	0	-	916	29%
Auklet	10,000	36%	6,442 – 13,558	4,285	20%	5,160	64%	555	84%
Murre	5,624	36%	3,619 – 7,629	4,458	45%	1,130	17%	36	82%
Guillemot	35	61%	14 – 57	14	86%	16	105%	5	151%
Puffin	89	60%	35 – 142	41	84%	40	84%	7	116%
Total seabirds	23,676	24%	17,898 – 29,454	9,317	24%	6,402	53%	7,957	32%
Shorebirds									
Whimbrel	7	164%	* – 18	0	-	0	-	7	164%
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	21	122%	* – 46	0	-	0	-	21	122%
Golden plover	99	151%	* – 249	99	151%	0	-	0	-
Small shorebird	29	95%	1 – 56	8	127%	0	-	21	122%
Total shorebirds	155	103%	* – 315	107	141%	0	-	48	108%
Grebes and loons									
Common loon	889	18%	727 – 1,050	23	79%	83	81%	783	18%
Pacific loon	33	87%	4 – 61	30	93%	0	-	2	151%
Red-throated loon	15	96%	1 – 30	15	96%	0	-	0	-
Yellow-billed loon	45	48%	23 – 66	37	53%	7	111%	0	-
Total grebes and loons	981	17%	815 – 1,148	105	41%	90	75%	786	18%
Other/unknown bird	18	69%	6 – 30	3	164%	9	116%	6	90%
Total birds	74,115	17%	61,682 – 86,548	34,442	12%	17,709	56%	21,965	16%

Sampling effort (Bering Strait/Norton Sound, 2005): 11 out of 16 villages in this region were surveyed; 3 out of 3 subregions were represented in the sample. Harvest estimates are presented only at region level as per request of regional partners.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 71.—Estimated harvest of eggs, Bering Strait/Norton Sound Region, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	20	122%	* – 45	20	122%	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	406	108%	* – 844	395	111%	10	122%	0	-
Pintail	1,272	44%	712 – 1,832	879	52%	393	98%	0	-
Shoveler	16	122%	* – 35	0	-	16	122%	0	-
Black scoter	63	84%	10 – 117	63	84%	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	21	122%	* – 46	21	122%	0	-	0	-
Scaup	186	60%	74 – 298	186	60%	0	-	0	-
Common eider	3,711	37%	2,344 – 5,077	3,711	37%	0	-	0	-
King eider	1,088	122%	* – 2,418	330	60%	758	173%	0	-
Spectacled eider	48	122%	* – 105	48	122%	0	-	0	-
Steller's eider	120	122%	* – 267	120	122%	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	713	49%	361 – 1,066	674	51%	40	122%	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	5	129%	* – 12	5	129%	0	-	0	-
Total ducks	7,669	30%	5,397 – 9,941	6,453	29%	1,216	112%	0	-
Geese									
Black brant	3,015	97%	98 – 5,932	3,015	97%	0	-	0	-
Cackling Canada goose	67	148%	* – 166	57	173%	10	122%	0	-
Lesser Canada goose	947	42%	545 – 1,349	947	42%	0	-	0	-
White-fronted goose	20	122%	* – 44	20	122%	0	-	0	-
Emperor goose	462	128%	* – 1,055	446	133%	16	122%	0	-
Lesser snow goose	121	129%	* – 276	121	129%	0	-	0	-
Total geese	4,632	76%	1,101 – 8,163	4,606	77%	26	88%	0	-
Swans									
Tundra swan	403	41%	236 – 571	403	41%	0	-	0	-
Cranes									
Sandhill crane	171	46%	93 – 250	161	48%	10	122%	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	38	185%	* – 109	38	185%	0	-	0	-
Total grouse	38	185%	* – 109	38	185%	0	-	0	-
Seabirds									
Cormorant	53	107%	* – 111	39	141%	14	116%	0	-
Arctic tern	1,045	59%	433 – 1,656	1,034	59%	10	122%	0	-
Kittiwake	1,146	53%	544 – 1,748	858	59%	288	79%	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	2,621	45%	1,436 – 3,806	2,405	48%	216	116%	0	-
Glaucous gull	12,291	50%	6,146 – 18,436	12,127	51%	164	112%	0	-
Auklet	109	51%	53 – 165	51	99%	58	83%	0	-
Murre	77,152	21%	61,179 – 93,126	70,144	22%	7,009	74%	0	-
Guillemot	15	87%	2 – 29	15	87%	0	-	0	-
Puffin	335	78%	73 – 597	315	83%	20	87%	0	-
Total seabirds	94,768	19%	77,208 – 112,327	86,989	19%	7,778	67%	0	-
Shorebirds									
Whimbrel	21	122%	* – 46	0	-	21	122%	0	-
Bristle-thighed curlew	58	185%	* – 164	58	185%	0	-	0	-
Godwit	42	122%	* – 93	21	122%	21	122%	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	2,736	73%	746 – 4,727	2,736	73%	0	-	0	-
Total shorebirds	2,856	70%	861 – 4,852	2,815	71%	42	122%	0	-
Grebes and loons									
Common loon	257	39%	157 – 357	257	39%	0	-	0	-
Pacific loon	165	121%	* – 363	165	121%	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	421	53%	200 – 643	421	53%	0	-	0	-
Other/unknown bird	2,123	18%	1,733 – 2,513	2,123	18%	0	-	0	-
Total birds	113,082	19%	91,685 – 134,480	104,009	20%	9,073	59%	0	-

Sampling effort (Bering Strait/Norton Sound, 2005): 11 out of 16 villages in this region were surveyed; 3 out of 3 subregions were represented in the sample. Harvest estimates are presented only at region level as per request of regional partners.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 72.—Estimated harvest of birds, North Slope Region, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	a	
Green-winged teal	0	-	-	0	-	0	-	a	
Mallard	11	70%	3 – 18	11	70%	0	-	a	
Pintail	14	99%	1 – 28	14	99%	0	-	a	
Shoveler	0	-	-	0	-	0	-	a	
Black scoter	0	-	-	0	-	0	-	a	
Surf scoter	0	-	-	0	-	0	-	a	
White-winged scoter	0	-	-	0	-	0	-	a	
Bufflehead	0	-	-	0	-	0	-	a	
Goldeneye	0	-	-	0	-	0	-	a	
Canvasback	0	-	-	0	-	0	-	a	
Scaup	6	129%	* – 15	6	129%	0	-	a	
Common eider	811	26%	600 – 1,023	533	25%	279	53%	a	
King eider	5,525	14%	4,737 – 6,312	1,846	19%	3,679	17%	a	
Spectacled eider	43	41%	25 – 60	15	60%	27	55%	a	
Steller's eider	14	49%	7 – 22	12	58%	3	100%	a	
Harlequin duck	0	-	-	0	-	0	-	a	
Long-tailed duck	10	100%	* – 20	7	122%	2	170%	a	
Common merganser	0	-	-	0	-	0	-	a	
Red-breasted merganser	0	-	-	0	-	0	-	a	
Duck (unidentified)	1	78%	1 – 2	0	-	1	78%	a	
Total ducks	6,435	13%	5,621 – 7,250	2,444	16%	3,991	16%	a	
Geese									
Black brant	1,233	29%	874 – 1,591	1,026	32%	207	37%	a	
Cackling Canada goose	297	29%	210 – 384	221	35%	76	59%	a	
Lesser Canada goose	138	38%	85 – 191	80	50%	58	49%	a	
White-fronted goose	6,161	16%	5,164 – 7,157	5,574	17%	587	37%	a	
Emperor goose	0	-	-	0	-	0	-	a	
Lesser snow goose	336	32%	227 – 445	289	37%	47	53%	a	
Total geese	8,165	15%	6,947 – 9,382	7,189	16%	975	26%	a	
Swans									
Tundra swan	18	49%	9 – 27	18	49%	0	-	a	
Cranes									
Sandhill crane	13	83%	2 – 23	13	83%	0	-	a	
Grouse									
Spruce grouse	0	-	-	0	-	0	-	a	
Ptarmigan	759	31%	526 – 993	750	31%	10	68%	a	
Total grouse	759	31%	526 – 993	750	31%	10	68%	a	
Seabirds									
Cormorant	0	-	-	0	-	0	-	a	
Arctic tern	11	65%	4 – 18	11	65%	0	-	a	
Kittiwake	0	-	-	0	-	0	-	a	
Sabine's gull	0	-	-	0	-	0	-	a	
Mew gull	0	-	-	0	-	0	-	a	
Glaucous gull	0	-	-	0	-	0	-	a	
Auklet	0	-	-	0	-	0	-	a	
Murre	29	81%	6 – 52	29	81%	0	-	a	
Guillemot	0	-	-	0	-	0	-	a	
Puffin	0	-	-	0	-	0	-	a	
Total seabirds	40	61%	15 – 64	40	61%	0	-	a	
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	a	
Bristle-thighed curlew	0	-	-	0	-	0	-	a	
Godwit	0	-	-	0	-	0	-	a	
Golden plover	0	-	-	0	-	0	-	a	
Small shorebird	119	54%	55 – 183	15	103%	104	59%	a	
Total shorebirds	119	54%	55 – 183	15	103%	104	59%	a	
Grebes and loons									
Common loon	0	-	-	0	-	0	-	a	
Pacific loon	0	-	-	0	-	0	-	a	
Red-throated loon	0	-	-	0	-	0	-	a	
Yellow-billed loon	2	170%	* – 6	0	-	2	170%	a	
Total grebes and loons	2	170%	* – 6	0	-	2	170%	a	
Other/unknown bird	63	106%	* – 131	63	106%	0	-	a	
Total birds	15,615	11%	13,820 – 17,410	10,532	14%	5,083	14%	a	

Sampling effort (North Slope, 2005): 7 out of 8 villages in this region were surveyed; 2 out of 2 subregions were represented in the sample. Harvest estimates are presented only at region level as per request of regional partners. ^aThere is no fall survey in this region.

–: No harvest, no confidence interval. *: 95% CI ≥ 100%.

Table 73.—Estimated harvest of eggs, North Slope Region, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	a	
Green-winged teal	0	-	-	0	-	0	-	a	
Mallard	0	-	-	0	-	0	-	a	
Pintail	0	-	-	0	-	0	-	a	
Shoveler	0	-	-	0	-	0	-	a	
Black scoter	0	-	-	0	-	0	-	a	
Surf scoter	0	-	-	0	-	0	-	a	
White-winged scoter	0	-	-	0	-	0	-	a	
Bufflehead	0	-	-	0	-	0	-	a	
Goldeneye	0	-	-	0	-	0	-	a	
Canvasback	0	-	-	0	-	0	-	a	
Scaup	0	-	-	0	-	0	-	a	
Common eider	0	-	-	0	-	0	-	a	
King eider	211	38%	131 – 290	151	82%	59	78%	a	
Spectacled eider	0	-	-	0	-	0	-	a	
Steller's eider	0	-	-	0	-	0	-	a	
Harlequin duck	0	-	-	0	-	0	-	a	
Long-tailed duck	4	68%	1 – 7	4	93%	0	-	a	
Common merganser	0	-	-	0	-	0	-	a	
Red-breasted merganser	0	-	-	0	-	0	-	a	
Duck (unidentified)	125	78%	28 – 222	0	-	125	78%	a	
Total ducks	339	46%	182 – 496	155	79%	184	78%	a	
Geese									
Black brant	66	56%	30 – 103	66	112%	0	-	a	
Cackling Canada goose	91	56%	41 – 142	91	112%	0	-	a	
Lesser Canada goose	33	56%	15 – 52	33	112%	0	-	a	
White-fronted goose	99	52%	48 – 150	66	112%	32	110%	a	
Emperor goose	0	-	-	0	-	0	-	a	
Lesser snow goose	34	68%	11 – 57	34	93%	0	-	a	
Total geese	324	41%	191 – 457	291	87%	32	110%	a	
Swans									
Tundra swan	83	56%	37 – 129	83	112%	0	-	a	
Cranes									
Sandhill crane	0	-	-	0	-	0	-	a	
Grouse									
Spruce grouse	0	-	-	0	-	0	-	a	
Ptarmigan	0	-	-	0	-	0	-	a	
Total grouse	0	-	-	0	-	0	-	a	
Seabirds									
Cormorant	0	-	-	0	-	0	-	a	
Arctic tern	83	56%	37 – 129	83	112%	0	-	a	
Kittiwake	0	-	-	0	-	0	-	a	
Sabine's gull	0	-	-	0	-	0	-	a	
Mew gull	0	-	-	0	-	0	-	a	
Glaucous gull	227	44%	127 – 327	179	103%	47	78%	a	
Auklet	0	-	-	0	-	0	-	a	
Murre	3,572	44%	1,992 – 5,152	2,527	50%	1,045	106%	a	
Guillemot	0	-	-	0	-	0	-	a	
Puffin	0	-	-	0	-	0	-	a	
Total seabirds	3,882	41%	2,296 – 5,468	2,790	46%	1,092	102%	a	
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	a	
Bristle-thighed curlew	0	-	-	0	-	0	-	a	
Godwit	0	-	-	0	-	0	-	a	
Golden plover	0	-	-	0	-	0	-	a	
Small shorebird	0	-	-	0	-	0	-	a	
Total shorebirds	0	-	-	0	-	0	-	a	
Grebes and loons									
Common loon	0	-	-	0	-	0	-	a	
Pacific loon	0	-	-	0	-	0	-	a	
Red-throated loon	0	-	-	0	-	0	-	a	
Yellow-billed loon	0	-	-	0	-	0	-	a	
Total grebes and loons	0	-	-	0	-	0	-	a	
Other/unknown bird	76	49%	39 – 114	76	98%	0	-	a	
Total birds	4,705	35%	3,074 – 6,336	3,396	43%	1,309	86%	a	

Sampling effort (North Slope, 2005): 7 out of 8 villages in this region were surveyed; 2 out of 2 subregions were represented in the sample. Harvest estimates are presented only at region level as per request of regional partners. ^aThere is no fall survey in this region.

–: No harvest, no confidence interval. *: 95% CI ≥ 100%.

Table 74.—Estimated harvest of birds, Interior Region, Mid Yukon/Upper Kuskokwim Subregion, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	328	34%	218 – 439	116	56%	0	-	213	36%
Green-winged teal	123	48%	64 – 182	45	71%	0	-	78	60%
Mallard	298	34%	195 – 400	99	54%	0	-	199	39%
Pintail	227	53%	106 – 348	139	77%	0	-	87	51%
Shoveler	69	51%	34 – 103	24	91%	0	-	45	57%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	14	149%	* – 35	0	-	0	-	14	148%
White-winged scoter	0	0%	-	0	-	0	-	0	-
Bufflehead	24	92%	2 – 45	24	91%	0	-	0	-
Goldeneye	61	76%	15 – 108	43	91%	0	-	19	131%
Canvasback	12	149%	* – 29	12	148%	0	-	0	-
Scaup	5	149%	* – 12	0	-	0	-	5	148%
Harlequin duck	7	149%	* – 18	7	148%	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	1,167	35%	755 – 1,580	508	60%	0	-	659	34%
Geese									
Black brant	17	88%	2 – 31	0	-	0	-	17	87%
Cackling Canada goose	12	149%	* – 29	0	-	0	-	12	148%
Lesser Canada goose	529	34%	349 – 709	189	52%	0	-	340	39%
White-fronted goose	95	66%	32 – 157	85	69%	9	148%	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	652	33%	436 – 869	274	52%	9	148%	369	37%
Swans									
Tundra swan	17	77%	4 – 29	14	85%	0	-	2	148%
Cranes									
Sandhill crane	2	149%	* – 6	0	-	0	-	2	148%
Grouse									
Grouse (unidentified)	877	34%	576 – 1,177	12	148%	0	-	865	31%
Ptarmigan	14	149%	* – 35	0	-	0	-	14	148%
Total grouse	891	34%	587 – 1,194	12	148%	0	-	879	31%
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	14	149%	* – 35	0	-	0	-	14	148%
Total birds	2,744	29%	1,956 – 3,532	808	52%	9	148%	1,926	28%

Sampling effort (Mid-Yukon/Upper Kuskokwim, 2005): 6 out of 9 villages in this subregion were surveyed; 42% of households in the subregion were represented in the sample.

—: No harvest, no confidence interval. *: 95% CI ≥ 100%.

Table 75.—Estimated harvest of eggs, Interior Region, Mid Yukon/Upper Kuskokwim Subregion, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	2	149%	* – 6	2	148%	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	2	149%	* – 6	2	148%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	2	149%	* – 6	2	148%	0	-	0	-

Sampling effort (Mid-Yukon/Upper Kuskokwim, 2005): 6 out of 9 villages in this subregion were surveyed; 42% of households in the subregion were represented in the sample.

–: No harvest, no confidence interval. *: 95% CI ≥ 100%.

Table 76.—Estimated harvest of birds, Interior Region, Yukon/Koyukuk Subregion, 2005.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	50	83%	9 – 91	22	124%	0	-	28	112%
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	144	56%	63 – 225	82	72%	0	-	61	109%
Pintail	139	52%	67 – 211	125	81%	0	-	15	167%
Shoveler	18	74%	5 – 31	0	-	0	-	18	101%
Black scoter	11	96%	1 – 22	7	117%	0	-	4	167%
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	4	167%	* – 10	4	167%	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	365	49%	185 – 545	240	72%	0	-	125	100%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	337	52%	163 – 511	337	54%	0	-	0	-
White-fronted goose	224	68%	71 – 377	224	68%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	560	56%	247 – 874	560	56%	0	-	0	-
Swans									
Tundra swan	4	144%	* – 11	4	147%	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	930	44%	525 – 1,335	805	51%	0	-	125	100%

Sampling effort (Yukon/Koyukuk, 2005): 3 out of 12 villages in this subregion were surveyed; 27% of households in the subregion were represented in the sample.

-: No harvest, no confidence interval. *: 95% CI $\geq$ 100%.

Table 77.—Estimated harvest of eggs, Interior Region, Yukon/Koyukuk Subregion, 2005.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	0	-	-	0	-	0	-	0	-

Sampling effort (Yukon/Koyukuk, 2005): 3 out of 12 villages in this subregion were surveyed; 27% of households in the subregion were represented in the sample.

—: No harvest, no confidence interval. *: 95% CI ≥ 100%.

2006 HARVEST ESTIMATES

Table 78.—Estimated harvest of birds, Gulf of Alaska/Cook Inlet Region, Gulf of Alaska Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	93	47%	49 – 138	23	126%	0	-	71	65%
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	41	67%	13 – 69	0	-	0	-	41	129%
Surf scoter	4	108%	* – 8	0	-	0	-	4	126%
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	61	66%	21 – 101	23	126%	19	128%	19	126%
Goldeneye	300	45%	165 – 436	42	84%	0	-	259	70%
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	8	108%	* – 16	0	-	0	-	8	126%
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	19	115%	* – 41	0	-	19	128%	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	55	55%	25 – 85	0	-	0	-	55	82%
Total ducks	581	42%	338 – 823	87	99%	38	128%	455	65%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	15	108%	* – 32	0	-	0	-	15	126%
Total shorebirds	15	108%	* – 32	0	-	0	-	15	126%
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	596	42%	343 – 849	87	99%	38	128%	470	65%

Sampling effort (Gulf of Alaska, 2006): 2 out of 4 villages were surveyed; 44% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 79.—Estimated harvest of eggs, Gulf of Alaska/Cook Inlet Region, Gulf of Alaska Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	64	115%	* – 137	64	128%	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Herring gull	38	115%	* – 82	38	128%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	102	115%	* – 220	102	128%	0	-	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	102	115%	* – 220	102	128%	0	-	0	-

Sampling effort (Gulf of Alaska, 2006): 2 out of 4 villages were surveyed; 44% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 80.—Estimated harvest of birds, Kodiak Archipelago Region, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	"			367	53%	362	41%		"
Green-winged teal	"			208	52%	190	67%		"
Mallard	"			1,095	33%	438	42%		"
Pintail	"			13	57%	211	49%		"
Shoveler	"			0	-	0	-		"
Black scoter	"			103	65%	0	-		"
Surf scoter	"			131	65%	0	-		"
White-winged scoter	"			89	62%	0	-		"
Bufflehead	"			237	53%	0	-		"
Goldeneye	"			577	33%	128	72%		"
Canvasback	"			0	-	55	97%		"
Scaup	"			49	102%	0	-		"
Common eider	"			0	-	0	-		"
King eider	"			5	99%	0	-		"
Spectacled eider	"			0	-	0	-		"
Steller's eider	"			0	-	0	-		"
Harlequin duck	"			158	60%	0	-		"
Long-tailed duck	"			38	141%	0	-		"
Common merganser	"			21	98%	0	-		"
Red-breasted merganser	"			0	-	0	-		"
Total ducks	"			3,090	33%	1,384	41%		"
Geese									
Black brant	"			0	-	0	-		"
Cackling Canada goose	"			0	-	0	-		"
Lesser Canada goose	"			17	65%	0	-		"
White-fronted goose	"			0	-	0	-		"
Emperor goose	"			0	-	0	-		"
Lesser snow goose	"			0	-	0	-		"
Total geese	"			17	65%	0	-		"
Swans									
Tundra swan	"			0	-	0	-		"
Cranes									
Sandhill crane	"			0	-	0	-		"
Grouse									
Ptarmigan	"			121	88%	0	-		"
Seabirds									
Cormorant	"			0	-	0	-		"
Arctic tern	"			0	-	0	-		"
Black-legged kittiwake	"			0	-	0	-		"
Red-legged kittiwake	"			37	88%	0	-		"
Sabine's gull	"			0	-	0	-		"
Glaucous-winged gull	"			0	-	0	-		"
Herring gull	"			165	49%	0	-		"
Auklet	"			53	130%	0	-		"
Murre	"			0	-	0	-		"
Guillemot	"			0	-	0	-		"
Puffin	"			0	-	0	-		"
Total seabirds	"			255	48%	0	-		"
Shorebirds									
Black oystercatcher	"			0	-	0	-		"
Bristle-thighed curlew	"			0	-	0	-		"
Godwit	"			0	-	0	-		"
Golden plover	"			0	-	0	-		"
Small shorebird	"			0	-	0	-		"
Total shorebirds	"			0	-	0	-		"
Grebes and loons									
Common loon	"			0	-	0	-		"
Pacific loon	"			0	-	0	-		"
Red-throated loon	"			0	-	0	-		"
Yellow-billed loon	"			0	-	0	-		"
Total grebes and loons	"			0	-	0	-		"
Total birds	"			3,483	31%	1,384	41%		"

Sampling effort (Kodiak Archipelago, 2006): 6 out of 12 villages in the region were surveyed. 2 out of 2 subregions in this region were sampled; 44% of households in the Kodiak City & Road Connected subregion were represented in the sample. ^a Fall-Winter harvest data not available.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 81.—Estimated harvest of eggs, Kodiak Archipelago Region, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number ^a	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	a	
Green-winged teal	0	-	-	0	-	0	-	a	
Mallard	116	68%	37 – 195	116	68%	0	-	a	
Pintail	0	-	-	0	-	0	-	a	
Shoveler	0	-	-	0	-	0	-	a	
Black scoter	0	-	-	0	-	0	-	a	
Surf scoter	0	-	-	0	-	0	-	a	
White-winged scoter	0	-	-	0	-	0	-	a	
Bufflehead	0	-	-	0	-	0	-	a	
Goldeneye	0	-	-	0	-	0	-	a	
Canvasback	0	-	-	0	-	0	-	a	
Scaup	0	-	-	0	-	0	-	a	
Common eider	0	-	-	0	-	0	-	a	
King eider	0	-	-	0	-	0	-	a	
Spectacled eider	0	-	-	0	-	0	-	a	
Steller's eider	0	-	-	0	-	0	-	a	
Harlequin duck	0	-	-	0	-	0	-	a	
Long-tailed duck	0	-	-	0	-	0	-	a	
Common merganser	32	130%	* – 74	32	130%	0	-	a	
Red-breasted merganser	0	-	-	0	-	0	-	a	
Total ducks	148	71%	43 – 252	148	71%	0	-	a	
Geese									
Black brant	0	-	-	0	-	0	-	a	
Cackling Canada goose	0	-	-	0	-	0	-	a	
Lesser Canada goose	0	-	-	0	-	0	-	a	
White-fronted goose	0	-	-	0	-	0	-	a	
Emperor goose	0	-	-	0	-	0	-	a	
Lesser snow goose	0	-	-	0	-	0	-	a	
Total geese	0	-	-	0	-	0	-	a	
Swans									
Tundra swan	0	-	-	0	-	0	-	a	
Cranes									
Sandhill crane	0	-	-	0	-	0	-	a	
Grouse									
Ptarmigan	0	-	-	0	-	0	-	a	
Seabirds									
Cormorant	0	-	-	0	-	0	-	a	
Arctic tern	27	98%	1 – 53	27	98%	0	-	a	
Black-legged kittiwake	1,409	123%	* – 3,148	1,409	123%	0	-	a	
Red-legged kittiwake	253	50%	127 – 378	253	50%	0	-	a	
Sabine's gull	0	-	-	0	-	0	-	a	
Glaucous-winged gull	2,148	81%	406 – 3,890	2,148	81%	0	-	a	
Herring gull	936	43%	531 – 1,340	936	43%	0	-	a	
Auklet	0	-	-	0	-	0	-	a	
Murre	0	-	-	0	-	0	-	a	
Guillemot	0	-	-	0	-	0	-	a	
Puffin	0	-	-	0	-	0	-	a	
Total seabirds	4,772	75%	1,184 – 8,360	4,772	75%	0	-	a	
Shorebirds									
Black oystercatcher	302	67%	101 – 502	302	67%	0	-	a	
Bristle-thighed curlew	0	-	-	0	-	0	-	a	
Godwit	0	-	-	0	-	0	-	a	
Golden plover	0	-	-	0	-	0	-	a	
Small shorebird	0	-	-	0	-	0	-	a	
Total shorebirds	302	67%	101 – 502	302	67%	0	-	a	
grebes and loons									
Common loon	0	-	-	0	-	0	-	a	
Pacific loon	0	-	-	0	-	0	-	a	
Red-throated loon	0	-	-	0	-	0	-	a	
Yellow-billed loon	0	-	-	0	-	0	-	a	
Total grebes and loons	0	-	-	0	-	0	-	a	
Total birds	5,222	73%	1,403 – 9,041	5,222	73%	0	-	a	

Sampling effort (Kodiak Archipelago, 2006): 6 out of 12 villages in the region were surveyed. 2 out of 2 subregions in this region were sampled; 44% of households in the Kodiak City & Road Connected subregion were represented in the sample. a Fall-Winter harvest data not available; fall egg harvest assumed to be zero in annual harvest estimates.

—: No reported harvest. *: 95% CI $\geq$ 100%.

Table 82.—Estimated harvest of birds, Kodiak Archipelago Region, Kodiak Villages Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	196	41%	117 – 276	0	-	0	-	196	67%
Green-winged teal	221	39%	136 – 307	43	85%	0	-	179	74%
Mallard	1,653	37%	1,043 – 2,262	294	45%	0	-	1,359	67%
Pintail	164	44%	91 – 237	9	64%	0	-	155	76%
Shoveler	11	65%	4 – 18	0	-	0	-	11	132%
Black scoter	413	28%	297 – 529	60	85%	0	-	354	52%
Surf scoter	247	33%	166 – 329	100	81%	0	-	147	70%
White-winged scoter	278	34%	184 – 372	65	77%	0	-	213	75%
Bufflehead	636	26%	468 – 805	153	66%	0	-	483	45%
Goldeneye	896	29%	635 – 1,157	156	56%	0	-	740	49%
Canvasback	10	76%	3 – 18	0	-	0	-	10	75%
Scaup	354	33%	239 – 470	49	102%	0	-	305	53%
Common eider	0	-	-	0	-	0	-	0	-
King eider	5	97%	1 – 11	5	99%	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	117	43%	67 – 166	91	81%	0	-	26	137%
Long-tailed duck	104	64%	38 – 171	38	141%	0	-	67	130%
Common merganser	41	51%	20 – 63	21	98%	0	-	21	169%
Red-breasted merganser	41	81%	8 – 74	0	-	0	-	41	169%
Total ducks	5,390	29%	3,821 – 6,959	1,083	54%	0	-	4,307	52%
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	41	57%	18 – 65	0	-	0	-	41	114%
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	17	76%	4 – 30	0	-	0	-	17	75%
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	58	46%	32 – 85	0	-	0	-	58	84%
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	51	48%	27 – 75	34	62%	0	-	17	75%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	53	86%	7 – 99	53	130%	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	53	86%	7 – 99	53	130%	0	-	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	5,552	28%	3,972 – 7,133	1,170	51%	0	-	4,383	52%

Sampling effort (Kodiak Villages, 2006): 5 out of 6 villages in this subregion were surveyed; 75% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 83.—Estimated harvest of eggs, Kodiak Archipelago Region, Kodiak Villages Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	35	70%	11 – 59	35	102%	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	32	86%	4 – 60	32	130%	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	67	77%	16 – 118	67	115%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	27	98%	1 – 53	27	98%	0	-	0	-
Black-legged kittiwake	1,409	82%	259 – 2,559	1,409	123%	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	2,088	56%	925 – 3,250	2,088	83%	0	-	0	-
Herring gull	653	38%	408 – 898	653	58%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	4,176	57%	1,794 – 6,559	4,176	86%	0	-	0	-
Shorebirds									
Black oystercatcher	302	44%	169 – 434	302	67%	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	302	44%	169 – 434	302	67%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	4,545	56%	2,010 – 7,079	4,545	84%	0	-	0	-

Sampling effort (Kodiak Villages, 2006): 5 out of 6 villages in this subregion were surveyed; 75% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 84.—Estimated harvest of birds, Kodiak Archipelago Region, Kodiak City and Road Connected Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	a			367	53%	362	41%		a
Green-winged teal	a			165	61%	190	67%		a
Mallard	a			801	42%	438	42%		a
Pintail	a			3	124%	211	49%		a
Shoveler	a			0	-	0	-		a
Black scoter	a			44	99%	0	-		a
Surf scoter	a			30	88%	0	-		a
White-winged scoter	a			24	95%	0	-		a
Bufflehead	a			84	89%	0	-		a
Goldeneye	a			421	39%	128	72%		a
Canvasback	a			0	-	55	97%		a
Scaup	a			0	-	0	-		a
Common eider	a			0	-	0	-		a
King eider	a			0	-	0	-		a
Spectacled eider	a			0	-	0	-		a
Steller's eider	a			0	-	0	-		a
Harlequin duck	a			67	87%	0	-		a
Long-tailed duck	a			0	-	0	-		a
Common merganser	a			0	-	0	-		a
Red-breasted merganser	a			0	-	0	-		a
Total ducks	a			2,007	42%	1,384	41%		a
Geese									
Black brant	a			0	-	0	-		a
Cackling Canada goose	a			0	-	0	-		a
Lesser Canada goose	a			17	65%	0	-		a
White-fronted goose	a			0	-	0	-		a
Emperor goose	a			0	-	0	-		a
Lesser snow goose	a			0	-	0	-		a
Total geese	a			17	65%	0	-		a
Swans									
Tundra swan	a			0	-	0	-		a
Cranes									
Sandhill crane	a			0	-	0	-		a
Grouse									
Ptarmigan	a			88	119%	0	-		a
Seabirds									
Cormorant	a			0	-	0	-		a
Arctic tern	a			0	-	0	-		a
Black-legged kittiwake	a			0	-	0	-		a
Red-legged kittiwake	a			37	88%	0	-		a
Sabine's gull	a			0	-	0	-		a
Glaucous-winged gull	a			0	-	0	-		a
Herring gull	a			165	49%	0	-		a
Auklet	a			0	-	0	-		a
Murre	a			0	-	0	-		a
Guillemot	a			0	-	0	-		a
Puffin	a			0	-	0	-		a
Total seabirds	a			202	50%	0	-		a
Shorebirds									
Black oystercatcher	a			0	-	0	-		a
Bristle-thighed curlew	a			0	-	0	-		a
Godwit	a			0	-	0	-		a
Golden plover	a			0	-	0	-		a
Small shorebird	a			0	-	0	-		a
Total shorebirds	a			0	-	0	-		a
Grebes and loons									
Common loon	a			0	-	0	-		a
Pacific loon	a			0	-	0	-		a
Red-throated loon	a			0	-	0	-		a
Yellow-billed loon	a			0	-	0	-		a
Total grebes and loons	a			0	-	0	-		a
Total birds	a			2,314	38%	1,384	41%		a

Sampling effort (Kodiak City & Road Connected, 2006): 1 out of 6 villages in this subregion were surveyed; 44% of the subregion households were represented in the sample. *Harvest estimates based on a sample of harvesters only.* * Fall harvest data not available.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 85.—Estimated harvest of eggs, Kodiak Archipelago Region, Kodiak City and Road Connected Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	a	
Green-winged teal	0	-	-	0	-	0	-	a	
Mallard	81	80%	17 – 145	81	87%	0	-	a	
Pintail	0	-	-	0	-	0	-	a	
Shoveler	0	-	-	0	-	0	-	a	
Black scoter	0	-	-	0	-	0	-	a	
Surf scoter	0	-	-	0	-	0	-	a	
White-winged scoter	0	-	-	0	-	0	-	a	
Bufflehead	0	-	-	0	-	0	-	a	
Goldeneye	0	-	-	0	-	0	-	a	
Canvasback	0	-	-	0	-	0	-	a	
Scaup	0	-	-	0	-	0	-	a	
Common eider	0	-	-	0	-	0	-	a	
King eider	0	-	-	0	-	0	-	a	
Spectacled eider	0	-	-	0	-	0	-	a	
Steller's eider	0	-	-	0	-	0	-	a	
Harlequin duck	0	-	-	0	-	0	-	a	
Long-tailed duck	0	-	-	0	-	0	-	a	
Common merganser	0	-	-	0	-	0	-	a	
Red-breasted merganser	0	-	-	0	-	0	-	a	
Total ducks	81	80%	17 – 145	81	87%	0	-	a	
Geese									
Black brant	0	-	-	0	-	0	-	a	
Cackling Canada goose	0	-	-	0	-	0	-	a	
Lesser Canada goose	0	-	-	0	-	0	-	a	
White-fronted goose	0	-	-	0	-	0	-	a	
Emperor goose	0	-	-	0	-	0	-	a	
Lesser snow goose	0	-	-	0	-	0	-	a	
Total geese	0	-	-	0	-	0	-	a	
Swans									
Tundra swan	0	-	-	0	-	0	-	a	
Cranes									
Sandhill crane	0	-	-	0	-	0	-	a	
Grouse									
Ptarmigan	0	-	-	0	-	0	-	a	
Seabirds									
Cormorant	0	-	-	0	-	0	-	a	
Arctic tern	0	-	-	0	-	0	-	a	
Black-legged kittiwake	0	-	-	0	-	0	-	a	
Red-legged kittiwake	253	46%	136 – 369	253	50%	0	-	a	
Sabine's gull	0	-	-	0	-	0	-	a	
Glaucous-winged gull	61	84%	10 – 111	61	92%	0	-	a	
Herring gull	283	47%	151 – 415	283	50%	0	-	a	
Auklet	0	-	-	0	-	0	-	a	
Murre	0	-	-	0	-	0	-	a	
Guillemot	0	-	-	0	-	0	-	a	
Puffin	0	-	-	0	-	0	-	a	
Total seabirds	596	42%	348 – 845	596	45%	0	-	a	
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	a	
Bristle-thighed curlew	0	-	-	0	-	0	-	a	
Godwit	0	-	-	0	-	0	-	a	
Golden plover	0	-	-	0	-	0	-	a	
Small shorebird	0	-	-	0	-	0	-	a	
Total shorebirds	0	-	-	0	-	0	-	a	
Grebes and loons									
Common loon	0	-	-	0	-	0	-	a	
Pacific loon	0	-	-	0	-	0	-	a	
Red-throated loon	0	-	-	0	-	0	-	a	
Yellow-billed loon	0	-	-	0	-	0	-	a	
Total grebes and loons	0	-	-	0	-	0	-	a	
Total birds	677	41%	401 – 953	677	44%	0	-	a	

Sampling effort (Kodiak City & Road Connected, 2006): 1 out of 6 villages in this subregion were surveyed; 44% of the subregion households were represented in the sample. *Harvest estimates based on a sample of harvesters only.* ^a Fall harvest data not available, fall egg harvest assumed to be zero in annual estimates.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 86.—Estimated harvest of birds, Bristol Bay Region, Southwest Bristol Bay Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	672	44%	373 – 970	27	77%	0	-	645	52%
Mallard	979	28%	706 – 1,251	649	39%	95	84%	235	52%
Pintail	571	38%	353 – 788	297	52%	0	-	273	62%
Shoveler	35	65%	12 – 58	35	73%	0	-	0	-
Goldeneye	56	61%	22 – 90	27	109%	14	109%	15	102%
Black scoter	510	47%	271 – 749	419	56%	0	-	91	102%
Surf scoter	218	95%	10 – 426	203	109%	0	-	15	102%
White-winged scoter	179	63%	67 – 291	149	77%	0	-	30	102%
Bufflehead	59	67%	19 – 98	43	97%	0	-	15	102%
Canvasback	318	42%	184 – 453	0	-	0	-	318	73%
Common eider	291	52%	139 – 442	230	64%	0	-	61	102%
King eider	4,773	35%	3,083 – 6,463	4,773	36%	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	83	85%	12 – 153	68	109%	0	-	15	102%
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	164	59%	68 – 259	103	88%	0	-	61	80%
Long-tailed duck	81	102%	* – 164	81	109%	0	-	0	-
Common merganser	1,208	30%	849 – 1,566	798	33%	0	-	410	63%
Red-breasted merganser	650	33%	436 – 864	192	52%	176	66%	282	58%
Total ducks	10,845	23%	8,313 – 13,376	8,095	29%	284	62%	2,466	33%
Geese									
Black brant	2,859	31%	1,967 – 3,751	2,844	32%	0	-	15	102%
Cackling Canada goose	1,631	31%	1,123 – 2,138	1,509	33%	0	-	121	74%
Lesser Canada goose	838	39%	514 – 1,163	838	40%	0	-	0	-
White-fronted goose	1,621	32%	1,109 – 2,134	1,561	33%	0	-	61	102%
Emperor goose	27	73%	7 – 47	27	77%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	6,976	26%	5,159 – 8,794	6,779	26%	0	-	197	59%
Swans									
Tundra swan	230	52%	110 – 350	230	55%	0	-	0	-
Cranes									
Sandhill crane	301	33%	203 – 398	287	37%	14	109%	0	-
Grouse									
Spruce grouse	273	91%	24 – 522	0	-	0	-	273	102%
Ptarmigan	7,928	35%	5,185 – 10,672	7,885	35%	14	109%	30	102%
Total grouse	8,201	34%	5,441 – 10,962	7,885	35%	14	109%	303	92%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	27	102%	* – 55	27	109%	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	81	102%	* – 164	81	109%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	108	102%	* – 219	108	109%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	27	102%	* – 55	27	109%	0	-	0	-
Pacific loon	14	102%	* – 27	0	-	14	109%	0	-
Red-throated loon	14	102%	* – 27	14	109%	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	54	63%	20 – 88	41	81%	14	109%	0	-
Total birds	26,715	22%	20,959 – 32,471	23,424	22%	325	57%	2,966	30%

Sampling effort (Southwest Bristol Bay, 2006): only 1 out of 21 villages were surveyed; 14% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 87.—Estimated harvest of eggs, Bristol Bay Region, Southwest Bristol Bay Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	341	68%	110 – 573	341	74%	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	87	85%	13 – 161	87	97%	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	428	59%	173 – 682	428	62%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	43	85%	6 – 80	43	97%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	1,660	55%	744 – 2,576	1,660	64%	0	-	0	-
Kittiwake	135	74%	35 – 235	135	79%	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	3,516	78%	785 – 6,246	3,516	83%	0	-	0	-
Glaucous gull	12,007	28%	8,654 – 15,359	12,007	34%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	12,846	45%	7,046 – 18,646	12,846	47%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	30,164	26%	22,239 – 38,088	30,164	27%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	108	102%	* – 219	108	109%	0	-	0	-
Total shorebirds	108	102%	* – 219	108	109%	0	-	0	-
Grebes and loons									
Common loon	54	102%	* – 109	54	109%	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	54	102%	* – 109	54	109%	0	-	0	-
Other/unknown bird	495	48%	260 – 730	495	73%	0	-	0	-
Total birds	31,292	26%	23,194 – 39,391	31,292	26%	0	-	0	-

Sampling effort (Southwest Bristol Bay, 2006): only 1 out of 21 villages were surveyed; 14% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 88.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	3,876	27%	2,847 – 4,905	905	18%	310	41%	2,660	39%
Green-winged teal	2,696	17%	2,230 – 3,161	501	31%	358	45%	1,837	22%
Mallard	8,169	13%	7,109 – 9,230	2,917	16%	1,114	30%	4,137	21%
Pintail	11,774	15%	9,958 – 13,589	2,148	30%	4,305	23%	5,320	19%
Shoveler	1,994	18%	1,631 – 2,356	601	24%	185	63%	1,207	25%
Goldeneye	969	22%	752 – 1,187	742	45%	89	40%	138	48%
Black scoter	7,318	19%	5,903 – 8,733	5,569	27%	975	49%	774	33%
Surf scoter	1,634	27%	1,188 – 2,080	1,228	36%	77	44%	329	41%
White-winged scoter	3,872	23%	2,991 – 4,754	3,306	25%	7	141%	559	60%
Bufflehead	359	28%	260 – 458	228	54%	57	44%	74	80%
Canvasback	870	24%	659 – 1,082	707	34%	31	86%	132	61%
Common eider	393	41%	233 – 553	292	50%	0	-	100	64%
King eider	6,213	24%	4,707 – 7,718	6,213	24%	0	-	0	-
Spectacled eider	26	91%	2 – 50	26	91%	0	-	0	-
Steller's eider	12	135%	* – 27	12	135%	0	-	0	-
Scaup	11,380	12%	9,967 – 12,793	9,037	18%	974	49%	1,369	33%
Harlequin duck	179	36%	114 – 244	134	44%	7	141%	37	107%
Long-tailed duck	2,215	25%	1,660 – 2,770	901	36%	97	52%	1,218	41%
Common merganser	164	52%	78 – 250	123	64%	0	-	42	68%
Red-breasted merganser	430	43%	246 – 613	293	64%	105	65%	32	73%
Duck (unidentified)	165	54%	75 – 254	92	82%	48	130%	25	116%
Total ducks	64,707	9%	58,871 – 70,544	35,974	12%	8,742	15%	19,992	18%
Geese									
Black brant	8,433	17%	7,030 – 9,836	6,868	18%	721	46%	845	41%
Cackling Canada goose	17,474	11%	15,580 – 19,367	8,001	12%	1,577	33%	7,896	18%
Lesser Canada goose	8,669	14%	7,429 – 9,909	6,372	13%	904	49%	1,392	41%
White-fronted goose	29,956	13%	25,969 – 33,942	22,254	17%	2,720	18%	4,982	20%
Emperor goose	2,425	17%	2,001 – 2,849	1,956	20%	187	61%	283	43%
Lesser snow goose	2,072	18%	1,705 – 2,439	1,757	26%	117	45%	198	44%
Total geese	69,029	9%	62,845 – 75,212	47,208	11%	6,226	21%	15,595	16%
Swans									
Tundra swan	6,099	11%	5,428 – 6,771	4,107	13%	512	29%	1,480	19%
Cranes									
Sandhill crane	4,501	9%	4,095 – 4,907	3,212	10%	191	33%	1,098	21%
Grouse									
Spruce grouse	1,490	34%	977 – 2,004	174	56%	104	78%	1,212	39%
Ptarmigan	20,433	12%	18,005 – 22,861	17,780	15%	1,538	61%	1,115	64%
Total grouse	21,923	11%	19,432 – 24,414	17,954	15%	1,642	57%	2,327	37%
Seabirds									
Cormorant	17	116%	* – 37	0	-	0	-	17	116%
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	82	152%	* – 206	82	152%	0	-	0	-
Mew gull	6	88%	1 – 11	6	106%	0	-	0	-
Glaucous gull	23	109%	* – 49	0	-	0	-	23	109%
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	128	100%	* – 256	88	142%	0	-	40	80%
Shorebirds									
Whimbrel	63	110%	* – 132	19	109%	0	-	44	152%
Bristle-thighed curlew	6	88%	1 – 11	6	106%	0	-	0	-
Godwit	4,639	27%	3,396 – 5,881	17	104%	2,966	26%	1,656	39%
Golden plover	22	69%	7 – 37	22	69%	0	-	0	-
Small shorebird	40	63%	15 – 65	40	65%	0	-	0	-
Total shorebirds	4,769	26%	3,523 – 6,015	104	50%	2,966	26%	1,699	38%
Grebes and loons									
Common loon	433	40%	262 – 604	416	46%	0	-	17	116%
Pacific loon	139	70%	42 – 236	43	108%	45	86%	51	98%
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	572	35%	372 – 772	459	42%	45	86%	68	84%
Other/unknown bird	127	95%	6 – 248	1	104%	33	108%	93	125%
Total birds	171,856	7%	159,552 – 184,160	109,107	9%	20,357	15%	42,392	14%

Sampling effort (Yukon-Kuskokwim Delta, 2006): 30 out of 47 villages in this region were surveyed; 7 out of 7 subregions in this region were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 89.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	225	75%	57 – 393	127	119%	98	150%	0	-
Green-winged teal	108	110%	* – 227	108	110%	0	-	0	-
Mallard	509	45%	282 – 735	509	45%	0	-	0	-
Pintail	334	59%	136 – 531	334	60%	0	-	0	-
Shoveler	38	77%	9 – 68	38	77%	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black scoter	72	155%	* – 182	72	155%	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	49	152%	* – 123	49	152%	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	3	109%	* – 7	3	111%	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	12	104%	* – 24	12	104%	0	-	0	-
Total ducks	1,350	29%	954 – 1,745	1,251	31%	98	150%	0	-
Geese									
Black brant	4,397	31%	3,019 – 5,776	4,397	31%	0	-	0	-
Cackling Canada goose	5,151	28%	3,693 – 6,609	4,230	32%	921	72%	0	-
Lesser Canada goose	3,422	45%	1,882 – 4,961	3,422	46%	0	-	0	-
White-fronted goose	10,325	25%	7,779 – 12,872	9,950	26%	376	87%	0	-
Emperor goose	107	68%	35 – 180	107	69%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	23,403	25%	17,537 – 29,269	22,106	27%	1,297	76%	0	-
Swans									
Tundra swan	681	30%	474 – 889	681	34%	0	-	0	-
Cranes									
Sandhill crane	345	34%	227 – 463	270	39%	75	87%	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	189	65%	66 – 312	189	69%	0	-	0	-
Total grouse	189	65%	66 – 312	189	69%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	476	94%	27 – 925	431	104%	45	86%	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	1,934	55%	865 – 3,002	1,934	55%	0	-	0	-
Glaucous gull	718	46%	387 – 1,050	435	51%	284	86%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	695	135%	* – 1,634	695	135%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	3,823	53%	1,781 – 5,865	3,494	58%	329	86%	0	-
Shorebirds									
Whimbrel	14	85%	2 – 26	14	88%	0	-	0	-
Bristle-thighed curlew	24	88%	3 – 46	24	106%	0	-	0	-
Godwit	104	89%	11 – 196	104	90%	0	-	0	-
Golden plover	99	70%	29 – 169	99	70%	0	-	0	-
Small shorebird	655	52%	314 – 996	655	52%	0	-	0	-
Total shorebirds	896	42%	517 – 1,275	896	43%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	27	139%	* – 65	27	139%	0	-	0	-
Red-throated loon	6	155%	* – 15	6	155%	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	33	117%	* – 72	33	117%	0	-	0	-
Other/unknown bird	4	143%	* – 9	4	143%	0	-	0	-
Total birds	30,723	20%	24,444 – 37,003	28,924	22%	1,799	-	0	-

Sampling effort (Yukon-Kuskokwim Delta, 2006): 30 out of 47 villages in this region were surveyed; 7 out of 7 subregions in this region were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 90.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	183	56%	81 – 286	27	95%	0	-	156	99%
Green-winged teal	881	24%	672 – 1,090	14	100%	78	129%	789	36%
Mallard	2,021	17%	1,680 – 2,363	492	48%	50	74%	1,480	29%
Pintail	2,393	17%	1,988 – 2,798	248	40%	440	84%	1,705	29%
Shoveler	141	31%	97 – 184	56	67%	3	155%	81	68%
Goldeneye	20	44%	11 – 28	8	75%	0	-	12	107%
Black scoter	397	26%	292 – 502	321	37%	0	-	75	109%
Surf scoter	47	47%	25 – 69	14	132%	16	138%	18	111%
White-winged scoter	146	44%	81 – 211	117	82%	0	-	29	111%
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	20	49%	10 – 29	11	93%	0	-	9	134%
Common eider	0	-	-	0	-	0	-	0	-
King eider	1,878	27%	1,365 – 2,392	1,878	41%	0	-	0	-
Spectacled eider	4	101%	* – 7	4	143%	0	-	0	-
Steller's eider	12	88%	1 – 22	12	135%	0	-	0	-
Scaup	487	37%	307 – 667	242	54%	0	-	245	108%
Harlequin duck	43	58%	18 – 68	5	132%	0	-	37	107%
Long-tailed duck	149	59%	61 – 237	59	88%	0	-	90	154%
Common merganser	123	43%	70 – 176	85	90%	0	-	37	75%
Red-breasted merganser	205	39%	125 – 286	126	83%	48	133%	32	73%
Duck (unidentified)	5	86%	1 – 10	5	132%	0	-	0	-
Total ducks	9,154	11%	8,106 – 10,203	3,725	24%	634	68%	4,796	25%
Geese									
Black brant	2,181	23%	1,686 – 2,675	1,929	38%	120	108%	132	123%
Cackling Canada goose	5,571	13%	4,872 – 6,271	1,832	29%	230	126%	3,510	23%
Lesser Canada goose	1,680	16%	1,406 – 1,954	1,211	28%	33	89%	436	59%
White-fronted goose	6,859	10%	6,195 – 7,524	4,896	15%	217	86%	1,746	25%
Emperor goose	415	36%	264 – 566	341	69%	0	-	74	89%
Lesser snow goose	78	55%	35 – 120	59	120%	0	-	19	112%
Total geese	16,784	8%	15,375 – 18,192	10,267	13%	600	62%	5,917	20%
Swans									
Tundra swan	979	12%	858 – 1,101	528	22%	14	75%	437	27%
Cranes									
Sandhill crane	1,653	12%	1,448 – 1,858	905	19%	22	114%	725	27%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	3,149	22%	2,466 – 3,832	2,625	31%	0	-	524	128%
Total grouse	3,149	22%	2,466 – 3,832	2,625	31%	0	-	524	128%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	82	90%	8 – 155	82	152%	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	82	90%	8 – 155	82	152%	0	-	0	-
Shorebirds									
Whimbrel	44	90%	4 – 83	0	-	0	-	44	152%
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	74	70%	22 – 125	11	152%	0	-	63	138%
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	117	55%	52 – 182	11	152%	0	-	106	102%
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	31,918	8%	29,310 – 34,526	18,143	-	1,270	-	12,505	-

Sampling effort (Yukon-Kuskokwim Delta South Coast, 2006): 6 out of 8 villages in this subregion were surveyed; 77% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 91.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	18	102%	* – 36	18	155%	0	-	0	-
Green-winged teal	108	70%	33 – 184	108	110%	0	-	0	-
Mallard	151	68%	49 – 254	151	113%	0	-	0	-
Pintail	197	56%	88 – 307	197	93%	0	-	0	-
Shoveler	19	86%	3 – 35	19	132%	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black scoter	72	102%	* – 145	72	155%	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	49	90%	5 – 93	49	152%	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	615	33%	410 – 819	615	52%	0	-	0	-
Geese									
Black brant	82	90%	8 – 155	82	152%	0	-	0	-
Cackling Canada goose	519	33%	348 – 691	519	51%	0	-	0	-
Lesser Canada goose	546	39%	333 – 759	546	63%	0	-	0	-
White-fronted goose	1,643	35%	1,074 – 2,212	1,643	58%	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	2,790	28%	2,011 – 3,569	2,790	45%	0	-	0	-
Swans									
Tundra swan	376	30%	263 – 490	376	47%	0	-	0	-
Cranes									
Sandhill crane	195	29%	138 – 252	195	47%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	48	102%	* – 96	48	155%	0	-	0	-
Total grouse	48	102%	* – 96	48	155%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	363	88%	44 – 682	363	123%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	1,174	53%	546 – 1,802	1,174	82%	0	-	0	-
Glaucous gull	390	37%	247 – 533	390	56%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	695	88%	86 – 1,304	695	135%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	2,622	49%	1,337 – 3,908	2,622	75%	0	-	0	-
Shorebirds									
Whimbrel	8	86%	1 – 15	8	132%	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	79	69%	24 – 134	79	113%	0	-	0	-
Golden plover	89	52%	43 – 136	89	77%	0	-	0	-
Small shorebird	547	39%	336 – 757	547	62%	0	-	0	-
Total shorebirds	723	33%	485 – 962	723	50%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	27	83%	5 – 50	27	139%	0	-	0	-
Red-throated loon	6	102%	* – 12	6	155%	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	33	71%	10 – 56	33	117%	0	-	0	-
Other/unknown bird	4	101%	* – 7	4	143%	0	-	0	-
Total birds	7,406	23%	5,717 – 9,095	7,406	34%	0	-	0	-

Sampling effort (Yukon-Kuskokwim Delta South Coast, 2006): 6 out of 8 villages in this subregion were surveyed; 77% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 92.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	852	49%	433 – 1,270	0	-	0	-	852	54%
Green-winged teal	509	32%	345 – 672	111	67%	21	71%	376	49%
Mallard	1,818	30%	1,268 – 2,367	93	63%	650	45%	1,074	61%
Pintail	5,790	20%	4,604 – 6,975	172	47%	3,531	25%	2,087	34%
Shoveler	389	45%	213 – 566	40	61%	0	-	349	57%
Black scoter	388	43%	220 – 555	11	104%	23	86%	354	57%
Surf scoter	223	48%	116 – 330	0	-	0	-	223	55%
White-winged scoter	131	54%	60 – 202	0	-	0	-	131	67%
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	705	40%	424 – 986	129	108%	68	64%	508	62%
Common eider	393	38%	242 – 543	292	50%	0	-	100	64%
King eider	4,242	29%	3,002 – 5,482	4,242	30%	0	-	0	-
Spectacled eider	22	84%	4 – 41	22	104%	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	1,077	40%	648 – 1,506	24	73%	0	-	1,052	45%
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	25	100%	* – 51	0	-	0	-	25	116%
Total ducks	16,564	20%	13,283 – 19,844	5,137	27%	4,293	22%	7,133	38%
Black brant	5,757	18%	4,705 – 6,809	4,444	23%	601	51%	711	43%
Cackling Canada goose	6,108	18%	5,004 – 7,212	1,517	18%	951	42%	3,640	32%
Lesser Canada goose	1,769	35%	1,154 – 2,384	925	52%	488	80%	356	110%
White-fronted goose	12,016	13%	10,415 – 13,616	8,195	15%	1,825	24%	1,995	39%
Emperor goose	1,938	17%	1,607 – 2,269	1,548	19%	181	63%	209	49%
Lesser snow goose	142	48%	74 – 210	0	-	34	86%	108	67%
Total geese	27,729	13%	24,146 – 31,312	16,629	15%	4,081	29%	7,019	30%
Swans									
Tundra swan	1,442	17%	1,191 – 1,693	603	23%	170	45%	669	34%
Cranes									
Sandhill crane	1,772	14%	1,522 – 2,023	1,375	15%	68	61%	329	34%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	9,351	18%	7,637 – 11,065	9,122	14%	0	-	229	84%
Total grouse	9,351	18%	7,637 – 11,065	9,122	14%	0	-	229	84%
Seabirds									
Cormorant	17	100%	* – 34	0	-	0	-	17	116%
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	17	100%	* – 34	0	-	0	-	17	116%
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	4,559	24%	3,473 – 5,644	0	-	2,966	26%	1,593	40%
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	4,559	24%	3,473 – 5,644	0	-	2,966	26%	1,593	40%
Grebes and loons									
Common loon	425	36%	272 – 578	408	47%	0	-	17	116%
Pacific loon	139	48%	72 – 206	43	108%	45	86%	51	98%
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	564	31%	389 – 740	451	43%	45	86%	68	84%
Total birds	61,998	12%	54,306 – 69,689	33,318	14%	11,623	21%	17,057	27%

Sampling effort (Yukon-Kuskokwim Delta Mid-Coast, 2006): 4 out of 9 villages in this subregion were surveyed; 24% of the subregion households were represented in the sample.

∴ No reported harvest. *: 95% CI ≥ 100%.

Table 93.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	93	86%	13 – 172	93	104%	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	93	86%	13 – 172	93	104%	0	-	0	-
Geese									
Black brant	4,316	32%	2,948 – 5,684	4,316	32%	0	-	0	-
Cackling Canada goose	4,343	30%	3,035 – 5,650	3,421	37%	921	72%	0	-
Lesser Canada goose	2,642	49%	1,348 – 3,936	2,642	56%	0	-	0	-
White-fronted goose	8,566	28%	6,172 – 10,961	8,191	29%	376	87%	0	-
Emperor goose	107	56%	48 – 167	107	69%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	19,974	29%	14,224 – 25,724	18,677	30%	1,297	76%	0	-
Swans									
Tundra swan	81	49%	41 – 120	81	60%	0	-	0	-
Cranes									
Sandhill crane	111	47%	59 – 162	35	75%	75	87%	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	45	75%	11 – 79	0	-	45	86%	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	723	56%	319 – 1,128	723	64%	0	-	0	-
Glaucous gull	328	66%	113 – 543	45	104%	284	86%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	1,097	44%	613 – 1,580	768	62%	329	86%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	21,354	27%	15,598 – 27,111	19,653	29%	1,701	66%	0	-

Sampling effort (Yukon-Kuskokwim Delta Mid-Coast, 2006): 4 out of 9 villages in this subregion were surveyed; 24% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 94.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	341	66%	116 – 566	0	-	0	-	341	113%
Green-winged teal	24	72%	7 – 42	19	146%	5	146%	0	-
Mallard	324	36%	209 – 439	83	46%	8	97%	233	81%
Pintail	556	48%	290 – 822	162	75%	0	-	393	113%
Shoveler	99	87%	13 – 185	0	-	2	111%	97	149%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	6	89%	1 – 11	6	149%	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	3	92%	1 – 7	0	-	0	-	3	111%
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	1,353	46%	731 – 1,975	270	53%	15	99%	1,068	99%
Geese									
Black brant	143	37%	90 – 197	142	49%	0	-	2	111%
Cackling Canada goose	372	20%	298 – 446	282	33%	17	70%	73	58%
Lesser Canada goose	995	30%	698 – 1,292	642	51%	119	143%	234	126%
White-fronted goose	679	33%	454 – 904	606	59%	18	85%	55	116%
Emperor goose	43	75%	11 – 75	38	101%	5	111%	0	-
Lesser snow goose	15	51%	7 – 22	10	91%	0	-	5	146%
Total geese	2,248	20%	1,795 – 2,700	1,720	35%	160	109%	368	92%
Swans									
Tundra swan	353	22%	277 – 429	297	37%	27	95%	29	77%
Cranes									
Sandhill crane	210	29%	149 – 271	188	51%	7	111%	14	104%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	323	45%	178 – 468	283	57%	14	146%	26	137%
Total grouse	323	45%	178 – 468	283	57%	14	146%	26	137%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	6	72%	2 – 11	1	104%	0	-	5	108%
Total birds	4,493	21%	3,545 – 5,440	2,760	26%	223	86%	1,510	92%

Sampling effort (Yukon-Kuskokwim Delta North Coast, 2006): 3 out of 4 villages in this subregion were surveyed; 74% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 95.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	34	59%	14 – 54	34	63%	0	-	0	-
Pintail	15	92%	1 – 30	15	111%	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	3	92%	1 – 7	3	111%	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	12	97%	1 – 23	12	104%	0	-	0	-
Total ducks	64	42%	37 – 92	64	46%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	97	88%	12 – 181	97	146%	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	97	88%	12 – 181	97	146%	0	-	0	-
Swans									
Tundra swan	6	97%	1 – 12	6	104%	0	-	0	-
Cranes									
Sandhill crane	6	69%	2 – 10	6	73%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	16	68%	5 – 26	16	76%	0	-	0	-
Total shorebirds	16	68%	5 – 26	16	76%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	188	50%	95 – 282	188	78%	0	-	0	-

Sampling effort (Yukon-Kuskokwim Delta North Coast, 2006): 3 out of 4 villages in this subregion were surveyed; 74% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 96.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	471	27%	344 – 598	188	45%	161	51%	122	72%
Green-winged teal	97	45%	53 – 141	0	-	66	68%	31	109%
Mallard	1,283	18%	1,057 – 1,508	778	24%	210	39%	295	39%
Pintail	379	22%	296 – 462	114	43%	198	40%	67	50%
Shoveler	210	28%	151 – 269	123	44%	32	68%	55	63%
Black scoter	454	49%	233 – 675	68	112%	378	107%	8	109%
Surf scoter	121	59%	50 – 192	97	107%	0	-	23	109%
White-winged scoter	23	84%	4 – 43	0	-	0	-	23	109%
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	33	50%	16 – 49	17	108%	8	108%	8	109%
Canvasback	66	51%	32 – 100	58	76%	8	108%	0	-
Scaup	17	79%	4 – 30	0	-	17	108%	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	3,153	16%	2,637 – 3,670	1,443	24%	1,079	44%	632	35%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	820	18%	675 – 966	527	35%	136	50%	158	63%
Lesser Canada goose	829	21%	652 – 1,005	630	33%	105	48%	94	50%
White-fronted goose	1,747	18%	1,441 – 2,053	1,102	35%	304	36%	341	48%
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	1,735	16%	1,453 – 2,017	1,590	28%	83	53%	62	69%
Total geese	5,131	12%	4,514 – 5,748	3,848	20%	628	34%	654	42%
Swans									
Tundra swan	1,525	21%	1,206 – 1,844	1,266	38%	223	52%	36	60%
Cranes									
Sandhill crane	55	43%	31 – 78	25	80%	20	77%	10	126%
Grouse									
Spruce grouse	307	48%	158 – 456	0	-	50	76%	257	70%
Ptarmigan	41	58%	18 – 65	0	-	41	77%	0	-
Total grouse	348	45%	192 – 505	0	-	91	75%	257	70%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	23	84%	4 – 43	0	-	0	-	23	109%
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	23	84%	4 – 43	0	-	0	-	23	109%
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	33	79%	7 – 59	0	-	33	108%	0	-
Total birds	10,269	12%	9,025 – 11,513	6,582	20%	2,075	35%	1,612	27%

Sampling effort (Lower Yukon, 2006): 3 out of 6 villages in this subregion were surveyed; 32% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 97.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	215	42%	126 – 305	215	53%	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	215	42%	126 – 305	215	53%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	17	79%	4 – 30	17	108%	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	232	42%	133 – 330	232	54%	0	-	0	-

Sampling effort (Lower Yukon, 2006): 3 out of 6 villages in this subregion were surveyed; 32% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 98.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	917	13%	802 – 1,032	628	20%	82	83%	208	42%
Green-winged teal	739	20%	593 – 884	282	42%	128	84%	329	54%
Mallard	1,799	12%	1,592 – 2,007	949	15%	197	69%	654	34%
Pintail	1,666	12%	1,459 – 1,874	935	24%	86	122%	646	21%
Shoveler	836	16%	699 – 974	272	31%	135	84%	429	27%
Black scoter	4,695	11%	4,186 – 5,203	3,876	25%	524	44%	294	45%
Surf scoter	1,237	22%	967 – 1,507	1,111	38%	61	42%	65	69%
White-winged scoter	3,206	18%	2,639 – 3,773	2,977	27%	7	141%	222	68%
Bufflehead	338	20%	271 – 406	221	56%	57	44%	60	95%
Goldeneye	826	17%	681 – 970	673	48%	81	43%	72	59%
Canvasback	727	18%	593 – 861	638	37%	23	111%	66	67%
Scaup	9,390	10%	8,442 – 10,339	8,102	19%	800	57%	489	37%
Common eider	0	-	-	0	-	0	-	0	-
King eider	44	65%	15 – 73	44	99%	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	136	28%	98 – 174	128	46%	7	141%	0	-
Long-tailed duck	968	17%	803 – 1,134	814	39%	97	52%	57	77%
Common merganser	38	28%	28 – 49	34	44%	0	-	4	117%
Red-breasted merganser	224	29%	159 – 290	167	92%	57	44%	0	-
Duck (unidentified)	134	50%	67 – 201	86	86%	48	130%	0	-
Total ducks	27,922	8%	25,618 – 30,227	21,937	16%	2,390	28%	3,595	18%
Geese									
Black brant	232	27%	170 – 294	232	39%	0	-	0	-
Cackling Canada goose	3,376	9%	3,080 – 3,672	3,039	14%	179	57%	158	41%
Lesser Canada goose	2,686	9%	2,434 – 2,938	2,433	17%	142	80%	111	60%
White-fronted goose	4,697	8%	4,299 – 5,095	4,109	15%	239	39%	349	44%
Emperor goose	29	48%	15 – 43	29	101%	0	-	0	-
Lesser snow goose	96	48%	50 – 142	96	78%	0	-	0	-
Total geese	11,116	7%	10,314 – 11,918	9,938	11%	560	40%	618	37%
Swans									
Tundra swan	1,388	9%	1,265 – 1,510	1,217	14%	41	49%	129	33%
Cranes									
Sandhill crane	616	12%	542 – 690	530	25%	73	49%	12	88%
Grouse									
Spruce grouse	624	21%	493 – 754	76	60%	0	-	548	32%
Ptarmigan	7,080	17%	5,867 – 8,293	5,261	42%	1,482	63%	336	41%
Total grouse	7,703	16%	6,476 – 8,931	5,337	41%	1,482	63%	884	32%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	6	59%	2 – 10	6	106%	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	6	59%	2 – 10	6	106%	0	-	0	-
Shorebirds									
Whimbrel	19	72%	5 – 33	19	109%	0	-	0	-
Bristle-thighed curlew	6	59%	2 – 10	6	106%	0	-	0	-
Godwit	6	59%	2 – 10	6	106%	0	-	0	-
Golden plover	22	46%	12 – 32	22	69%	0	-	0	-
Small shorebird	40	41%	23 – 56	40	65%	0	-	0	-
Total shorebirds	93	34%	62 – 125	93	53%	0	-	0	-
Grebes and loons									
Common loon	5	72%	1 – 8	5	109%	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	5	72%	1 – 8	5	109%	0	-	0	-
Total birds	48,849	8%	45,095 – 52,604	39,064	15%	4,547	35%	5,238	16%

Sampling effort (Lower Kuskokwim, 2006): 9 out of 13 villages in this subregion were surveyed; 63% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 99.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	207	40%	124 – 289	109	136%	98	150%	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	121	45%	66 – 176	121	65%	0	-	0	-
Shoveler	19	80%	4 – 34	19	80%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	347	29%	247 – 447	249	68%	98	150%	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	289	53%	136 – 442	289	134%	0	-	0	-
Lesser Canada goose	234	54%	108 – 360	234	136%	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	523	53%	244 – 801	523	135%	0	-	0	-
Swans									
Tundra swan	202	32%	137 – 267	202	71%	0	-	0	-
Cranes									
Sandhill crane	33	54%	15 – 51	33	136%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	141	46%	76 – 206	141	76%	0	-	0	-
Total grouse	141	46%	76 – 206	141	76%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	68	36%	44 – 92	68	54%	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	27	51%	13 – 40	27	65%	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	94	37%	59 – 129	94	53%	0	-	0	-
Shorebirds									
Whimbrel	6	59%	2 – 10	6	106%	0	-	0	-
Bristle-thighed curlew	24	59%	10 – 39	24	106%	0	-	0	-
Godwit	24	59%	10 – 39	24	106%	0	-	0	-
Golden plover	10	72%	3 – 17	10	109%	0	-	0	-
Small shorebird	92	40%	56 – 129	92	66%	0	-	0	-
Total shorebirds	157	43%	90 – 224	157	74%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	1,498	27%	1,087 – 1,909	1,400	67%	98	150%	0	-

Sampling effort (Lower Kuskokwim, 2006): 9 out of 13 villages in this subregion were surveyed; 63% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 100.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Central Kuskokwim Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	4	101%	* – 8	4	100%	0	-	0	-
Green-winged teal	15	61%	6 – 24	10	77%	0	-	5	100%
Mallard	222	40%	133 – 311	180	61%	0	-	42	45%
Pintail	34	43%	19 – 49	18	49%	0	-	16	72%
Shoveler	18	42%	10 – 25	5	71%	0	-	12	50%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	30	45%	16 – 43	20	51%	0	-	10	100%
Bufflehead	20	75%	5 – 36	7	100%	0	-	14	100%
Goldeneye	41	87%	5 – 77	41	145%	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	8	101%	* – 16	0	-	0	-	8	100%
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	392	33%	263 – 521	285	50%	0	-	107	49%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	4	66%	1 – 7	3	127%	0	-	1	100%
Lesser Canada goose	112	62%	42 – 181	112	79%	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	116	60%	46 – 185	114	78%	0	-	1	100%
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	15	93%	1 – 30	15	155%	0	-	0	-
Grouse									
Spruce grouse	556	48%	290 – 821	98	88%	54	132%	404	98%
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	556	48%	290 – 821	98	88%	54	132%	404	98%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	88	86%	12 – 164	0	-	0	-	88	132%
Total birds	1,167	35%	754 – 1,580	513	61%	54	132%	600	86%

Sampling effort (Central Kuskokwim, 2006): 4 out of 6 villages in this subregion were surveyed; 74% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 101.–Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Central Kuskokwim Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	15	93%	1 – 30	15	155%	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	15	93%	1 – 30	15	155%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	15	93%	1 – 30	15	155%	0	-	0	-

Sampling effort (Central Kuskokwim, 2006): 4 out of 6 villages in this subregion were surveyed; 74% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 102.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	1,107	39%	672 – 1,543	59	87%	67	102%	982	84%
Green-winged teal	431	21%	341 – 521	65	95%	60	79%	306	48%
Mallard	702	29%	500 – 905	343	92%	0	-	360	46%
Pintail	956	38%	597 – 1,315	499	116%	50	114%	407	60%
Shoveler	301	28%	216 – 386	104	91%	13	116%	183	66%
Black scoter	1,385	49%	708 – 2,062	1,292	90%	50	164%	43	98%
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	336	55%	153 – 519	192	75%	0	-	144	195%
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	50	52%	24 – 76	3	163%	0	-	47	106%
Canvasback	58	61%	22 – 93	0	-	0	-	58	116%
Scaup	773	31%	534 – 1,012	564	66%	90	158%	119	62%
Common eider	0	-	-	0	-	0	-	0	-
King eider	49	72%	14 – 84	49	121%	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	18	73%	5 – 31	3	163%	0	-	14	167%
Common merganser	3	96%	1 – 6	3	163%	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	6,169	19%	4,990 – 7,348	3,177	49%	330	66%	2,662	50%
Geese									
Black brant	121	70%	36 – 205	121	119%	0	-	0	-
Cackling Canada goose	1,222	29%	867 – 1,577	802	74%	63	110%	356	47%
Lesser Canada goose	599	17%	497 – 701	420	34%	17	164%	162	62%
White-fronted goose	3,958	50%	1,986 – 5,930	3,345	102%	117	79%	496	65%
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	7	65%	2 – 11	3	163%	0	-	4	167%
Total geese	5,906	39%	3,588 – 8,225	4,692	85%	197	66%	1,018	42%
Swans									
Tundra swan	412	17%	342 – 483	196	34%	37	93%	180	58%
Cranes									
Sandhill crane	180	23%	139 – 221	173	39%	0	-	7	117%
Grouse									
Spruce grouse	4	87%	1 – 7	0	-	0	-	4	167%
Ptarmigan	489	57%	208 – 769	489	97%	0	-	0	-
Total grouse	492	57%	212 – 773	489	97%	0	-	4	167%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	3	96%	1 – 6	3	163%	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	3	96%	1 – 6	3	163%	0	-	0	-
Total birds	13,163	24%	9,969 – 16,357	8,729	60%	564	60%	3,871	41%

Sampling effort (Bethel, 2006): 1 out of 1 village in this subregion was surveyed. *Harvest expansion assumed that harvesters account for 30% of the total village households (village size estimate).*

—: No reported harvest. *: 95% CI ≥ 100%.

Table 103.–Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	20	96%	1 – 38	20	163%	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	20	96%	1 – 38	20	163%	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	10	96%	1 – 19	10	163%	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	10	96%	1 – 19	10	163%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	29	96%	1 – 58	29	163%	0	-	0	-

Sampling effort (Bethel, 2006): 1 out of 1 village in this subregion was surveyed. *Harvest expansion assumed that harvesters account for 30% of the total village households (village size estimate).*

–: No reported harvest. *: 95% CI ≥ 100%.

Table 104.—Estimated harvest of birds, Northwest Arctic Region, Northwest Arctic Villages Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	685	32%	468 – 902	461	37%	24	112%	201	63%
Green-winged teal	93	73%	25 – 160	6	142%	0	-	87	100%
Mallard	1,569	21%	1,241 – 1,897	1,234	26%	77	51%	258	51%
Pintail	1,577	36%	1,005 – 2,148	825	28%	612	105%	140	103%
Shoveler	444	45%	245 – 644	201	50%	148	117%	96	68%
Black scoter	741	29%	524 – 957	690	31%	27	101%	24	71%
Surf scoter	44	84%	7 – 80	41	90%	0	-	3	142%
White-winged scoter	32	93%	2 – 62	32	92%	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	44	86%	6 – 81	0	-	0	-	44	114%
Canvasback	56	79%	12 – 100	0	-	6	142%	50	114%
Scaup	150	71%	43 – 258	136	77%	0	-	14	146%
Common eider	36	77%	8 – 65	36	100%	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	238	47%	125 – 351	238	51%	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	12	139%	* – 28	12	142%	0	-	0	-
Total ducks	5,720	22%	4,479 – 6,961	3,913	23%	892	75%	915	62%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	369	44%	206 – 532	325	51%	0	-	44	114%
Lesser Canada goose	1,945	32%	1,316 – 2,575	1,202	23%	712	101%	31	96%
White-fronted goose	1,185	28%	854 – 1,517	914	26%	256	112%	16	116%
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	311	36%	199 – 423	311	41%	0	-	0	-
Total geese	3,811	26%	2,822 – 4,799	2,753	20%	968	103%	90	67%
Swans									
Tundra swan	12	81%	2 – 22	6	142%	0	-	6	114%
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	123	58%	51 – 194	114	66%	0	-	9	142%
Total grouse	123	58%	51 – 194	114	66%	0	-	9	142%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	10	154%	* – 27	10	154%	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	10	154%	* – 27	10	154%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	9,676	21%	7,631 – 11,722	6,795	19%	1,860	89%	1,021	57%

Sampling effort (Northwest Arctic Villages, 2006): 4 out of 10 villages in this subregion were surveyed; 38% of the subregion households were represented in the sample.

-. No reported harvest. *: 95% CI $\geq$ 100%.

Table 105.—Estimated harvest of eggs, Northwest Arctic Region, Northwest Arctic Villages Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	59	80%	12 – 106	0	-	59	116%	0	-
Pintail	474	80%	94 – 855	474	105%	0	-	0	-
Shoveler	50	86%	7 – 93	50	114%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	583	67%	194 – 972	524	96%	59	116%	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	156	64%	56 – 256	156	81%	0	-	0	-
Lesser Canada goose	1,410	77%	319 – 2,502	1,410	101%	0	-	0	-
White-fronted goose	68	71%	20 – 116	68	90%	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	1,634	68%	523 – 2,745	1,634	88%	0	-	0	-
Swans									
Tundra swan	218	75%	53 – 383	218	99%	0	-	0	-
Cranes									
Sandhill crane	125	86%	17 – 233	125	114%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	94	86%	13 – 175	94	114%	0	-	0	-
Mew gull	292	55%	131 – 454	292	69%	0	-	0	-
Glaucous gull	2,040	55%	918 – 3,162	499	114%	1,540	108%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	2,871	76%	683 – 5,059	2,496	114%	374	80%	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	2,212	50%	1,105 – 3,318	125	114%	2,087	79%	0	-
Total seabirds	7,508	48%	3,875 – 11,141	3,506	109%	4,002	83%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	12	86%	2 – 23	12	114%	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	12	86%	2 – 23	12	114%	0	-	0	-
Total birds	10,081	51%	4,921 – 15,241	6,020	101%	4,061	82%	0	-

Sampling effort (Northwest Arctic Villages, 2006): 4 out of 10 villages in this subregion were surveyed; 38% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 106.—Estimated harvest of birds, Interior Alaska Region, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	2,842	20%	2,262 – 3,421	1,794	23%	125	53%	923	30%
Green-winged teal	1,102	28%	791 – 1,413	671	32%	22	104%	409	39%
Mallard	6,278	17%	5,223 – 7,332	3,068	17%	523	41%	2,686	24%
Pintail	3,362	21%	2,663 – 4,060	1,956	22%	154	58%	1,251	32%
Shoveler	808	39%	494 – 1,121	591	40%	64	80%	153	72%
Black scoter	843	50%	418 – 1,268	492	60%	90	70%	260	98%
Surf scoter	682	52%	329 – 1,034	364	49%	72	85%	245	103%
White-winged scoter	4,113	24%	3,114 – 5,111	2,586	29%	359	40%	1,168	45%
Bufflehead	457	66%	155 – 760	148	79%	40	85%	270	86%
Goldeneye	1,527	37%	959 – 2,095	809	33%	126	90%	592	48%
Canvasback	857	42%	499 – 1,214	403	42%	298	114%	156	72%
Scaup	573	61%	221 – 926	234	44%	114	75%	226	110%
Harlequin duck	199	107%	* – 414	30	160%	42	107%	127	120%
Long-tailed duck	1,008	37%	633 – 1,382	743	34%	133	63%	132	148%
Common merganser	90	98%	1 – 179	25	120%	36	123%	28	124%
Red-breasted merganser	122	77%	28 – 216	78	91%	36	123%	7	123%
Duck (unidentified)	41	93%	3 – 79	26	85%	0	-	14	123%
Total ducks	24,901	19%	20,150 – 29,652	14,018	18%	2,235	39%	8,649	31%
Geese									
Black brant	114	116%	* – 246	114	116%	0	-	0	-
Lesser Canada goose	3,891	17%	3,211 – 4,572	2,921	21%	192	57%	779	27%
White-fronted goose	3,892	20%	3,099 – 4,686	3,352	23%	255	92%	286	30%
Emperor goose	33	126%	* – 75	0	-	0	-	33	126%
Lesser snow goose	226	59%	93 – 359	226	59%	0	-	0	-
Total geese	8,157	17%	6,804 – 9,509	6,612	19%	446	59%	1,098	24%
Swans									
Tundra swan	76	42%	44 – 108	70	43%	0	-	6	160%
Cranes									
Sandhill crane	214	69%	67 – 360	105	44%	86	157%	23	125%
Grouse									
Grouse (unidentified)	2,772	27%	2,034 – 3,510	802	36%	280	62%	1,689	28%
Ptarmigan	923	50%	464 – 1,382	483	51%	103	72%	337	64%
Total grouse	3,695	29%	2,624 – 4,765	1,286	38%	383	55%	2,026	30%
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	6	154%	* – 15	0	-	0	-	6	154%
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	6	154%	* – 15	0	-	0	-	6	154%
Grebes and loons									
Common loon	6	73%	2 – 10	0	-	6	130%	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	6	73%	2 – 10	0	-	6	130%	0	-
Other/unknown bird	13	103%	* – 27	13	103%	0	-	0	-
Total birds	37,068	17%	30,792 – 43,343	22,104	17%	3,157	35%	11,807	27%

Sampling effort (Interior, 2006): 19 out of 42 villages in this region were surveyed; 5 out of 5 subregions were represented in the sample.

-: No reported harvest, no confidence interval. *: 95% CI ≥ 100%.

Table 107.—Estimated harvest of eggs, Interior Alaska Region, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	72	123%	* – 161	29	123%	43	123%	0	-
Green-winged teal	87	85%	13 – 160	87	85%	0	-	0	-
Mallard	178	63%	66 – 290	178	63%	0	-	0	-
Pintail	65	85%	10 – 121	65	85%	0	-	0	-
Shoveler	109	86%	15 – 202	109	86%	0	-	0	-
Black scoter	62	123%	* – 137	36	123%	25	123%	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	7	123%	* – 16	7	123%	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	130	67%	43 – 218	87	85%	43	123%	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	7	123%	* – 16	4	123%	4	123%	0	-
Total ducks	717	63%	265 – 1,169	601	66%	116	119%	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	58	123%	* – 129	29	123%	29	123%	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	58	123%	* – 129	29	123%	29	123%	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	115	126%	* – 260	57	126%	57	126%	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	115	126%	* – 260	57	126%	57	126%	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	22	123%	* – 48	22	123%	0	-	0	-
Total shorebirds	22	123%	* – 48	22	123%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	911	58%	381 – 1,442	709	60%	202	93%	0	-

Sampling effort (Interior, 2006): 19 out of 42 villages in this region were surveyed; 5 out of 5 subregions were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 108.—Estimated harvest of birds, Interior Alaska Region, Mid Yukon/Upper Kuskokwim Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	138	79%	30 – 247	50	107%	0	-	88	118%
Green-winged teal	67	54%	31 – 103	35	61%	0	-	32	96%
Mallard	97	48%	51 – 144	62	68%	0	-	36	78%
Pintail	34	61%	13 – 54	8	126%	0	-	26	84%
Shoveler	3	154%	* – 7	0	-	0	-	3	154%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	12	94%	1 – 23	12	115%	0	-	0	-
Total ducks	351	46%	189 – 513	166	51%	0	-	185	80%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	166	45%	91 – 242	152	48%	0	-	14	111%
White-fronted goose	51	96%	2 – 100	51	96%	0	-	0	-
Emperor goose	33	115%	* – 71	0	-	0	-	33	126%
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	250	42%	145 – 356	203	46%	0	-	47	94%
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	78	79%	16 – 140	0	-	0	-	78	79%
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	78	79%	16 – 140	0	-	0	-	78	79%
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	6	154%	* – 15	0	-	0	-	6	154%
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	6	154%	* – 15	0	-	0	-	6	154%
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	12	94%	1 – 23	12	115%	0	-	0	-
Total birds	697	36%	447 – 948	381	41%	0	-	317	63%

Sampling effort (Mid-Yukon/Upper Kuskokwim, 2006): 5 out of 9 villages in this subregion were surveyed; 36% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 109.–Estimated harvest of eggs, Interior Alaska Region, Mid Yukon/Upper Kuskokwim Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	0	-	-	0	-	0	-	0	-

Sampling effort (Mid-Yukon/Upper Kuskokwim, 2006): 5 out of 9 villages in this subregion were surveyed; 36% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 110.—Estimated harvest of birds, Interior Alaska Region, Yukon/Koyukuk Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	312	86%	43 – 580	312	81%	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	112	91%	10 – 213	112	86%	0	-	0	-
Pintail	264	74%	69 – 458	264	68%	0	-	0	-
Shoveler	16	184%	* – 45	16	182%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	16	131%	* – 37	16	128%	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	80	131%	* – 185	80	128%	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	799	65%	282 – 1,316	799	58%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	615	74%	161 – 1,069	615	68%	0	-	0	-
White-fronted goose	256	91%	22 – 489	256	87%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	871	78%	194 – 1,547	871	72%	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	94	142%	* – 228	8	182%	86	157%	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	1,764	60%	712 – 2,816	1,678	55%	86	157%	0	-

Sampling effort (Yukon/Koyukuk, 2006): 3 out of 12 villages in this subregion were surveyed; 13% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 111.–Estimated harvest of eggs, Interior Alaska Region, Yukon/Koyukuk Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	0	-	-	0	-	0	-	0	-

Sampling effort (Yukon/Koyukuk, 2006): 3 out of 12 villages in this subregion were surveyed; 13% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI $\geq$ 100%.

Table 112.—Estimated harvest of birds, Interior Alaska Region, Upper Yukon Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	717	19%	580 – 855	477	41%	45	86%	196	49%
Green-winged teal	23	45%	13 – 34	19	54%	4	126%	0	-
Mallard	1,271	13%	1,109 – 1,434	714	30%	179	46%	378	42%
Pintail	566	22%	439 – 692	366	49%	100	81%	99	87%
Shoveler	134	48%	70 – 198	102	98%	6	126%	26	94%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	44	48%	23 – 65	44	76%	0	-	0	-
White-winged scoter	2,502	18%	2,046 – 2,958	2,082	33%	262	48%	158	60%
Bufflehead	130	67%	43 – 218	24	135%	0	0%	106	165%
Goldeneye	95	29%	67 – 122	72	52%	0	-	22	64%
Canvasback	349	47%	184 – 513	103	37%	229	146%	16	81%
Scaup	181	27%	132 – 229	115	45%	56	122%	10	126%
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	543	20%	435 – 652	411	37%	133	63%	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	71	73%	19 – 123	71	100%	0	-	0	-
Total ducks	6,626	12%	5,850 – 7,402	4,601	22%	1,013	58%	1,011	37%
Geese									
Black brant	9	56%	4 – 13	9	118%	0	-	0	-
Lesser Canada goose	1,303	18%	1,065 – 1,542	1,012	34%	126	73%	165	76%
White-fronted goose	2,551	19%	2,069 – 3,032	2,303	31%	248	95%	0	-
Lesser snow goose	213	40%	128 – 298	213	62%	0	-	0	-
Total geese	4,075	16%	3,403 – 4,747	3,536	27%	374	68%	165	76%
Swans									
Tundra swan	10	61%	4 – 15	10	96%	0	-	0	-
Cranes									
Sandhill crane	9	88%	1 – 17	9	141%	0	-	0	-
Grouse									
Grouse (unidentified)	94	24%	71 – 116	39	64%	33	90%	21	116%
Ptarmigan	105	42%	61 – 150	65	105%	21	115%	19	126%
Total grouse	199	28%	143 – 254	104	75%	54	94%	40	120%
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	6	54%	3 – 9	0	-	6	130%	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	6	54%	3 – 9	0	-	6	130%	0	-
Other/unknown bird	1	73%	* – 2	1	100%	0	-	0	-
Total birds	10,927	12%	9,576 – 12,277	8,262	23%	1,448	53%	1,216	37%

Sampling effort (Upper Yukon, 2006): 7 out of 10 villages in this subregion were surveyed; 90% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 113.–Estimated harvest of eggs, Interior Alaska Region, Upper Yukon Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	0	-	-	0	-	0	-	0	-

Sampling effort (Upper Yukon, 2006): 7 out of 10 villages in this subregion were surveyed; 90% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI $\geq$ 100%.

Table 114.—Estimated harvest of birds, Interior Alaska Region, Tanana Villages Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	1,487	17%	1,237 – 1,736	883	29%	80	67%	523	37%
Green-winged teal	948	20%	758 – 1,138	577	36%	18	123%	353	44%
Mallard	3,517	13%	3,068 – 3,966	1,826	21%	302	63%	1,389	24%
Pintail	1,819	16%	1,531 – 2,107	1,135	28%	54	68%	629	32%
Shoveler	494	31%	340 – 649	391	47%	58	87%	45	81%
Black scoter	540	29%	384 – 695	341	48%	90	70%	109	67%
Surf scoter	428	34%	283 – 573	283	61%	72	85%	72	85%
White-winged scoter	394	34%	260 – 528	249	62%	54	90%	90	70%
Bufflehead	133	38%	82 – 183	33	91%	40	85%	60	70%
Goldeneye	1,101	18%	901 – 1,302	606	35%	126	90%	369	38%
Canvasback	375	35%	243 – 506	251	62%	69	69%	55	72%
Scaup	156	40%	93 – 219	55	72%	58	87%	43	85%
Harlequin duck	78	63%	29 – 128	0	-	42	107%	36	123%
Long-tailed duck	202	52%	98 – 307	192	74%	0	-	11	123%
Common merganser	51	71%	15 – 87	7	123%	36	123%	7	123%
Red-breasted merganser	51	71%	15 – 87	7	123%	36	123%	7	123%
Duck (unidentified)	29	68%	9 – 49	14	123%	0	-	14	123%
Total ducks	11,802	15%	10,060 – 13,543	6,850	27%	1,136	56%	3,815	24%
Geese									
Black brant	105	85%	16 – 195	105	125%	0	-	0	-
Lesser Canada goose	1,700	14%	1,455 – 1,945	1,105	24%	65	87%	530	26%
White-fronted goose	1,035	16%	865 – 1,205	742	27%	7	123%	286	30%
Lesser snow goose	7	94%	1 – 14	7	123%	0	-	0	-
Total geese	2,848	16%	2,405 – 3,292	1,960	27%	72	83%	816	26%
Swans									
Tundra swan	60	33%	40 – 81	60	47%	0	-	0	-
Cranes									
Sandhill crane	110	31%	75 – 145	88	48%	0	-	23	125%
Grouse									
Grouse (unidentified)	1,993	17%	1,647 – 2,339	566	42%	162	94%	1,265	29%
Ptarmigan	545	30%	382 – 707	312	59%	36	123%	196	46%
Total grouse	2,538	17%	2,098 – 2,977	878	43%	198	86%	1,462	28%
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	17,358	14%	14,940 – 19,776	9,836	26%	1,407	55%	6,116	21%

Sampling effort (Tanana Villages, 2006): 3 out of 10 villages in this subregion were surveyed; 52% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 115.—Estimated harvest of eggs, Interior Alaska Region, Tanana Villages Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	72	69%	22 – 122	29	123%	43	123%	0	-
Green-winged teal	87	68%	28 – 146	87	85%	0	-	0	-
Mallard	141	57%	61 – 221	141	68%	0	-	0	-
Pintail	65	68%	21 – 110	65	85%	0	-	0	-
Shoveler	109	69%	34 – 183	109	86%	0	-	0	-
Black scoter	62	69%	19 – 104	36	123%	25	123%	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	7	94%	1 – 14	7	123%	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	130	56%	57 – 204	87	85%	43	123%	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	7	68%	2 – 12	4	123%	4	123%	0	-
Total ducks	680	51%	331 – 1,030	565	69%	116	119%	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	58	68%	19 – 97	29	123%	29	123%	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	58	68%	19 – 97	29	123%	29	123%	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	115	60%	46 – 184	57	126%	57	126%	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	115	60%	46 – 184	57	126%	57	126%	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	22	94%	1 – 42	22	123%	0	-	0	-
Total shorebirds	22	94%	1 – 42	22	123%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	875	44%	490 – 1,260	673	62%	202	93%	0	-

Sampling effort (Tanana Villages, 2006): 3 out of 10 villages in this subregion were surveyed; 52% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 116.—Estimated harvest of birds, Interior Alaska Region, Tok Subregion, 2006.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	188	45%	103 – 273	73	94%	0	-	115	113%
Green-winged Teal	64	54%	30 – 98	39	113%	0	-	24	160%
Mallard	1,280	27%	932 – 1,628	355	77%	42	114%	883	59%
Pintail	679	32%	464 – 895	182	85%	0	-	497	67%
Shoveler	161	52%	78 – 244	82	125%	0	-	79	128%
Black Scoter	303	65%	105 – 501	152	160%	0	-	152	160%
Surf Scoter	194	74%	51 – 337	21	160%	0	-	173	142%
White-winged Scoter	1,216	28%	874 – 1,558	255	103%	42	114%	919	56%
Bufflehead	194	54%	89 – 299	91	119%	0	-	103	143%
Goldeneye	331	51%	163 – 499	130	116%	0	-	200	124%
Canvasback	133	51%	65 – 202	49	116%	0	-	85	123%
Scaup	237	63%	88 – 385	64	123%	0	-	173	142%
Harlequin Duck	121	73%	33 – 210	30	160%	0	-	91	160%
Long-tailed Duck	182	69%	57 – 307	61	160%	0	-	121	160%
Common Merganser	39	66%	14 – 65	18	160%	0	-	21	160%
Red-breasted Merganser	0	-	-	0	-	0	-	0	-
Total Ducks	5,324	31%	3,688 – 6,959	1,602	82%	85	114%	3,637	68%
Geese									
Black Brant	0	-	-	0	-	0	-	0	-
Lesser Canada Goose	106	62%	40 – 172	36	160%	0	-	70	141%
White-fronted Goose	0	-	-	0	-	0	-	0	-
Lesser Snow Goose	6	93%	1 – 12	6	160%	0	-	0	-
Total Geese	112	59%	46 – 178	42	139%	0	-	70	141%
Swans									
Tundra Swan	6	93%	1 – 12	0	-	0	-	6	160%
Cranes									
Sandhill Crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	607	32%	414 – 800	197	83%	85	92%	325	87%
Ptarmigan	273	53%	129 – 417	106	139%	46	119%	121	160%
Total Grouse	880	36%	567 – 1,193	303	99%	130	89%	446	98%
Seabirds									
Arctic Tern	0	-	-	0	-	0	-	0	-
Mew Gull	0	-	-	0	-	0	-	0	-
Glaucous Gull	0	-	-	0	-	0	-	0	-
Herring Gull	0	-	-	0	-	0	-	0	-
Total Seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden Plover	0	-	-	0	-	0	-	0	-
Small Shorebird	0	-	-	0	-	0	-	0	-
Total Shorebirds	0	-	-	0	-	0	-	0	-
Grebes & Loons									
Common Loon	0	-	-	0	-	0	-	0	-
Pacific Loon	0	-	-	0	-	0	-	0	-
Red-throated Loon	0	-	-	0	-	0	-	0	-
Red-necked Grebe	0	-	-	0	-	0	-	0	-
Total Grebes & Loons	0	-	-	0	-	0	-	0	-
Total Birds	6,321	31%	4,385 – 8,258	1,947	83%	215	69%	4,159	70%

Sampling effort (Tok, 2006): 1 out of 1 village in this subregion was surveyed.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 117.–Estimated harvest of eggs, Interior Alaska Region, Tok Subregion, 2006.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged Teal	0	-	-	0	-	0	-	0	-
Mallard	36	93%	3 – 70	36	160%	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black Scoter	0	-	-	0	-	0	-	0	-
Surf Scoter	0	-	-	0	-	0	-	0	-
White-winged Scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin Duck	0	-	-	0	-	0	-	0	-
Long-tailed Duck	0	-	-	0	-	0	-	0	-
Common Merganser	0	-	-	0	-	0	-	0	-
Red-breasted Merganser	0	-	-	0	-	0	-	0	-
Total Ducks	36	93%	3 – 70	36	160%	0	-	0	-
Geese									
Black Brant	0	-	-	0	-	0	-	0	-
Lesser Canada Goose	0	-	-	0	-	0	-	0	-
White-fronted Goose	0	-	-	0	-	0	-	0	-
Lesser Snow Goose	0	-	-	0	-	0	-	0	-
Total Geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra Swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill Crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total Grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic Tern	0	-	-	0	-	0	-	0	-
Mew Gull	0	-	-	0	-	0	-	0	-
Glaucous Gull	0	-	-	0	-	0	-	0	-
Herring Gull	0	-	-	0	-	0	-	0	-
Total Seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden Plover	0	-	-	0	-	0	-	0	-
Small Shorebird	0	-	-	0	-	0	-	0	-
Total Shorebirds	0	-	-	0	-	0	-	0	-
Grebes & Loons									
Common Loon	0	-	-	0	-	0	-	0	-
Pacific Loon	0	-	-	0	-	0	-	0	-
Red-throated Loon	0	-	-	0	-	0	-	0	-
Red-necked Grebe	0	-	-	0	-	0	-	0	-
Total Grebes & Loons	0	-	-	0	-	0	-	0	-
Total Birds	36	93%	3 – 70	36	160%	0	-	0	-

Sampling effort (Tok, 2006): 1 out of 1 village in this subregion was surveyed.

-: No reported harvest. *: 95% CI ≥ 100%.

2007 HARVEST ESTIMATES

Table 118.—Estimated harvest of birds, Aleutian/Pribilof Islands Region, Aleutian/Pribilof Villages Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	447	153%	* – 1,132	0	-	0	-	447	148%
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	383	153%	* – 970	0	-	0	-	383	148%
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	1,021	114%	* – 2,182	0	-	0	-	1,021	106%
Bufflehead	191	153%	* – 485	0	-	0	-	191	148%
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	64	153%	* – 162	0	-	0	-	64	148%
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	2,234	116%	* – 4,819	0	-	0	-	2,234	108%
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	64	153%	* – 162	0	-	0	-	64	148%
Total ducks	4,404	104%	* – 8,987	0	-	0	-	4,404	96%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	223	94%	14 – 432	0	-	0	-	223	84%
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	223	94%	14 – 432	0	-	0	-	223	84%
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	2,744	101%	* – 5,514	2,744	92%	0	-	0	-
Total seabirds	2,744	101%	* – 5,514	2,744	92%	0	-	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	7,371	77%	1,708 – 13,035	2,744	92%	0	-	4,627	93%

Sampling effort (Aleutian/Pribilof Villages, 2007): only 1 out of 11 villages in this subregion was surveyed; 4% of subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 119.—Estimated harvest of eggs, Aleutian/Pribilof Islands Region, Aleutian/Pribilof Villages Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	6,127	74%	1,590 – 10,664	5,489	67%	638	148%	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	6,127	74%	1,590 – 10,664	5,489	67%	638	148%	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	6,127	74%	1,590 – 10,664	5,489	67%	638	148%	0	-

Sampling effort (Aleutian/Pribilof Villages, 2007): only 1 out of 11 villages in this subregion was surveyed; 4% of subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 120.—Estimated harvest of birds, Bristol Bay Region, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	333	74%	86 – 580	111	49%	0	-	222	107%
Green-winged teal	662	37%	418 – 905	315	54%	96	110%	251	57%
Mallard	3,304	21%	2,595 – 4,014	1,752	23%	87	62%	1,465	31%
Pintail	2,296	30%	1,603 – 2,988	1,403	24%	172	112%	721	55%
Shoveler	299	62%	113 – 484	146	62%	7	181%	146	87%
Goldeneye	260	41%	154 – 367	172	48%	0	-	89	62%
Black scoter	413	29%	295 – 531	319	33%	15	128%	79	72%
Surf scoter	97	50%	49 – 146	43	70%	31	128%	24	80%
White-winged scoter	81	51%	40 – 121	33	80%	0	-	47	68%
Bufflehead	55	72%	15 – 95	0	-	0	-	55	72%
Canvasback	140	92%	12 – 269	84	109%	0	-	57	109%
Common eider	85	74%	22 – 148	63	91%	0	-	22	92%
King eider	919	35%	599 – 1,239	919	35%	0	-	0	-
Spectacled eider	131	88%	15 – 246	131	95%	0	-	0	-
Steller's eider	10	130%	* – 23	10	130%	0	-	0	-
Scaup	48	77%	11 – 85	35	69%	0	-	13	143%
Harlequin duck	319	46%	172 – 466	181	62%	0	-	138	55%
Long-tailed duck	163	102%	* – 329	154	108%	0	-	8	94%
Common merganser	144	52%	69 – 219	104	66%	0	-	40	77%
Red-breasted merganser	292	59%	119 – 465	202	78%	0	-	91	67%
Duck (unidentified)	478	54%	218 – 739	235	76%	0	-	244	74%
Total ducks	10,530	18%	8,686 – 12,375	6,412	16%	407	62%	3,712	31%
Geese									
Black brant	724	38%	446 – 1,003	662	42%	34	128%	28	132%
Cackling Canada goose	1,248	25%	930 – 1,566	607	26%	52	121%	589	44%
Lesser Canada goose	1,336	36%	856 – 1,815	655	32%	32	106%	649	53%
White-fronted goose	1,138	23%	880 – 1,395	1,020	24%	0	-	118	66%
Emperor goose	26	63%	10 – 43	10	101%	3	154%	13	81%
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	4,472	19%	3,634 – 5,309	2,954	18%	120	70%	1,397	38%
Swans									
Tundra swan	272	44%	151 – 394	201	58%	0	-	71	48%
Cranes									
Sandhill crane	292	31%	200 – 383	174	34%	17	68%	100	57%
Grouse									
Spruce grouse	3,413	43%	1,951 – 4,875	198	59%	834	101%	2,381	37%
Ptarmigan	3,441	54%	1,566 – 5,316	2,542	50%	44	111%	855	78%
Total grouse	6,854	35%	4,481 – 9,228	2,740	47%	878	96%	3,236	34%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	1,960	76%	465 – 3,455	1,960	76%	0	-	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Glaucous gull	2,279	69%	713 – 3,844	2,091	75%	0	-	187	139%
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	1,393	122%	* – 3,094	1,393	122%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	5,631	63%	2,074 – 9,188	5,444	65%	0	-	187	139%
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Whimbrel	62	107%	* – 128	10	144%	52	125%	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	155	125%	* – 348	0	-	155	125%	0	-
Total shorebirds	217	119%	* – 475	10	144%	207	125%	0	-
Grebes and loons									
Common loon	16	100%	* – 33	8	102%	0	-	8	180%
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	16	100%	* – 33	8	102%	0	-	8	180%
Total birds	28,285	20%	22,538 – 34,031	17,944	23%	1,629	63%	8,712	27%

Sampling effort (Bristol Bay, 2007): 16 out of 27 villages in this region were surveyed; 3 out of 3 subregions are represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 121.–Estimated harvest of eggs, Bristol Bay Region, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-		0	-	0	-	0	-
Green-winged Teal	16	96%	1 – 31	16	97%	0	-	0	-
Mallard	178	60%	71 – 285	178	62%	0	-	0	-
Pintail	93	75%	23 – 163	60	73%	33	181%	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black Scoter	0	-	-	0	-	0	-	0	-
Surf Scoter	0	-	-	0	-	0	-	0	-
White-winged Scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Common Eider	0	-	-	0	-	0	-	0	-
King Eider	0	-	-	0	-	0	-	0	-
Spectacled Eider	0	-	-	0	-	0	-	0	-
Steller's Eider	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin Duck	0	-	-	0	-	0	-	0	-
Long-tailed Duck	0	-	-	0	-	0	-	0	-
Common Merganser	0	-	-	0	-	0	-	0	-
Red-breasted Merganser	0	-	-	0	-	0	-	0	-
Total Ducks	286	46%	156 – 417	253	48%	33	181%	0	-
Geese									
Black Brant	0	-	-	0	-	0	-	0	-
Cackling Canada Goose	28	92%	2 – 53	28	100%	0	-	0	-
Lesser Canada Goose	35	86%	5 – 65	35	91%	0	-	0	-
White-fronted Goose	0	-	-	0	-	0	-	0	-
Emperor Goose	0	-	-	0	-	0	-	0	-
Lesser Snow Goose	0	-	-	0	-	0	-	0	-
Total Geese	63	69%	19 – 106	63	73%	0	-	0	-
Swans									
Tundra Swan	29	122%	* – 64	20	130%	9	128%	0	-
Cranes									
Sandhill Crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce Grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total Grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	26	125%	* – 58	0	-	26	125%	0	-
Arctic Tern	565	77%	129 – 1,002	565	77%	0	-	0	-
Black-legged Kittiwake	0	-	-	0	-	0	-	0	-
Red-legged Kittiwake	0	-	-	0	-	0	-	0	-
Kittiwake	209	118%	* – 456	209	118%	0	-	0	-
Sabine's Gull	969	121%	* – 2,140	969	121%	0	-	0	-
Mew Gull	10,980	51%	5,435 – 16,526	10,916	51%	65	125%	0	-
Glaucous-winged Gull	40	118%	* – 87	40	130%	0	-	0	-
Glaucous Gull	7,900	32%	5,387 – 10,413	7,854	34%	46	128%	0	-
Herring Gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	9,035	49%	4,618 – 13,452	8,968	55%	67	181%	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total Seabirds	29,725	28%	21,326 – 38,124	29,522	30%	203	86%	0	-
Shorebirds									
Black Oystercatcher	0	-	-	0	-	0	-	0	-
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed Curlew	13	118%	* – 29	13	130%	0	-	0	-
Godwit	3	118%	* – 7	3	130%	0	-	0	-
Golden Plover	0	-	-	0	-	0	-	0	-
Small Shorebird	16	118%	* – 36	16	118%	0	-	0	-
Total Shorebirds	33	76%	8 – 58	33	79%	0	-	0	-
Grebes & Loons									
Common Loon	8	125%	* – 17	0	-	8	125%	0	-
Pacific Loon	3	118%	* – 7	3	130%	0	-	0	-
Red-throated Loon	0	-	-	0	-	0	-	0	-
Yellow-billed Loon	0	-	-	0	-	0	-	0	-
Total Grebes & Loons	11	94%	1 – 21	3	130%	8	125%	0	-
Other/Unknown Bird	655	122%	* – 1,454	655	122%	0	-	0	-
Total Birds	30,801	27%	22,354 – 39,249	30,548	29%	253	89%	0	-

Sampling effort (Bristol Bay, 2007): 16 out of 27 villages in this region were surveyed; 3 out of 3 subregions are represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 122.—Estimated harvest of birds, Bristol Bay Region, South Alaska Peninsula Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	33	76%	8 – 58	33	92%	0	-	0	-
Mallard	212	53%	100 – 325	99	75%	0	-	114	87%
Pintail	55	62%	21 – 90	26	107%	0	-	29	98%
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	36	75%	9 – 62	11	143%	0	-	25	113%
Surf scoter	5	124%	* – 12	0	-	0	-	5	131%
White-winged scoter	9	109%	* – 19	7	143%	0	-	3	131%
Bufflehead	13	145%	* – 32	0	-	0	-	13	143%
Goldeneye	95	61%	37 – 153	46	90%	0	-	49	84%
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	22	104%	* – 45	9	143%	0	-	13	143%
Common eider	22	75%	5 – 38	11	126%	0	-	11	126%
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	93	68%	30 – 156	48	93%	0	-	45	94%
Long-tailed duck	10	94%	1 – 19	4	143%	0	-	5	131%
Common merganser	22	75%	5 – 38	11	126%	0	-	11	126%
Red-breasted merganser	72	60%	29 – 116	31	80%	0	-	42	103%
Total ducks	700	47%	374 – 1,026	335	69%	0	-	365	72%
Geese									
Black brant	18	81%	3 – 32	18	94%	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	5	124%	* – 12	0	-	0	-	5	131%
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	23	69%	7 – 39	18	94%	0	-	5	131%
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	245	82%	44 – 447	245	104%	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	968	50%	488 – 1,449	598	79%	0	-	371	71%

sampling effort (South Alaska Peninsula, 2007): 2 out of 5 villages in this subregion were surveyed; 46% of subregion households were represented in the sample.

Table 123.—Estimated harvest of eggs, Bristol Bay Region, South Alaska Peninsula Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall-Winter	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Ptarmigan	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Black-legged kittiwake	0	-	-	0	-	0	-	0	-
Red-legged kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Glaucous-winged gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Black oystercatcher	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	651	81%	122 – 1,181	651	123%	0	-	0	-
Total birds	651	81%	122 – 1,181	651	123%	0	-	0	-

Sampling effort (South Alaska Peninsula, 2007): 2 out of 5 villages in this subregion were surveyed; 46% of subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 124.—Estimated harvest of birds, Bristol Bay Region, Southwest Bristol Bay Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	187	43%	108 – 267	90	49%	0	-	97	87%
Green-winged teal	279	25%	210 – 348	87	53%	16	92%	176	51%
Mallard	2,500	20%	1,999 – 3,001	1,402	26%	70	72%	1,028	30%
Pintail	1,549	13%	1,346 – 1,752	1,102	18%	52	66%	395	27%
Shoveler	141	43%	80 – 203	85	63%	0	-	56	86%
Goldeneye	163	44%	91 – 234	123	58%	0	-	40	91%
Black scoter	377	21%	297 – 457	308	34%	15	128%	54	91%
Surf scoter	92	38%	57 – 127	43	70%	31	128%	19	95%
White-winged scoter	71	34%	47 – 96	27	94%	0	-	45	72%
Bufflehead	42	51%	21 – 64	0	-	0	-	42	84%
Canvasback	140	86%	20 – 261	84	109%	0	-	57	109%
Common eider	63	62%	24 – 102	52	107%	0	-	11	133%
King eider	919	28%	665 – 1,174	919	35%	0	-	0	-
Spectacled eider	131	59%	54 – 207	131	95%	0	-	0	-
Steller's eider	10	88%	1 – 18	10	130%	0	-	0	-
Scaup	26	53%	12 – 40	26	79%	0	-	0	-
Harlequin duck	213	33%	142 – 285	123	82%	0	-	91	69%
Long-tailed duck	153	64%	55 – 251	150	111%	0	-	3	111%
Common merganser	122	39%	74 – 170	93	72%	0	-	29	95%
Red-breasted merganser	215	51%	106 – 323	171	91%	0	-	44	97%
Duck (unidentified)	392	69%	120 – 665	235	76%	0	-	158	87%
Total ducks	7,788	14%	6,715 – 8,860	5,261	16%	184	55%	2,343	25%
Geese									
Black brant	707	27%	513 – 900	645	43%	34	128%	28	132%
Cackling Canada goose	1,056	17%	875 – 1,237	586	27%	39	152%	430	40%
Lesser Canada goose	779	17%	645 – 914	479	26%	5	124%	296	38%
White-fronted goose	1,104	18%	908 – 1,300	1,012	25%	0	-	92	73%
Emperor goose	15	62%	6 – 25	8	125%	0	-	8	101%
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	3,661	12%	3,211 – 4,112	2,729	19%	78	95%	854	28%
Swans									
Tundra swan	270	34%	179 – 361	199	59%	0	-	71	48%
Cranes									
Sandhill crane	249	20%	199 – 300	155	30%	14	75%	80	55%
Grouse									
Spruce grouse	715	23%	548 – 882	128	71%	26	125%	561	39%
Ptarmigan	2,033	21%	1,602 – 2,465	1,503	36%	44	111%	486	34%
Total grouse	2,748	17%	2,274 – 3,222	1,631	35%	70	116%	1,048	27%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	1,548	53%	726 – 2,370	1,548	84%	0	-	0	-
Glaucous gull	2,279	48%	1,193 – 3,365	2,091	75%	0	-	187	139%
Auklet	0	-	-	0	-	0	-	0	-
Murre	1,393	83%	239 – 2,547	1,393	122%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	5,220	46%	2,831 – 7,608	5,032	69%	0	-	187	139%
Shorebirds									
Whimbrel	62	77%	14 – 109	10	144%	52	125%	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	155	90%	15 – 295	0	-	155	125%	0	-
Total shorebirds	217	86%	30 – 403	10	144%	207	125%	0	-
Grebes and loons									
Common loon	16	91%	2 – 31	8	102%	0	-	8	180%
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	16	91%	2 – 31	8	102%	0	-	8	180%
Total birds	20,169	15%	17,240 – 23,097	15,025	24%	553	68%	4,591	19%

Sampling effort (Southwest Bristol Bay, 2007): 13 out of 21 villages in this subregion were surveyed; 68% of subregion households were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 125.—Estimated harvest of eggs, Bristol Bay Region, Southwest Bristol Bay Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-		0	-	0	-	0	-
Green-winged teal	16	77%	4 – 28	16	97%	0	-	0	-
Mallard	147	45%	80 – 213	147	68%	0	-	0	-
Pintail	60	50%	30 – 90	60	73%	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	222	35%	145 – 299	222	51%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	28	66%	9 – 46	28	100%	0	-	0	-
Lesser Canada goose	35	62%	13 – 57	35	91%	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	63	50%	31 – 94	63	73%	0	-	0	-
Swans									
Tundra swan	29	64%	10 – 48	20	130%	9	128%	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	26	90%	3 – 49	0	-	26	125%	0	-
Arctic tern	414	62%	156 – 672	414	82%	0	-	0	-
Kittiwake	90	81%	17 – 162	90	119%	0	-	0	-
Sabine's gull	969	92%	76 – 1,862	969	121%	0	-	0	-
Mew gull	6,468	49%	3,279 – 9,656	6,403	43%	65	125%	0	-
Glaucous-winged gull	40	84%	6 – 73	40	130%	0	-	0	-
Glaucous gull	7,783	22%	6,039 – 9,528	7,737	35%	46	128%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	8,968	33%	6,024 – 11,912	8,968	55%	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	24,757	22%	19,403 – 30,111	24,621	30%	136	93%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	13	84%	2 – 24	13	130%	0	-	0	-
Godwit	3	84%	1 – 6	3	130%	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	16	95%	1 – 32	16	118%	0	-	0	-
Total shorebirds	33	58%	14 – 52	33	79%	0	-	0	-
Grebes and loons									
Common loon	8	90%	1 – 15	0	-	8	125%	0	-
Pacific loon	3	84%	1 – 6	3	130%	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	11	68%	4 – 19	3	130%	8	125%	0	-
Other/unknown bird	3	55%	1 – 5	3	66%	0	-	0	-
Total birds	25,118	21%	19,757 – 30,479	24,964	30%	153	89%	0	-

Sampling effort (Southwest Bristol Bay, 2007): 13 out of 21 villages in this subregion were surveyed; 68% of subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 126.—Estimated harvest of birds, Bristol Bay Region, Dillingham Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	146	89%	16 – 275	21	154%	0	-	125	178%
Green-winged teal	350	37%	222 – 477	195	83%	79	132%	75	149%
Mallard	592	36%	381 – 803	252	69%	17	117%	323	98%
Pintail	691	42%	403 – 980	274	98%	120	158%	297	128%
Shoveler	157	51%	77 – 238	61	120%	7	181%	90	131%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	3	89%	1 – 5	3	154%	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	13	73%	4 – 22	10	154%	0	-	3	154%
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	5	89%	1 – 10	0	-	0	-	5	154%
Duck (unidentified)	86	79%	18 – 154	0	-	0	-	86	138%
Total ducks	2,042	32%	1,386 – 2,699	816	67%	223	103%	1,004	96%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	192	60%	77 – 308	21	120%	13	154%	159	125%
Lesser Canada goose	556	38%	343 – 770	176	97%	27	124%	354	92%
White-fronted goose	34	71%	10 – 58	8	154%	0	-	26	154%
Emperor goose	5	62%	2 – 8	3	154%	3	154%	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	788	37%	492 – 1,083	207	85%	42	97%	538	88%
Swans									
Tundra swan	3	89%	1 – 5	3	154%	0	-	0	-
Cranes									
Sandhill crane	42	71%	12 – 73	20	186%	3	154%	20	186%
Grouse									
Spruce grouse	2,698	25%	2,014 – 3,382	70	103%	808	104%	1,820	47%
Ptarmigan	1,163	64%	413 – 1,913	794	142%	0	-	369	176%
Total grouse	3,861	26%	2,851 – 4,871	864	131%	808	104%	2,188	49%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	412	104%	* – 840	412	180%	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	412	104%	* – 840	412	180%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	7,148	25%	5,395 – 8,901	2,322	81%	1,076	88%	3,750	58%

Sampling effort (Dillingham, 2007): 1 out of 1 village in this subregion was surveyed.

-: No reported harvest, no confidence interval. *: 95% CI ≥ 100%.

Table 127.—Estimated harvest of eggs, Bristol Bay Region, Dillingham Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	31	89%	4 – 59	31	154%	0	-	0	-
Pintail	33	100%	* – 67	0	-	33	181%	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	65	67%	21 – 108	31	154%	33	181%	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	152	106%	* – 312	152	180%	0	-	0	-
Kittiwake	120	107%	* – 248	120	186%	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	4,513	62%	1,708 – 7,318	4,513	107%	0	-	0	-
Glaucous gull	117	66%	40 – 194	117	113%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	67	100%	* – 133	0	-	67	181%	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	4,968	57%	2,151 – 7,784	4,901	99%	67	181%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	5,032	56%	2,215 – 7,850	4,932	98%	100	181%	0	-

Sampling effort (Dillingham, 2007): 1 out of 1 village in this subregion was surveyed.

-: No reported harvest, no confidence interval. *: 95% CI ≥ 100%.

Table 128.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, 2007.



Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	a			647	24%	650	33%		a
Green-winged teal	a			612	44%	761	43%		a
Mallard	a			1,531	27%	1,492	33%		a
Pintail	a			1,226	19%	2,874	28%		a
Shoveler	a			637	24%	554	27%		a
Goldeneye	a			551	43%	48	62%		a
Black scoter	a			6,724	14%	1,191	26%		a
Surf scoter	a			1,269	28%	15	86%		a
White-winged scoter	a			1,297	27%	67	79%		a
Bufflehead	a			117	79%	104	68%		a
Canvasback	a			402	37%	136	90%		a
Common eider	a			145	52%	0	-		a
King eider	a			6,908	19%	2,737	78%		a
Spectacled eider	a			37	91%	0	-		a
Steller's eider	a			88	84%	0	-		a
Scaup	a			7,296	14%	5,237	16%		a
Harlequin duck	a			28	68%	0	-		a
Long-tailed duck	a			1,089	40%	120	77%		a
Common merganser	a			120	64%	0	-		a
Red-breasted merganser	a			77	56%	0	-		a
Duck (unidentified)	a			29	98%	0	-		a
Total ducks	a			30,831	9%	15,986	18%		a
Geese									
Black brant	a			4,882	18%	177	87%		a
Cackling Canada goose	a			8,809	11%	593	48%		a
Lesser Canada goose	a			5,400	20%	2,592	58%		a
White-fronted goose	a			16,550	12%	3,441	31%		a
Emperor goose	a			1,017	22%	480	66%		a
Lesser snow goose	a			114	67%	21	102%		a
Total geese	a			36,771	10%	7,304	38%		a
Swans									
Tundra swan	a			2,065	17%	291	29%		a
Cranes									
Sandhill crane	a			1,752	21%	339	48%		a
Grouse									
Spruce grouse	a			10	132%	0	-		a
Ptarmigan	a			4,742	23%	93	74%		a
Total grouse	a			4,753	23%	93	74%		a
Seabirds									
Cormorant	a			0	-	0	-		a
Arctic tern	a			0	-	0	-		a
Kittiwake	a			0	-	0	-		a
Sabine's gull	a			0	-	0	-		a
Mew gull	a			5	132%	0	-		a
Glaucous gull	a			363	92%	0	-		a
Auklet	a			0	-	0	-		a
Murre	a			0	-	0	-		a
Guillemot	a			0	-	0	-		a
Puffin	a			0	-	0	-		a
Total seabirds	a			368	90%	0	-		a
Shorebirds									
Whimbrel	a			0	-	0	-		a
Bristle-thighed curlew	a			14	127%	0	-		a
Godwit	a			0	-	883	46%		a
Golden plover	a			0	-	0	-		a
Small shorebird	a			0	-	32	146%		a
Total shorebirds	a			14	127%	915	45%		a
Grebes and loons									
Common loon	a			71	60%	11	95%		a
Pacific loon	a			20	64%	0	-		a
Red-throated loon	a			12	109%	0	-		a
Yellow-billed loon	a			0	-	0	-		a
Total grebes and loons	a			103	45%	11	95%		a
Other/unknown bird	a			0	-	38	143%		a
Total birds	a			76,657	8%	24,978	20%		a

Sampling effort (Yukon-Kuskokwim Delta, 2007): 26 out of 47 villages in the region were surveyed; 7 out of 7 subregions were represented in the sample. " Fall harvest data not available.

-.: No reported harvest. *: 95% CI ≥ 100%.

Table 129.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, 2007.



Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	182	74%	48 – 317	145	88%	37	128%		^a
Green-winged teal	275	60%	110 – 441	238	74%	37	128%		^a
Mallard	576	42%	336 – 816	298	63%	278	70%		^a
Pintail	954	43%	548 – 1,359	803	50%	150	89%		^a
Shoveler	192	80%	38 – 346	192	109%	0	-		^a
Goldeneye	0	-	-	0	-	0	-		^a
Black scoter	5	121%	* – 11	5	121%	0	-		^a
Surf scoter	0	-	-	0	-	0	-		^a
White-winged scoter	0	-	-	0	-	0	-		^a
Bufflehead	0	-	-	0	-	0	-		^a
Canvasback	31	101%	0 – 62	31	138%	0	-		^a
Common eider	0	-	-	0	-	0	-		^a
King eider	0	-	-	0	-	0	-		^a
Spectacled eider	0	-	-	0	-	0	-		^a
Steller's eider	12	101%	0 – 25	12	138%	0	-		^a
Scaup	354	48%	183 – 525	273	73%	82	128%		^a
Harlequin duck	0	-	-	0	-	0	-		^a
Long-tailed duck	26	121%	* – 58	26	126%	0	-		^a
Common merganser	6	101%	1 – 12	6	138%	0	-		^a
Red-breasted merganser	0	-	-	0	-	0	-		^a
Duck (unidentified)	46	128%	* – 105	46	128%	0	-		^a
Total ducks	2,660	27%	1,951 – 3,369	2,076	31%	584	57%		^a
Geese									
Black brant	834	45%	457 – 1,210	834	47%	0	-		^a
Cackling Canada goose	3,376	25%	2,524 – 4,228	3,174	28%	202	102%		^a
Lesser Canada goose	588	50%	294 – 882	588	53%	0	-		^a
White-fronted goose	5,740	22%	4,461 – 7,019	5,666	24%	74	122%		^a
Emperor goose	0	-	-	0	-	0	-		^a
Lesser snow goose	0	-	-	0	-	0	-		^a
Total geese	10,538	21%	8,297 – 12,779	10,262	23%	275	93%		^a
Swans									
Tundra swan	485	30%	337 – 633	427	35%	58	75%		^a
Cranes									
Sandhill crane	168	41%	98 – 237	135	47%	32	75%		^a
Grouse									
Spruce grouse	0	-	-	0	-	0	-		^a
Ptarmigan	252	56%	111 – 392	222	67%	30	128%		^a
Total grouse	252	56%	111 – 392	222	67%	30	128%		^a
Seabirds									
Cormorant	0	-	-	0	-	0	-		^a
Arctic tern	403	39%	245 – 560	328	49%	74	73%		^a
Kittiwake	2	121%	* – 5	2	121%	0	-		^a
Sabine's gull	112	108%	* – 232	0	-	112	128%		^a
Mew gull	567	42%	329 – 804	492	51%	74	128%		^a
Glaucous gull	3,005	47%	1,603 – 4,407	2,819	50%	186	128%		^a
Auklet	0	-	-	0	-	0	-		^a
Murre	0	-	-	0	-	0	-		^a
Guillemot	0	-	-	0	-	0	-		^a
Puffin	0	-	-	0	-	0	-		^a
Total seabirds	4,088	37%	2,563 – 5,613	3,642	40%	446	117%		^a
Shorebirds									
Whimbrel	115	53%	54 – 176	59	83%	56	103%		^a
Bristle-thighed curlew	0	-	-	0	-	0	-		^a
Godwit	51	71%	15 – 87	21	91%	30	86%		^a
Golden plover	110	63%	41 – 180	81	64%	30	128%		^a
Small shorebird	670	37%	425 – 916	537	43%	134	79%		^a
Total shorebirds	947	35%	614 – 1,279	698	40%	249	71%		^a
Grebes and loons									
Common loon	16	83%	3 – 30	16	110%	0	-		^a
Pacific loon	0	-	-	0	-	0	-		^a
Red-throated loon	0	-	-	0	-	0	-		^a
Yellow-billed loon	0	-	-	0	-	0	-		^a
Total grebes and loons	16	83%	3 – 30	16	-	0	-		^a
Total birds	19,153	16%	16,033 – 22,274	17,479	-	1,675	-		^a

Sampling effort (Yukon-Kuskokwim Delta, 2007): 26 out of 47 villages in the region were surveyed; 7 out of 7 subregions were represented in the sample.

^a Fall harvest data not available; fall egg harvest assumed to be zero in annual harvest estimates.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 130.–Estimated harvest of birds, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	230	34%	151 – 308	5	121%	50	141%	175	61%
Green-winged teal	252	38%	156 – 347	10	121%	67	141%	175	65%
Mallard	3,021	17%	2,521 – 3,521	345	65%	321	71%	2,354	29%
Pintail	2,904	14%	2,491 – 3,317	72	49%	600	48%	2,232	21%
Shoveler	235	32%	159 – 311	47	67%	87	126%	101	45%
Goldeneye	61	49%	31 – 91	4	128%	0	-	57	72%
Black scoter	248	32%	169 – 328	161	48%	0	-	87	88%
Surf scoter	14	98%	1 – 28	14	121%	0	-	0	-
White-winged scoter	234	39%	144 – 324	98	63%	0	-	136	81%
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	20	55%	9 – 30	5	121%	0	-	15	88%
Common eider	62	60%	25 – 99	38	128%	0	-	24	105%
King eider	5,836	24%	4,454 – 7,219	2,769	31%	2,737	78%	330	60%
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	392	27%	287 – 497	119	60%	0	-	273	51%
Harlequin duck	5	98%	1 – 9	5	121%	0	-	0	-
Long-tailed duck	16	67%	5 – 27	5	121%	0	-	11	128%
Common merganser	207	34%	136 – 278	108	69%	0	-	99	76%
Red-breasted merganser	251	45%	139 – 363	11	128%	0	-	239	77%
Total ducks	13,988	12%	12,255 – 15,721	3,816	25%	3,862	57%	6,310	21%
Geese									
Black brant	939	19%	759 – 1,120	749	28%	169	90%	21	76%
Cackling Canada goose	6,223	14%	5,332 – 7,115	1,026	33%	109	55%	5,088	21%
Lesser Canada goose	4,018	26%	2,974 – 5,062	1,561	53%	2,073	72%	384	62%
White-fronted goose	6,104	15%	5,189 – 7,020	3,433	29%	1,976	50%	696	49%
Emperor goose	503	38%	313 – 693	103	81%	384	74%	15	100%
Lesser snow goose	18	48%	9 – 26	8	128%	0	-	10	74%
Total geese	17,805	12%	15,604 – 20,006	6,880	25%	4,711	58%	6,214	20%
Swans									
Tundra swan	711	24%	543 – 880	167	30%	109	59%	436	60%
Cranes									
Sandhill crane	832	18%	683 – 982	540	32%	180	80%	113	61%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	142	58%	60 – 223	132	86%	0	-	10	95%
Total grouse	142	58%	60 – 223	132	86%	0	-	10	95%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	382	86%	53 – 712	0	-	0	-	382	128%
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	382	86%	53 – 712	0	-	0	-	382	128%
Shorebirds									
Whimbrel	12	98%	1 – 24	0	-	0	-	12	121%
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	12	98%	1 – 24	0	-	0	-	12	121%
Grebes and loons									
Common loon	10	51%	5 – 15	0	-	4	129%	6	91%
Pacific loon	2	98%	1 – 5	2	121%	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	13	45%	7 – 18	2	121%	4	129%	6	91%
Other/unknown bird	42	78%	9 – 74	0	-	38	143%	4	128%
Total birds	33,927	11%	30,229 – 37,625	11,538	23%	8,903	50%	13,486	20%

Sampling effort (Yukon-Kuskokwim Delta South Coast, 2007): 4 out of 8 villages in this subregion were surveyed; 62% of the sub-region households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 131.–Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, South Coast Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	65	67%	21 – 109	65	97%	0	-	0	-
Green-winged teal	5	98%	1 – 9	5	121%	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	99	51%	49 – 149	58	82%	41	131%	0	-
Shoveler	7	98%	1 – 14	7	121%	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Black scoter	5	98%	1 – 9	5	121%	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	46	86%	6 – 85	46	128%	0	-	0	-
Total ducks	227	40%	137 – 317	186	62%	41	131%	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	300	47%	159 – 441	99	84%	202	102%	0	-
Lesser Canada goose	77	92%	6 – 147	77	113%	0	-	0	-
White-fronted goose	378	38%	236 – 520	304	54%	74	122%	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	754	39%	463 – 1,046	479	63%	275	93%	0	-
Swans									
Tundra swan	93	49%	48 – 139	76	72%	18	131%	0	-
Cranes									
Sandhill crane	51	49%	26 – 76	41	67%	10	131%	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	76	56%	33 – 119	76	81%	0	-	0	-
Kittiwake	2	98%	1 – 5	2	121%	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	360	36%	232 – 488	360	52%	0	-	0	-
Glaucous gull	108	65%	37 – 178	108	95%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	546	40%	330 – 763	546	57%	0	-	0	-
Shorebirds									
Whimbrel	10	98%	1 – 19	10	121%	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	61	77%	14 – 107	61	114%	0	-	0	-
Total shorebirds	70	68%	23 – 118	70	100%	0	-	0	-
Grebes and loons									
Common loon	4	86%	1 – 7	4	128%	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	4	86%	1 – 7	4	128%	0	-	0	-
Total birds	1,746	28%	1,262 – 2,230	1,402	40%	344	1	0	-

Sampling effort (Yukon-Kuskokwim Delta South Coast, 2007): 4 out of 8 villages in this subregion were surveyed; 62% of the sub-region households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 132.–Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	1,392	24%	1,059 – 1,724	0	-	213	44%	1,179	29%
Green-winged teal	82	67%	27 – 137	0	-	55	116%	27	117%
Mallard	1,359	18%	1,120 – 1,598	55	69%	245	42%	1,059	26%
Pintail	5,818	20%	4,673 – 6,963	86	89%	1,689	41%	4,043	23%
Shoveler	655	25%	491 – 819	0	-	202	41%	453	42%
Black scoter	58	85%	8 – 107	0	-	0	-	58	107%
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	1,311	26%	964 – 1,657	0	-	0	-	1,311	33%
Common eider	107	39%	65 – 148	107	53%	0	-	0	-
King eider	3,930	21%	3,094 – 4,766	3,930	24%	0	-	0	-
Spectacled eider	37	75%	9 – 64	37	91%	0	-	0	-
Steller's eider	39	51%	19 – 59	39	71%	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	2,404	25%	1,811 – 2,998	0	-	0	-	2,404	30%
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	17,191	17%	14,299 – 20,083	4,254	23%	2,405	39%	10,532	25%
Geese									
Black brant	3,707	20%	2,951 – 4,462	3,582	23%	0	-	125	81%
Cackling Canada goose	5,574	15%	4,757 – 6,392	2,521	26%	0	-	3,053	24%
Lesser Canada goose	383	36%	245 – 521	251	56%	0	-	132	81%
White-fronted goose	8,674	12%	7,599 – 9,749	5,743	16%	601	45%	2,330	22%
Emperor goose	893	21%	704 – 1,082	893	23%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	19,232	12%	16,841 – 21,623	12,990	16%	601	45%	5,641	22%
Swans									
Tundra swan	90	39%	55 – 125	66	59%	0	-	24	112%
Cranes									
Sandhill crane	321	23%	247 – 396	242	34%	18	85%	61	60%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	2,218	31%	1,536 – 2,901	2,150	36%	0	-	68	123%
Total grouse	2,218	31%	1,536 – 2,901	2,150	36%	0	-	68	123%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	363	77%	85 – 642	363	92%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	363	77%	85 – 642	363	92%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	14	107%	* – 30	14	127%	0	-	0	-
Godwit	4,308	21%	3,389 – 5,227	0	-	883	46%	3,425	25%
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	4,322	21%	3,403 – 5,242	14	127%	883	46%	3,425	25%
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	43,737	13%	37,837 – 49,638	20,079	16%	3,907	40%	19,751	23%

Sampling effort (Yukon-Kuskokwim Delta Mid-Coast, 2007): 5 out of 9 villages in this subregion were surveyed; 37% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI $\geq$ 100%.

Table 133.–Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Mid Coast Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	345	64%	124 – 565	345	89%	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	345	64%	124 – 565	345	89%	0	-	0	-
Geese									
Black brant	834	35%	539 – 1,129	834	47%	0	-	0	-
Cackling Canada goose	2,822	22%	2,190 – 3,454	2,822	30%	0	-	0	-
Lesser Canada goose	259	64%	93 – 424	259	89%	0	-	0	-
White-fronted goose	5,035	22%	3,938 – 6,132	5,035	26%	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	8,949	21%	7,110 – 10,787	8,949	26%	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	21	92%	2 – 40	21	120%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	2,579	46%	1,392 – 3,767	2,579	54%	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	2,579	46%	1,392 – 3,767	2,579	54%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	36	92%	3 – 69	36	118%	0	-	0	-
Total shorebirds	36	92%	3 – 69	36	118%	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	11,930	19%	9,656 – 14,204	11,930	23%	0	-	0	-

Sampling effort (Yukon-Kuskokwim Delta Mid-Coast, 2007): 5 out of 9 villages in this subregion were surveyed; 37% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 134.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	193	47%	103 – 283	0	-	193	64%	0	-
Pintail	220	54%	102 – 338	39	88%	181	103%	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	413	47%	217 – 609	39	88%	374	80%	0	-
Geese									
Black brant	7	118%	* – 16	0	-	7	129%	0	-
Cackling Canada goose	469	44%	260 – 677	361	66%	108	129%	0	-
Lesser Canada goose	226	46%	122 – 330	0	-	190	74%	36	129%
White-fronted goose	39	78%	9 – 69	39	88%	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	30	73%	8 – 52	16	99%	14	129%	0	-
Total geese	771	33%	520 – 1,022	415	60%	320	64%	36	129%
Swans									
Tundra swan	22	72%	6 – 38	12	93%	11	129%	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	1,206	31%	829 – 1,584	466	57%	705	66%	36	129%

Sampling effort (Yukon-Kuskokwim Delta North Coast, 2007): 1 out of 4 villages in this subregion was surveyed; 39% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI $\geq$ 100%.

Table 135.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, North Coast Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	22	118%	* – 47	0	-	22	129%	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	22	118%	* – 47	0	-	22	129%	0	-

Sampling effort (Yukon-Kuskokwim Delta North Coast, 2007): 1 out of 4 villages in this subregion was surveyed; 39% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI $\geq$ 100%.

Table 136.–Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	298	25%	223 – 373	104	53%	98	67%	97	88%
Green-winged teal	5	88%	1 – 10	0	-	0	-	5	140%
Mallard	163	24%	124 – 203	111	54%	22	81%	31	114%
Pintail	122	61%	48 – 196	34	77%	12	142%	77	128%
Shoveler	52	53%	24 – 80	16	134%	0	-	36	106%
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	18	56%	8 – 28	0	-	0	-	18	99%
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	5	88%	1 – 10	0	-	5	139%	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	8	89%	1 – 16	8	134%	0	-	0	-
Long-tailed duck	197	62%	74 – 319	197	125%	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	29	66%	10 – 48	29	98%	0	-	0	-
Total ducks	898	20%	719 – 1,077	498	54%	137	58%	263	52%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	231	59%	94 – 368	54	51%	5	140%	172	95%
Lesser Canada goose	833	23%	646 – 1,021	692	44%	80	64%	62	68%
White-fronted goose	1,360	19%	1,108 – 1,612	568	22%	534	39%	258	42%
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	85	60%	34 – 136	85	87%	0	-	0	-
Total geese	2,509	16%	2,110 – 2,909	1,399	27%	619	35%	492	38%
Swans									
Tundra swan	498	20%	400 – 597	382	32%	20	84%	96	46%
Cranes									
Sandhill crane	77	38%	48 – 106	44	116%	11	100%	22	92%
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Other/unknown bird	5	74%	1 – 9	0	-	0	-	5	137%
Total birds	3,988	15%	3,404 – 4,572	2,323	28%	787	28%	878	39%

Sampling effort (Lower Yukon, 2007): 4 out of 6 villages in this subregion were surveyed; 66% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 137.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Yukon Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	60	80%	12 – 109	60	142%	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	60	80%	12 – 109	60	142%	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	233	50%	116 – 351	233	83%	0	-	0	-
White-fronted goose	188	57%	81 – 296	188	99%	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	422	53%	200 – 644	422	89%	0	-	0	-
Swans									
Tundra swan	83	50%	42 – 124	83	81%	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	565	54%	263 – 868	565	91%	0	-	0	-

Sampling effort (Lower Yukon, 2007): 4 out of 6 villages in this subregion were surveyed; 66% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 138.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	1,622	25%	1,221 – 2,024	490	29%	182	74%	951	62%
Green-winged teal	1,662	17%	1,377 – 1,947	409	41%	557	53%	696	48%
Mallard	3,469	14%	2,990 – 3,947	836	31%	692	58%	1,941	26%
Pintail	2,397	13%	2,078 – 2,716	876	24%	315	67%	1,205	25%
Shoveler	1,547	17%	1,288 – 1,806	524	28%	253	25%	770	38%
Black scoter	7,347	11%	6,572 – 8,122	5,580	15%	1,172	26%	595	35%
Surf scoter	1,276	29%	900 – 1,652	1,172	29%	15	86%	89	94%
White-winged scoter	1,340	19%	1,087 – 1,594	1,074	31%	67	79%	199	50%
Bufflehead	409	32%	280 – 538	117	79%	104	68%	188	100%
Goldeneye	1,049	27%	767 – 1,332	547	43%	48	62%	454	92%
Canvasback	585	22%	454 – 716	397	37%	136	90%	52	75%
Scaup	13,881	9%	12,612 – 15,151	7,052	14%	5,232	16%	1,598	44%
Common eider	6	70%	2 – 11	0	-	0	-	6	136%
King eider	19	70%	6 – 33	0	-	0	-	19	136%
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	50	66%	17 – 82	50	138%	0	-	0	-
Harlequin duck	15	66%	5 – 25	15	97%	0	-	0	-
Long-tailed duck	1,052	26%	783 – 1,321	881	41%	120	77%	51	96%
Common merganser	32	41%	19 – 44	12	138%	0	-	19	99%
Red-breasted merganser	119	36%	77 – 161	66	62%	0	-	54	105%
Total ducks	37,877	7%	35,040 – 40,714	20,098	12%	8,892	17%	8,887	22%
Geese									
Black brant	625	24%	473 – 776	551	39%	0	-	73	74%
Cackling Canada goose	5,200	10%	4,658 – 5,742	4,436	13%	266	84%	497	59%
Lesser Canada goose	3,282	12%	2,903 – 3,661	2,222	19%	243	60%	817	30%
White-fronted goose	5,858	10%	5,255 – 6,462	4,541	14%	121	74%	1,196	38%
Emperor goose	212	44%	118 – 306	20	132%	96	146%	96	146%
Lesser snow goose	13	48%	7 – 19	6	138%	0	-	6	136%
Total geese	15,189	9%	13,885 – 16,492	11,777	11%	726	56%	2,686	26%
Swans									
Tundra swan	1,747	12%	1,534 – 1,959	1,153	17%	142	34%	451	47%
Cranes									
Sandhill crane	1,048	16%	885 – 1,212	706	31%	130	57%	212	68%
Grouse									
Spruce grouse	116	98%	3 – 229	10	132%	0	-	106	149%
Ptarmigan	2,787	20%	2,234 – 3,340	2,411	31%	93	74%	283	140%
Total grouse	2,903	21%	2,285 – 3,521	2,421	31%	93	74%	389	142%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	5	89%	1 – 10	5	132%	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	5	89%	1 – 10	5	132%	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	64	48%	33 – 95	0	-	32	146%	32	146%
Total shorebirds	64	48%	33 – 95	0	-	32	146%	32	146%
Grebes and loons									
Common loon	109	42%	63 – 154	67	63%	7	128%	34	120%
Pacific loon	18	46%	10 – 26	18	71%	0	-	0	-
Red-throated loon	5	89%	1 – 10	5	132%	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	132	35%	85 – 178	90	49%	7	128%	34	120%
Other/unknown bird	19	90%	2 – 36	0	-	0	-	19	144%
Total birds	58,983	7%	54,575 – 63,392	36,250	11%	10,023	17%	12,710	23%

Sampling effort (Lower Kuskokwim, 2007): 9 out of 13 villages in this subregion were surveyed; 61% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 139.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Lower Kuskokwim Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	117	72%	33 – 202	80	139%	37	128%	0	-
Green-winged teal	271	42%	156 – 385	233	75%	37	128%	0	-
Mallard	515	30%	359 – 672	237	70%	278	70%	0	-
Pintail	510	35%	330 – 690	400	62%	110	112%	0	-
Shoveler	185	55%	83 – 287	185	113%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	0%	0	-	0	-
Canvasback	31	66%	10 – 52	31	138%	0	-	0	-
Scaup	354	34%	234 – 475	273	73%	82	128%	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	12	66%	4 – 21	12	138%	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	26	92%	2 – 51	26	126%	0	-	0	-
Common merganser	6	66%	2 – 10	6	138%	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	2,028	20%	1,619 – 2,438	1,485	37%	544	61%	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	254	50%	127 – 380	254	73%	0	-	0	-
Lesser Canada goose	20	92%	2 – 38	20	126%	0	-	0	-
White-fronted goose	139	53%	65 – 213	139	77%	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	412	37%	260 – 565	412	52%	0	-	0	-
Swans									
Tundra swan	287	33%	194 – 381	269	45%	19	128%	0	-
Cranes									
Sandhill crane	96	40%	57 – 135	74	71%	22	92%	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	252	36%	161 – 342	222	67%	30	128%	0	-
Total grouse	252	36%	161 – 342	222	67%	30	128%	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	327	30%	227 – 426	252	59%	74	73%	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	112	81%	21 – 202	0	-	112	128%	0	-
Mew gull	206	49%	104 – 308	132	130%	74	128%	0	-
Glaucous gull	318	62%	122 – 514	132	126%	186	128%	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	962	40%	574 – 1,351	516	63%	446	117%	0	-
Shorebirds									
Whimbrel	105	42%	61 – 150	50	96%	56	103%	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	51	46%	27 – 74	21	91%	30	86%	0	-
Golden plover	110	38%	69 – 152	81	64%	30	128%	0	-
Small shorebird	574	27%	419 – 728	440	49%	134	79%	0	-
Total shorebirds	840	25%	631 – 1,050	591	45%	249	71%	0	-
Grebes and loons									
Common loon	12	66%	4 – 21	12	138%	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	12	66%	4 – 21	12	138%	0	-	0	-
Total birds	4,891	19%	3,947 – 5,835	3,582	30%	1,309	64%	0	-

Sampling effort (Lower Kuskokwim, 2007): 9 out of 13 villages in this subregion were surveyed; 61% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI ≥ 100%.

Table 140.—Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Central Kuskokwim Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	219	79%	46 – 391	0	-	0	-	219	79%
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	219	79%	46 – 391	0	-	0	-	219	79%
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	219	79%	46 – 391	0	-	0	-	219	79%

Sampling effort (Central Kuskokwim, 2007): 2 out of 6 villages in this subregion were surveyed; 32% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 141.–Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Central Kuskokwim Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	0	-	-	0	-	0	-	0	-
King eider	0	-	-	0	-	0	-	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Emperor goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	-
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	0	-	-	0	-	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Auklet	0	-	-	0	-	0	-	0	-
Murre	0	-	-	0	-	0	-	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	0	-	-	0	-	0	-	0	-

Sampling effort (Central Kuskokwim, 2007): 2 out of 6 villages in this subregion were surveyed; 32% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 142.–Estimated harvest of birds, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	a			49	79%	108	97%	a	
Green-winged Teal	a			194	110%	82	90%	a	
Mallard	a			184	114%	19	101%	a	
Pintail	a			118	53%	76	100%	a	
Shoveler	a			49	83%	13	162%	a	
Black Scoter	a			983	39%	19	162%	a	
Surf Scoter	a			82	135%	0	-	a	
White-winged Scoter	a			125	64%	0	-	a	
Bufflehead	a			0	-	0	-	a	
Goldeneye	a			0	-	0	-	a	
Canvasback	a			0	-	0	-	a	
Scaup	a			125	71%	0	-	a	
Common Eider	a			0	-	0	-	a	
King Eider	a			210	195%	0	-	a	
Spectacled Eider	a			0	-	0	-	a	
Steller's Eider	a			0	-	0	-	a	
Harlequin Duck	a			0	-	0	-	a	
Long-tailed Duck	a			7	163%	0	-	a	
Common Merganser	a			0	-	0	-	a	
Red-breasted Merganser	a			0	-	0	-	a	
Total Ducks	a			2,125	36%	317	70%	a	
Geese									
Black Brant	a			0	-	0	-	a	
Cackling Canada Goose	a			411	33%	105	82%	a	
Lesser Canada Goose	a			673	70%	6	162%	a	
White-fronted Goose	a			2,227	60%	209	60%	a	
Emperor Goose	a			0	-	0	-	a	
Lesser Snow Goose	a			0	-	6	162%	a	
Total Geese	a			3,311	53%	327	60%	a	
Swans									
Tundra Swan	a			286	89%	10	121%	a	
Cranes									
Sandhill Crane	a			220	96%	0	-	a	
Grouse									
Spruce Grouse	a			0	-	0	-	a	
Ptarmigan	a			49	163%	0	-	a	
Total Grouse	a			49	163%	0	-	a	
Seabirds									
Cormorant	a			0	-	0	-	a	
Arctic Tern	a			0	-	0	-	a	
Kittiwake	a			0	-	0	-	a	
Sabine's Gull	a			0	-	0	-	a	
Mew Gull	a			0	-	0	-	a	
Glaucous Gull	a			0	-	0	-	a	
Auklet	a			0	-	0	-	a	
Murre	a			0	-	0	-	a	
Guillemot	a			0	-	0	-	a	
Puffin	a			0	-	0	-	a	
Total Seabirds	a			0	-	0	-	a	
Shorebirds									
Whimbrel	a			0	-	0	-	a	
Bristle-thighed Curlew	a			0	-	0	-	a	
Godwit	a			0	-	0	-	a	
Golden Plover	a			0	-	0	-	a	
Small Shorebird	a			0	-	0	-	a	
Total Shorebirds	a			0	-	0	-	a	
Grebes & Loons									
Common Loon	a			3	163%	0	-	a	
Pacific Loon	a			0	-	0	-	a	
Red-throated Loon	a			7	163%	0	-	a	
Yellow-billed Loon	a			0	-	0	-	a	
Total Grebes & Loons	a			10	122%	0	-	a	
Total Birds	a			6,001	42%	653	50%	a	

Sampling effort (Bethel, 2007): 1 out of 1 village in this subregion was surveyed. Harvest expansion assumed that harvesters account for 30% of the village size estimate (total households). ^a Fall harvest data not available.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 143.—Estimated harvest of eggs, Yukon–Kuskokwim Delta Region, Bethel Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	a	
Green-winged Teal	0	-	-	0	-	0	-	a	
Mallard	0	-	-	0	-	0	-	a	
Pintail	0	-	-	0	-	0	-	a	
Shoveler	0	-	-	0	-	0	-	a	
Black Scoter	0	-	-	0	-	0	-	a	
Surf Scoter	0	-	-	0	-	0	-	a	
White-winged Scoter	0	-	-	0	-	0	-	a	
Bufflehead	0	-	-	0	-	0	-	a	
Goldeneye	0	-	-	0	-	0	-	a	
Canvasback	0	-	-	0	-	0	-	a	
Scaup	0	-	-	0	-	0	-	a	
Common Eider	0	-	-	0	-	0	-	a	
King Eider	0	-	-	0	-	0	-	a	
Spectacled Eider	0	-	-	0	-	0	-	a	
Steller's Eider	0	-	-	0	-	0	-	a	
Harlequin Duck	0	-	-	0	-	0	-	a	
Long-tailed Duck	0	-	-	0	-	0	-	a	
Common Merganser	0	-	-	0	-	0	-	a	
Red-breasted Merganser	0	-	-	0	-	0	-	a	
Total Ducks	0	-	-	0	-	0	-	a	
Geese									
Black Brant	0	-	-	0	-	0	-	a	
Cackling Canada Goose	0	-	-	0	-	0	-	a	
Lesser Canada Goose	0	-	-	0	-	0	-	a	
White-fronted Goose	0	-	-	0	-	0	-	a	
Emperor Goose	0	-	-	0	-	0	-	a	
Lesser Snow Goose	0	-	-	0	-	0	-	a	
Total Geese	0	-	-	0	-	0	-	a	
Swans									
Tundra Swan	0	-	-	0	-	0	-	a	
Cranes									
Sandhill Crane	0	-	-	0	-	0	-	a	
Grouse									
Spruce Grouse	0	-	-	0	-	0	-	a	
Ptarmigan	0	-	-	0	-	0	-	a	
Total Grouse	0	-	-	0	-	0	-	a	
Seabirds									
Cormorant	0	-	-	0	-	0	-	a	
Arctic Tern	0	-	-	0	-	0	-	a	
Kittiwake	0	-	-	0	-	0	-	a	
Sabine's Gull	0	-	-	0	-	0	-	a	
Mew Gull	0	-	-	0	-	0	-	a	
Glaucous Gull	0	-	-	0	-	0	-	a	
Auklet	0	-	-	0	-	0	-	a	
Murre	0	-	-	0	-	0	-	a	
Guillemot	0	-	-	0	-	0	-	a	
Puffin	0	-	-	0	-	0	-	a	
Total Seabirds	0	-	-	0	-	0	-	a	
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	a	
Bristle-thighed Curlew	0	-	-	0	-	0	-	a	
Godwit	0	-	-	0	-	0	-	a	
Golden Plover	0	-	-	0	-	0	-	a	
Small Shorebird	0	-	-	0	-	0	-	a	
Total Shorebirds	0	-	-	0	-	0	-	a	
Grebes & Loons									
Common Loon	0	-	-	0	-	0	-	a	
Pacific Loon	0	-	-	0	-	0	-	a	
Red-throated Loon	0	-	-	0	-	0	-	a	
Yellow-billed Loon	0	-	-	0	-	0	-	a	
Total Grebes & Loons	0	-	-	0	-	0	-	a	
Total Birds	0	-	-	0	-	0	-	a	

Sampling effort (Bethel, 2007): 1 out of 1 village in this subregion was surveyed. *Harvest expansion assumed that harvesters account for 30% of the village size estimate (total households).* ^a Fall harvest data not available; egg fall harvest assumed to be zero in annual harvest estimates.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 144.–Estimated harvest of birds, Bering Strait/Norton Sound Region, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	469	36%	299 – 638	295	46%	0	-	174	42%
Green-winged teal	588	44%	329 – 848	325	45%	0	-	263	51%
Mallard	1,892	27%	1,377 – 2,407	883	25%	125	96%	884	46%
Pintail	3,646	19%	2,941 – 4,351	1,891	24%	490	64%	1,264	22%
Shoveler	610	45%	333 – 886	464	51%	48	149%	98	60%
Black scoter	407	144%	* – 992	317	177%	0	-	90	186%
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	35	150%	* – 87	35	150%	0	-	0	-
Scaup	22	133%	* – 51	0	-	0	-	22	133%
Common eider	4,901	17%	4,048 – 5,755	2,009	23%	1,308	28%	1,584	26%
King eider	3,737	24%	2,834 – 4,641	1,951	32%	869	30%	918	30%
Spectacled eider	863	35%	562 – 1,164	376	44%	196	56%	291	62%
Steller's eider	121	186%	* – 345	0	-	0	-	121	186%
Harlequin duck	2,001	47%	1,058 – 2,944	1,228	65%	469	82%	304	92%
Long-tailed duck	801	60%	322 – 1,281	521	54%	8	153%	273	107%
Common merganser	5	152%	* – 13	5	152%	0	-	0	-
Red-breasted merganser	124	88%	15 – 234	12	179%	25	153%	87	118%
Duck (unidentified)	182	127%	* – 413	3	152%	26	132%	153	149%
Total ducks	20,404	14%	17,562 – 23,247	10,314	17%	3,565	25%	6,526	18%
Geese									
Black brant	5,867	32%	4,015 – 7,719	4,263	35%	412	58%	1,192	43%
Cackling Canada goose	2,964	22%	2,312 – 3,615	1,604	26%	18	94%	1,342	33%
Lesser Canada goose	4,130	17%	3,423 – 4,837	2,140	19%	23	106%	1,967	25%
White-fronted goose	897	23%	688 – 1,106	703	27%	11	99%	183	46%
Emperor goose	1,250	34%	826 – 1,673	180	36%	525	45%	545	44%
Lesser snow goose	9,758	16%	8,151 – 11,366	8,284	19%	91	70%	1,383	26%
Total geese	24,865	13%	21,743 – 27,987	17,173	14%	1,080	33%	6,612	17%
Swans									
Tundra swan	1,334	17%	1,108 – 1,560	871	18%	170	53%	293	27%
Cranes									
Sandhill crane	2,674	15%	2,264 – 3,084	1,055	18%	69	48%	1,550	20%
Grouse									
Spruce grouse	78	59%	32 – 124	0	-	0	-	78	59%
Ptarmigan	784	34%	517 – 1,050	434	50%	10	149%	340	46%
Total grouse	861	31%	591 – 1,132	434	50%	10	149%	417	39%
Seabirds									
Cormorant	10,880	20%	8,672 – 13,088	53	138%	348	82%	10,479	21%
Arctic tern	0	-	-	0	-	0	-	0	-
Kittiwake	2,347	56%	1,035 – 3,660	0	-	393	56%	1,954	67%
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	1,276	35%	826 – 1,725	0	-	115	82%	1,161	38%
Auklet	18,553	17%	15,406 – 21,701	16,569	17%	1,926	68%	59	149%
Murre	35,844	17%	29,796 – 41,892	34,128	17%	442	53%	1,274	68%
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	176	118%	* – 383	101	186%	75	120%	0	-
Total seabirds	69,076	14%	59,465 – 78,686	50,850	15%	3,298	47%	14,928	19%
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	2,514	21%	1,991 – 3,036	188	58%	560	54%	1,766	22%
Pacific loon	76	135%	* – 179	10	175%	0	-	66	148%
Red-throated loon	375	64%	135 – 616	10	150%	27	163%	338	71%
Yellow-billed loon	1,077	46%	587 – 1,568	5	102%	362	91%	711	43%
Total grebes and loons	4,042	23%	3,095 – 4,990	212	56%	949	65%	2,881	23%
Total birds	123,257	10%	110,419 – 136,094	80,909	11%	9,140	24%	33,208	12%

Sampling effort (Bering Strait/Norton Sound, 2007): 12 out of 16 villages in this region were surveyed; all 3 subregions were represented in the sample. Bering Strait harvest estimates are presented only at regional level as per request of regional partners.

–: No reported harvest. *: 95% CI $\geq$ 100%.

Table 145.–Estimated harvest of eggs, Bering Strait/Norton Sound Region, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	7	132%	* – 17	7	132%	0	-	0	-
Green-winged teal	7	132%	* – 17	7	132%	0	-	0	-
Mallard	83	139%	* – 197	83	139%	0	-	0	-
Pintail	374	82%	67 – 682	374	82%	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	33	131%	* – 77	33	131%	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Common eider	1,814	39%	1,107 – 2,520	1,667	42%	146	77%	0	-
King eider	374	53%	175 – 573	335	58%	38	112%	0	-
Spectacled eider	0	-	-	0	-	0	-	0	-
Steller's eider	70	131%	* – 162	70	131%	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	31	153%	* – 79	31	153%	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	8	152%	* – 19	8	152%	0	-	0	-
Total ducks	2,801	29%	2,002 – 3,600	2,616	30%	184	65%	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Cackling Canada goose	10	152%	* – 25	10	152%	0	-	0	-
Lesser Canada goose	330	61%	128 – 533	310	64%	20	181%	0	-
White-fronted goose	47	97%	2 – 92	47	97%	0	-	0	-
Emperor goose	28	91%	3 – 53	5	153%	23	107%	0	-
Lesser snow goose	48	123%	* – 106	48	123%	0	-	0	-
Total geese	462	49%	237 – 688	419	53%	43	102%	0	-
Swans									
Tundra swan	411	44%	231 – 590	372	47%	39	116%	0	-
Cranes									
Sandhill crane	345	42%	201 – 489	345	42%	0	-	0	-
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	-
Ptarmigan	164	119%	* – 359	135	149%	29	149%	0	-
Total grouse	164	119%	* – 359	135	149%	29	149%	0	-
Seabirds									
Cormorant	13	88%	2 – 23	0	-	13	88%	0	-
Arctic tern	404	59%	164 – 645	404	59%	0	-	0	-
Kittiwake	555	90%	56 – 1,055	555	90%	0	-	0	-
Sabine's gull	0	-	-	0	-	0	-	0	-
Mew gull	3,557	36%	2,282 – 4,832	3,418	37%	139	174%	0	-
Glaucous gull	3,843	28%	2,782 – 4,904	3,507	29%	336	77%	0	-
Auklet	490	62%	185 – 795	0	-	490	62%	0	-
Murre	131,453	14%	113,219 – 149,688	120,755	15%	10,698	37%	0	-
Guillemot	0	-	-	0	-	0	-	0	-
Puffin	508	48%	264 – 752	70	131%	438	52%	0	-
Total seabirds	140,823	13%	122,430 – 159,216	128,710	14%	12,113	35%	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Bristle-thighed curlew	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	124	153%	* – 315	124	153%	0	-	0	-
Small shorebird	1,244	85%	184 – 2,304	1,244	85%	0	-	0	-
Total shorebirds	1,368	81%	265 – 2,472	1,368	81%	0	-	0	-
Grebes and loons									
Common loon	153	77%	34 – 271	153	77%	0	-	0	-
Pacific loon	31	149%	* – 76	31	149%	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Yellow-billed loon	0	-	-	0	-	0	-	0	-
Total grebes and loons	183	69%	57 – 310	183	69%	0	-	0	-
Total birds	146,557	13%	128,014 – 165,100	134,149	13%	12,408	34%	0	-

Sampling effort (Bering Strait/Norton Sound, 2007): 12 out of 16 villages in this region were surveyed; all 3 subregions were represented in the sample. Bering Strait harvest estimates are presented only at regional level as per request of regional partners.

-: No reported harvest. *: 95% CI ≥ 100%.

Table 146.—Estimated harvest of birds, North Slope Region, 2007.



Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	a	
Green-winged teal	0	-	-	0	-	0	-	a	
Mallard	16	175%	* – 43	0	-	16	176%	a	
Pintail	112	148%	* – 278	41	176%	71	134%	a	
Shoveler	0	-	-	0	-	0	-	a	
Black scoter	17	122%	* – 38	17	122%	0	-	a	
Surf scoter	0	-	-	0	-	0	-	a	
White-winged scoter	5	175%	* – 14	0	-	5	176%	a	
Bufflehead	0	-	-	0	-	0	-	a	
Goldeneye	0	-	-	0	-	0	-	a	
Canvasback	0	-	-	0	-	0	-	a	
Scaup	89	111%	* – 188	0	-	89	111%	a	
Common eider	2,572	29%	1,830 – 3,315	1,134	39%	1,439	36%	a	
King eider	15,231	32%	10,318 – 20,144	4,356	29%	10,875	41%	a	
Spectacled eider	99	79%	21 – 178	5	176%	94	84%	a	
Steller's eider	36	135%	* – 85	26	176%	10	176%	a	
Harlequin duck	0	-	-	0	-	0	-	a	
Long-tailed duck	271	67%	89 – 453	98	107%	173	87%	a	
Common merganser	0	-	-	0	-	0	-	a	
Red-breasted merganser	0	-	-	0	-	0	-	a	
Total ducks	18,449	29%	13,183 – 23,715	5,677	25%	12,772	37%	a	
Geese									
Black brant	2,704	46%	1,472 – 3,936	1,575	46%	1,129	60%	a	
Cackling Canada goose	324	58%	136 – 511	324	59%	0	-	a	
Lesser Canada goose	250	40%	149 – 351	250	40%	0	-	a	
White-fronted goose	18,355	25%	13,791 – 22,919	17,191	25%	1,164	69%	a	
Emperor goose	5	176%	* – 14	5	176%	0	-	a	
Lesser snow goose	429	45%	234 – 624	429	45%	0	-	a	
Total geese	22,066	24%	16,708 – 27,424	19,773	24%	2,293	51%	a	
Swans									
Tundra swan	73	83%	12 – 133	73	83%	0	-	a	
Cranes									
Sandhill crane	5	176%	* – 14	5	176%	0	-	a	
Grouse									
Spruce grouse	0	-	-	0	-	0	-	a	
Ptarmigan	2,833	31%	1,968 – 3,697	2,597	30%	235	107%	a	
Total grouse	2,833	31%	1,968 – 3,697	2,597	30%	235	107%	a	
Seabirds									
Cormorant	0	-	-	0	-	0	-	a	
Arctic tern	0	-	-	0	-	0	-	a	
Kittiwake	0	-	-	0	-	0	-	a	
Sabine's gull	0	-	-	0	-	0	-	a	
Mew gull	0	-	-	0	-	0	-	a	
Glaucous gull	178	77%	41 – 314	16	176%	162	84%	a	
Auklet	0	-	-	0	-	0	-	a	
Murre	0	-	-	0	-	0	-	a	
Guillemot	0	-	-	0	-	0	-	a	
Puffin	5	175%	* – 14	0	-	5	176%	a	
Total seabirds	183	76%	44 – 322	16	176%	167	83%	a	
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	a	
Bristle-thighed curlew	0	-	-	0	-	0	-	a	
Godwit	0	-	-	0	-	0	-	a	
Golden plover	9	122%	* – 19	9	122%	0	-	a	
Small shorebird	496	131%	* – 1,145	52	176%	444	127%	a	
Total shorebirds	505	129%	* – 1,154	60	152%	444	127%	a	
Grebes and loons									
Common loon	0	-	-	0	-	0	-	a	
Pacific loon	31	130%	* – 72	0	-	31	131%	a	
Red-throated loon	10	123%	* – 23	0	-	10	124%	a	
Yellow-billed loon ^b	84	87%	16 – 156	10	176%	73	97%	a	
Total grebes and loons	125	78%	27 – 224	10	176%	115	85%	a	
Other/unknown bird	31	148%	* – 78	5	176%	26	176%	a	
Total birds	44,270	23%	34,218 – 54,322	28,217	22%	16,053	36%	a	

Sampling effort (North Slope, 2007). ^aThere is no fall survey in the North Slope Region. 5 out of 8 villages in this region were surveyed; 2 out of 2 subregions were represented in the sample. Harvest estimates presented only at regional level as per request of regional partners. Barrow subregion estimates assumed Simple Random Sampling. -: No reported harvest. *: 95% CI ≥ 100%.

^bIn the North Slope Region, loons occasionally entangle in subsistence fishing nets. Entangled Yellow-billed loons salvaged from fishing nets are used for ceremonial purposes and were reported as "harvested" in this survey. Non-standard survey methods likely resulted in overestimation of harvest. Reported numbers of Yellow-billed loons for the region were 16 birds in 2007.

Table 147.—Estimated harvest of eggs, North Slope Region, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	0
Green-winged teal	0	-	-	0	-	0	-	0	0
Mallard	19	135%	* – 45	19	135%	0	-	0	0
Pintail	0	-	-	0	-	0	-	0	0
Shoveler	0	-	-	0	-	0	-	0	0
Black scoter	0	-	-	0	-	0	-	0	0
Surf scoter	0	-	-	0	-	0	-	0	0
White-winged scoter	0	-	-	0	-	0	-	0	0
Bufflehead	0	-	-	0	-	0	-	0	0
Goldeneye	0	-	-	0	-	0	-	0	0
Canvasback	0	-	-	0	-	0	-	0	0
Scaup	0	-	-	0	-	0	-	0	0
Common eider	154	122%	* – 342	154	122%	0	-	0	0
King eider	64	125%	* – 145	64	125%	0	-	0	0
Spectacled eider	0	-	-	0	-	0	-	0	0
Steller's eider	0	-	-	0	-	0	-	0	0
Harlequin duck	0	-	-	0	-	0	-	0	0
Long-tailed duck	0	-	-	0	-	0	-	0	0
Common merganser	0	-	-	0	-	0	-	0	0
Red-breasted merganser	0	-	-	0	-	0	-	0	0
Duck (unidentified)	157	175%	* – 431	0	-	157	176%	0	0
Total ducks	394	87%	52 – 737	237	87%	157	176%	0	0
Geese									
Black brant	0	-	-	0	-	0	-	0	0
Cackling Canada goose	0	-	-	0	-	0	-	0	0
Lesser Canada goose	0	-	-	0	-	0	-	0	0
White-fronted goose	370	109%	* – 775	370	109%	0	-	0	0
Emperor goose	0	-	-	0	-	0	-	0	0
Lesser snow goose	0	-	-	0	-	0	-	0	0
Total geese	370	109%	* – 775	370	109%	0	-	0	0
Swans									
Tundra swan	19	111%	* – 40	19	111%	0	-	0	0
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	0
Grouse									
Spruce grouse	0	-	-	0	-	0	-	0	0
Ptarmigan	0	-	-	0	-	0	-	0	0
Total grouse	0	-	-	0	-	0	-	0	0
Seabirds									
Cormorant	0	-	-	0	-	0	-	0	0
Arctic tern	0	-	-	0	-	0	-	0	0
Kittiwake	0	-	-	0	-	0	-	0	0
Sabine's gull	0	-	-	0	-	0	-	0	0
Mew gull	0	-	-	0	-	0	-	0	0
Glaucous gull	0	-	-	0	-	0	-	0	0
Auklet	0	-	-	0	-	0	-	0	0
Murre	1,569	175%	* – 4,307	0	-	1,569	176%	0	0
Guillemot	0	-	-	0	-	0	-	0	0
Puffin	0	-	-	0	-	0	-	0	0
Total seabirds	1,569	175%	* – 4,307	0	-	1,569	176%	0	0
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	0
Bristle-thighed curlew	0	-	-	0	-	0	-	0	0
Godwit	0	-	-	0	-	0	-	0	0
Golden plover	0	-	-	0	-	0	-	0	0
Small shorebird	16	175%	* – 43	0	-	16	176%	0	0
Total shorebirds	16	175%	* – 43	0	-	16	176%	0	0
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	0
Pacific loon	0	-	-	0	-	0	-	0	0
Red-throated loon	0	-	-	0	-	0	-	0	0
Yellow-billed loon	0	-	-	0	-	0	-	0	0
Total grebes and loons	0	-	-	0	-	0	-	0	0
Other/unknown bird	21	176%	* – 57	21	176%	0	-	0	0
Total birds	2,388	117%	* – 5,189	647	81%	1,741	160%	0	0

Sampling effort (North Slope, 2007): 5 out of 8 villages in this region were surveyed; all 2 subregions were represented in the sample. Harvest estimates presented only at regional level as per request of regional partners. *There is no fall survey in the North Slope Region. Barrow subregion estimates assumed Simple Random Sampling.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 148.—Estimated harvest of birds, Interior Alaska Region, Yukon/Koyukuk Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	343	128%	* – 781	332	127%	0	-	11	181%
Green-winged teal	100	119%	* – 218	100	114%	0	-	0	-
Mallard	498	64%	178 – 818	420	64%	0	-	77	91%
Pintail	376	118%	* – 819	354	120%	0	-	22	181%
Shoveler	133	116%	* – 287	133	112%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	55	184%	* – 157	55	181%	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	243	86%	35 – 452	188	97%	0	-	55	119%
Scaup	210	83%	35 – 385	144	95%	0	-	66	134%
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	266	79%	56 – 475	266	71%	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	11	184%	* – 31	0	-	0	-	11	181%
Total ducks	2,235	74%	574 – 3,895	1,991	74%	0	-	243	93%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	387	73%	104 – 670	277	83%	0	-	111	104%
White-fronted goose	409	70%	122 – 697	409	61%	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	797	68%	258 – 1,336	686	67%	0	-	111	104%
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	3,031	72%	856 – 5,206	2,677	72%	0	-	354	84%

Sampling effort (Yukon-Kouyuk, 2007): 2 out of 12 villages in this subregion were surveyed; 9% of the subregion households were represented in the sample.

—: No reported harvest. *: 95% CI $\geq$ 100%.

Table 149.–Estimated harvest of eggs, Interior Alaska Region, Yukon/Koyukuk Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	0	-	-	0	-	0	-	0	-

Sampling effort (Yukon-Koyukuk, 2007): 2 out of 12 villages in this subregion were surveyed; 9% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI $\geq$ 100%.

Table 150.—Estimated harvest of birds, Interior Alaska Region, Upper Yukon Subregion, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	800	27%	586 – 1,014	513	59%	0	-	286	61%
Green-winged teal	76	68%	25 – 128	0	-	0	-	76	113%
Mallard	1,023	18%	835 – 1,211	504	44%	0	-	519	39%
Pintail	455	37%	287 – 623	367	74%	0	-	88	76%
Shoveler	34	89%	4 – 65	0	-	0	-	34	149%
Black scoter	6	89%	1 – 11	6	149%	0	-	0	-
Surf scoter	69	82%	13 – 124	69	136%	0	-	0	-
White-winged scoter	5,331	29%	3,786 – 6,875	3,951	44%	0	-	1,379	123%
Bufflehead	28	63%	10 – 45	28	106%	0	-	0	-
Goldeneye	100	39%	61 – 138	11	99%	0	-	89	64%
Canvasback	45	54%	20 – 69	45	88%	0	-	0	-
Scaup	145	55%	65 – 224	123	106%	0	-	22	148%
Harlequin duck	0	-	–	0	-	0	-	0	-
Long-tailed duck	428	39%	259 – 597	291	72%	0	-	137	125%
Common merganser	0	-	–	0	-	0	-	0	-
Red-breasted merganser	37	54%	17 – 57	25	106%	0	-	11	149%
Duck (unidentified)	163	88%	20 – 307	0	-	0	-	163	148%
Total ducks	8,738	23%	6,715 – 10,762	5,933	41%	0	-	2,806	74%
Geese									
Black brant	0	-	–	0	-	0	-	0	-
Lesser Canada goose	693	18%	569 – 817	638	28%	0	-	54	103%
White-fronted goose	8,491	14%	7,330 – 9,652	8,299	18%	0	-	192	63%
Lesser snow goose	403	28%	290 – 516	392	46%	0	-	11	148%
Total geese	9,587	13%	8,334 – 10,839	9,330	17%	0	-	257	54%
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	3	101%	* – 5	3	101%	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	46	89%	5 – 86	46	149%	0	-	0	-
Total grouse	46	89%	5 – 86	46	149%	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	11	89%	1 – 22	11	149%	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	11	89%	1 – 22	11	149%	0	-	0	-
Grebes and loons									
Common loon	6	89%	1 – 11	6	149%	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	6	89%	1 – 11	6	149%	0	-	0	-
Other/unknown bird	11	89%	1 – 22	11	149%	0	-	0	-
Total birds	18,402	14%	15,800 – 21,004	15,339	20%	0	-	3,063	69%

Sampling effort (Upper Yukon, 2007): 6 out of 10 villages in this subregion were surveyed; 74% of the subregion households were represented in the sample.

-: No reported harvest. *: 95% CI $\geq$ 100%.

Table 151.–Estimated harvest of eggs, Interior Alaska Region, Upper Yukon Subregion, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	0	-	-	0	-	0	-	0	-

Sampling effort (Upper Yukon, 2007): 6 out of 10 villages in this subregion were surveyed; 74% of the subregion households were represented in the sample.

–: No reported harvest. *: 95% CI $\geq$ 100%.

Table 152.—Estimated harvest of birds, Upper Copper River Region, 2007.

Species	Annual estimated bird harvest			Estimated bird harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	95	38%	59 – 132	89	58%	0	-	6	92%
Pintail	18	52%	9 – 27	14	61%	0	-	4	92%
Shoveler	3	93%	1 – 5	3	92%	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	12	69%	4 – 20	8	92%	0	-	4	92%
Canvasback	30	46%	16 – 43	30	66%	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Duck (unidentified)	10	65%	4 – 17	5	92%	5	92%	0	-
Total ducks	168	35%	109 – 226	148	48%	5	92%	14	92%
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	13	55%	6 – 20	3	92%	0	-	10	89%
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	13	55%	6 – 20	3	92%	0	-	10	89%
Swans									
Tundra swan	3	93%	1 – 5	3	92%	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	64	57%	28 – 101	0	-	0	-	64	78%
Total grouse	64	57%	28 – 101	0	-	0	-	64	78%
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	247	30%	174 – 321	153	47%	5	92%	89	65%

Sampling effort (Upper Copper River, 2007): 6 out of 8 villages in this region were surveyed; sampling and expansion represent Alaska Native households only.

–: No reported harvest. *: 95% CI ≥ 100%.

Table 153.—Estimated harvest of eggs, Upper Copper River Region, 2007.

Species	Annual estimated egg harvest			Estimated egg harvest by season					
	Number	Confidence Interval		Spring		Summer		Fall	
		95% CI	Low – High	Number	95% CI	Number	95% CI	Number	95% CI
Ducks									
Wigeon	0	-	-	0	-	0	-	0	-
Green-winged teal	0	-	-	0	-	0	-	0	-
Mallard	0	-	-	0	-	0	-	0	-
Pintail	0	-	-	0	-	0	-	0	-
Shoveler	0	-	-	0	-	0	-	0	-
Black scoter	0	-	-	0	-	0	-	0	-
Surf scoter	0	-	-	0	-	0	-	0	-
White-winged scoter	0	-	-	0	-	0	-	0	-
Bufflehead	0	-	-	0	-	0	-	0	-
Goldeneye	0	-	-	0	-	0	-	0	-
Canvasback	0	-	-	0	-	0	-	0	-
Scaup	0	-	-	0	-	0	-	0	-
Harlequin duck	0	-	-	0	-	0	-	0	-
Long-tailed duck	0	-	-	0	-	0	-	0	-
Common merganser	0	-	-	0	-	0	-	0	-
Red-breasted merganser	0	-	-	0	-	0	-	0	-
Total ducks	0	-	-	0	-	0	-	0	-
Geese									
Black brant	0	-	-	0	-	0	-	0	-
Lesser Canada goose	0	-	-	0	-	0	-	0	-
White-fronted goose	0	-	-	0	-	0	-	0	-
Lesser snow goose	0	-	-	0	-	0	-	0	-
Total geese	0	-	-	0	-	0	-	0	-
Swans									
Tundra swan	0	-	-	0	-	0	-	0	-
Cranes									
Sandhill crane	0	-	-	0	-	0	-	0	-
Grouse									
Grouse (unidentified)	0	-	-	0	-	0	-	0	-
Ptarmigan	0	-	-	0	-	0	-	0	-
Total grouse	0	-	-	0	-	0	-	0	-
Seabirds									
Arctic tern	0	-	-	0	-	0	-	0	-
Mew gull	0	-	-	0	-	0	-	0	-
Glaucous gull	0	-	-	0	-	0	-	0	-
Herring gull	0	-	-	0	-	0	-	0	-
Total seabirds	0	-	-	0	-	0	-	0	-
Shorebirds									
Whimbrel	0	-	-	0	-	0	-	0	-
Godwit	0	-	-	0	-	0	-	0	-
Golden plover	0	-	-	0	-	0	-	0	-
Small shorebird	0	-	-	0	-	0	-	0	-
Total shorebirds	0	-	-	0	-	0	-	0	-
Grebes and loons									
Common loon	0	-	-	0	-	0	-	0	-
Pacific loon	0	-	-	0	-	0	-	0	-
Red-throated loon	0	-	-	0	-	0	-	0	-
Red-necked grebe	0	-	-	0	-	0	-	0	-
Total grebes and loons	0	-	-	0	-	0	-	0	-
Total birds	0	-	-	0	-	0	-	0	-

Sampling effort (Upper Copper River, 2007): 6 out of 8 villages in this region were surveyed; sampling and expansion represent Alaska Native households only.

—: No reported harvest. *: 95% CI $\geq$ 100%.

HOUSEHOLD PARTICIPATION RATES 2004–2007

Table 154.–Household participation rates, 2004–2007.

Region Sub-Region	2004		2005		2006		2007	
	Household Participation Rate	Number of Households*	Household Participation Rate	Number of Households*	Household Participation Rate	Number of Households*	Household Participation Rate	Number of Households*
Gulf of Alaska/Cook Inlet	97%	32	-	-	-	-	-	-
Chugack	100%	18	-	-	79%	24	-	-
Cook Inlet	93%	14	71%	17	-	-	-	-
Kodiak Archipelago	-	-	-	-	72%	233	-	-
Kodiak Villages	100%	65	-	-	75%	169	-	-
Kodiak City & Road Connected	-	-	-	-	64%	64	-	-
Aleutian/Pribilof Islands	-	-	-	-	-	-	-	-
Aleutian/Pribilof Villages	-	-	97%	38	-	-	100%	25
Unalaska	-	-	-	-	-	-	-	-
Bristol Bay	-	-	-	-	-	-	89%	354
South Alaska Peninsula	-	-	-	-	-	-	93%	29
Southwest Bristol Bay	-	-	-	-	-	-	85%	214
Dillingham	-	-	-	-	-	-	97%	111
Yukon-Kuskokwim Delta	-	-	-	-	-	-	-	-
Y-K Delta South Coast	-	-	-	-	78%	90	86%	283
Y-K Delta Mid-Coast	-	-	-	-	81%	156	54%	257
Y-K Delta North Coast	-	-	-	-	56%	107	44%	255
Lower Yukon	-	-	-	-	84%	56	60%	211
Lower Kuskokwim	-	-	-	-	63%	294	60%	602
Central Kuskokwim	-	-	-	-	74%	73	-	-
Bethel	-	-	-	-	-	-	-	-
Bering Strait/Norton Sound	71%	525	80%	354	-	-	90%	436
St. Lawrence/Diomedes Is.	75%	109	87%	75	-	-	95%	86
Bering Strait Mainland Villages	85%	206	78%	143	-	-	93%	159
Nome	57%	210	77%	136	-	-	86%	191
Northwest Arctic	-	-	-	-	-	-	-	-
Northwest Arctic Villages	-	-	-	-	86%	242	-	-
Kotzebue	-	-	-	-	-	-	-	-
North Slope	-	-	91%	600	-	-	-	-
North Slope Villages	-	-	87%	394	-	-	-	-
Barrow	-	-	98%	206	-	-	-	-
Interior	-	-	-	-	-	-	-	-
Mid-Yukon/Upper Kuskokwim	-	-	-	-	-	-	-	-
Yukon/Koyukuk	100%	18	-	-	90%	83	100%	50
Upper Yukon	-	-	-	-	95%	246	100%	147
Tanana Villages	99%	100	-	-	99%	123	-	-
Tok	-	-	-	-	100%	60	-	-
Upper Copper River	96%	57	-	-	-	-	84%	38

Household Participation Rate = Number of households that agreed to participate / Total number of households for which permission slips are available.

*: Number of households for which permission slips are available (may not represent the total number of households surveyed).

-: Information not available (region/subregion not surveyed or permission slips not available for data management and analysis).

ACKNOWLEDGEMENTS

This harvest assessment program would not be possible without the strong local support of the villages where the surveys are conducted. The AMBCC and the ADF&G Division of Subsistence are most grateful to the hundreds of households that volunteer to report their subsistence harvests of migratory birds to locally hired surveyors and to the village and tribal councils that facilitate village participation in the survey. The AMBCC and the ADF&G Division of Subsistence are very thankful for the collaboration of the many Alaska Native organizations and national wildlife refuges that coordinate data collection regionally. We thank Terri Lemons, ADF&G Division of Subsistence, for preparing the maps presented in this report. We thank Dave Koster and the ADF&G Division of Subsistence Information Management Unit for providing continuous support with data entry, management, and analysis. We also thank Lisa Olson and Garrett Zimpelman, ADF&G Division of Subsistence, for their great assistance as editors of this report.

REFERENCES CITED

- ADLWD (Alaska Department of Labor and Workforce Development). 2009. Alaska population estimates State of Alaska Department of Labor and Workforce Development., Juneau. <http://laborstats.alaska.gov/?PAGEID=67&SUBID=171>
- Ainley, D.G., D.N. Nettleship, H.R. Carter, and A.E. Storey. 2002. Common murre (*Uria aalge*). In A. Poole, editor. The birds of North America online. Cornell Lab of Ornithology: Ithaca, NY.
- Alaska Shorebird Group. 2008. Alaska shorebird conservation plan. Version II. Alaska Shorebird Group: Anchorage, AK.
- AMBCC (Alaska Migratory Bird Co-Management Council). 2003. Recommendations for a statewide Alaska migratory bird subsistence harvest survey. Submitted to the Alaska Migratory Bird Co-Management Council by the Subsistence Harvest Survey Ad-hoc Committee. Alaska Migratory Bird Co-Management Council, Anchorage.
- Austin, J.E., and M.R. Miller. 1995. Northern pintail (*Anas acuta*). In A. Poole, editor. The birds of North America online. Cornell Lab of Ornithology: Ithaca, NY.
- Bernard, D.R., A.E. Bingham, and M. Alexandersdottir. 1998. The mechanics of onsite creel surveys in Alaska. Alaska Department of Fish and Game Special Publication No. 98-1, Anchorage. <http://www.sf.adfg.state.ak.us/FedAidPDFs/sp98-01.pdf>
- Bowman, T. 2008. Field guide to bird nests and eggs of Alaska's coastal tundra. 2nd edition. University of Alaska Press: Fairbanks, AK.
- Cochran, W.G. 1977. Sampling techniques. 3rd edition. John Wiley & Sons: New York, NY.
- Denlinger, L.M. [2006]. Alaska seabird information series. Unpublished report. U.S. Fish and Wildlife Service, Migratory Birds Management, Nongame Program: Anchorage, AK.
- Drilling, N., R. Titman, and F. Mckinney. 2002. Mallard (*Anas platyrhynchos*). In A. Poole, editor. The birds of North America online. Cornell Lab of Ornithology: Ithaca, NY.
- Gilchrist, H.G. 2001. Glaucous gull (*Larus hyperboreus*). In A. Poole, editor. The birds of North America online. Cornell Lab of Ornithology: Ithaca, NY.
- Hatch, J.J. 2002. Arctic tern (*Sterna paradisaea*). In A. Poole, editor. The birds of North America online. Cornell Lab of Ornithology: Ithaca, NY.
- Hayward, J.L., and N.A. Verbeek. 2008. Glaucous-winged gull (*Larus glaucescens*). In A. Poole, editor. The birds of North America online. Cornell Lab of Ornithology: Ithaca, NY.
- Johnson J.A., R.B. Lanctot, B.A. Andres, J.R. Bart, S.C. Brown, S.J. Kendall, and D.C. Payer. 2007. Distribution of breeding shorebirds in the Arctic coastal plain of Alaska. Arctic 60:277–293.
- Johnson, S.R., and D.R. Herter. 1989. The birds of the Beaufort Sea. British Petroleum Exploration (Alaska) Inc.: Anchorage, AK.
- Kawerak Inc. 2004. 2002 migratory bird harvest data collection project; Bering Strait/Norton Sound region. Kawerak Natural Resources Department, Subsistence Resources Division, Nome.
- Moskoff, W., and L.R. Bevier. 2002. Mew gull (*Larus canus*). In A. Poole, editor. The birds of North America online. Cornell Lab of Ornithology: Ithaca, NY.
- National Geographic Society. 1999. Field guide to the birds of North America. National Geographic Society: Washington, D.C.
- Naves, L.C., D. Koster, M.G. See, B. Easley, and L. Olson. 2008. Alaska Migratory Birds Co-Management Council migratory bird subsistence harvest survey: assessment of the survey methods and implementation. Alaska Department of Fish and Game Division of Subsistence, Special Publication No. 2008-05, Anchorage.

REFERENCES CITED *continued...*

- Pamplin, W.L. Jr. 1986. Cooperative efforts to halt population declines of geese nesting on Alaska's Yukon-Kuskokwim Delta. Transactions of the North American Wildlife & Natural Resources Conference 51:487–506.
- Pierotti, R.J., and T.P. Good. 1994. Herring gull (*Larus argentatus*). In A. Poole, editor. The birds of North America online. Cornell Lab of Ornithology: Ithaca, NY.
- Reynolds, J.H. 2007. Investigating the impact of sampling effort on annual migratory bird subsistence harvest survey estimates. Final report for USFWS MBM Order No. 701812M816. Solutions Statistical Consulting, Anchorage.
- Seim, S.G., and C. Wentworth. 1996. Subsistence migratory bird harvest survey: Bristol Bay, 1995. U.S. Fish and Wildlife Service in cooperation with the Bristol Bay Native Association and the Alaska Peninsula-Becharof National Wildlife Refuge, Anchorage.
- Sea Duck Joint Venture. 2003–2005. Sea Duck Information Series. Sea Duck Joint Venture, <http://www.seaduckjv.org/infoseries/toc.html>.
- U.S. Census Bureau. 2001. Profiles of general demographic characteristics, Alaska: 2000. U.S. Department of Commerce: Washington, D.C.
- Wentworth, C. 1998. Subsistence waterfowl harvest survey: Yukon-Kuskokwim Delta: comprehensive report 1987–1997. U.S. Fish and Wildlife Service Migratory Bird Management in cooperation with the Yukon Delta National Wildlife Refuge, Anchorage.
- Wentworth, C. 2004. Subsistence migratory bird harvest survey: Yukon-Kuskokwim delta, 1995–2000. U. S. Fish and Wildlife Service Migratory Birds and State Programs, in cooperation with the Yukon Delta National Wildlife Refuge, Anchorage.
- Wentworth, C. 2006. Subsistence migratory bird harvest survey handbook 2007: subsistence migratory bird harvest survey handbook for refuge information technicians and survey contractors. Alaska Migratory Bird Co-Management Council: Anchorage, AK.
- Wentworth, C. 2007a. Subsistence migratory bird harvest survey: Bristol Bay: 2001–2005, with 1995–2005 species tables. U.S. Fish and Wildlife Service Migratory Birds and State Programs in cooperation with Togiak National Wildlife Refuge and Bristol Bay Native Association, Anchorage. http://alaska.fws.gov/ambcc/ambcc/Harvest/BristolBay_070730.pdf
- Wentworth, C. 2007b. Subsistence migratory bird harvest survey: Yukon-Kuskokwim Delta: 2001–2005 with 1985–2005 species tables. U.S. Fish and Wildlife Service Migratory Birds and State Programs, in cooperation with Yukon Delta National Wildlife Refuge, Anchorage. http://alaska.fws.gov/ambcc/ambcc/Harvest/YKD_070730.pdf
- Wentworth, C., and S.G. Seim. 1996. Subsistence waterfowl harvest survey: Yukon-Kuskokwim Delta: comprehensive report 1985–1995; results 1995. U.S. Fish and Wildlife Service Migratory Bird Management in cooperation with the Yukon Delta National Wildlife Refuge, Anchorage.
- Westat Inc. 1989. Investigation of possible recall/reference period bias in national surveys of fishing, hunting and wildlife-association recreation: final report. U.S. Fish and Wildlife Service and Westat, Inc.: Rockville, MD.
- Zavaleta, E. 1999. The emergence of waterfowl conservation among Yup'ik hunters in the Yukon-Kuskokwim Delta, Alaska. Human Ecology 27(2):231–266.

APPENDICES

Appendix A.—Regions, subregions, and communities surveyed from 2004–2007.

Region	2004	2005	2006	2007
<i>Subregion</i>				
<i>Village</i>				
Gulf of Alaska/Cook Inlet				
<i>Gulf of Alaska</i>				
Chenega Bay	-	-	x	-
Nanwalek	x	-	-	-
Port Graham	x	-	x	-
Tatitlek	x	-	-	-
<i>Cook Inlet</i>				
Tyonek	x	x	-	-
Kodiak Archipelago				
<i>Kodiak Villages</i>				
Akhiok	-	-	x	-
Karluk	-	-	x	-
Larsen Bay	-	-	x	-
Old Harbor	-	-	x	-
Ouzinkie	-	-	x	-
Port Lions	-	-	-	-
<i>Kodiak City and Road-connected</i>				
Kodiak City	-	-	x	-
Kodiak Station	-	-	-	-
Chiniak	-	-	-	-
Women's Bay	-	-	-	-
Kodiak at large	-	-	-	-
Aleneva	-	-	-	-
Aleutian/Pribilof Islands				
<i>Aleutian/Pribilof Villages</i>				
Adak Station	-	-	-	-
Akutan	-	x	-	x
Atka	-	x	-	-
Cold Bay	-	x	-	-
False Pass	-	-	-	-
King Cove	-	x	-	-
Nelson Lagoon	-	-	-	-
Nikolski	-	-	-	-
Sand Point	-	-	-	-
Saint George Island	-	-	-	-
Saint Paul Island	-	-	-	-
<i>Unalaska</i>				
Unalaska	-	-	-	-
Bristol Bay				
<i>South Alaska Peninsula</i>				
Chignik Bay	x	-	-	x
Chignik Lagoon	x	-	-	-
Chignik Lake	x	-	-	-
Ivanof Bay	-	-	-	-
Perryville	x	-	-	x
<i>Southwest Bristol Bay</i>				
Aleknagik	x	-	-	x
Clark's Point	x	x	-	x

-continued-

Appendix A. Page 2 of 5.

Region					
	Subregion	2004	2005	2006	2007
	Village				
	Egegik	-	X	-	X
	Ekwok	X	-	-	X
	Igiugig	-	-	-	-
	Iliamna	-	X	-	X
	King Salmon	-	X	-	-
	Kokhanok	X	X	-	X
	Koliganek	-	X	-	X
	Levelock	X	X	-	-
	Manokotak	-	X	-	X
	Naknek	X	-	-	X
	New Stuyahok	-	X	-	X
	Newhalen	X	X	-	-
	Nondalton	X	X	-	-
	Pedro Bay	-	X	-	-
	Pilot Point	-	X	-	-
	Port Heiden	-	X	-	-
	South Naknek	-	X	-	X
	Togiak	X	-	X	X
	Twin Hills	X	X	-	X
	Dillingham				
	Dillingham	-	X	-	X
Yukon–Kuskokwim Delta					
	Y-K Delta South Coast				
	Eek	X	X	-	X
	Goodnews Bay	-	-	X	-
	Kipnuk	-	X	X	X
	Kongiganak	-	X	X	X
	Kwigillingok	-	-	-	-
	Platinum	-	X	X	-
	Quinhagak	X	X	X	X
	Tuntutuliak	X	-	X	-
	Y-K Delta Mid Coast				
	Chefornak	X	-	X	X
	Chevak	X	-	-	-
	Hooper Bay	X	X	-	-
	Mekoryuk	-	X	-	X
	Newtok	-	X	X	-
	Nightmute	X	-	X	X
	Scammon Bay	-	-	X	-
	Toksook Bay	X	X	-	X
	Tununak	X	X	-	X
	Y-K Delta North Coast				
	Alakanuk	X	-	X	-
	Emmonak	-	X	X	X
	Kotlik	X	X	-	-
	Nunam Iqua (Sheldon Point)	-	X	X	-
	Lower Yukon				
	Marshall (Fortuna Lodge)	X	X	-	X

-continued-

Appendix A. Page 3 of 5.

Region		2004	2005	2006	2007
<i>Subregion</i>					
<i>Village</i>					
	Mountain Village	-	X	-	X
	Pilot Station	-	X	X	-
	Pitka's Point	X	-	X	X
	Russian Mission	-	X	X	-
	Saint Mary's (Andreafsky)	-	X	-	X
<i>Lower Kuskokwim</i>					
	Akiachak	-	-	X	-
	Akiak	-	X	X	X
	Aniak	X	X	-	-
	Atmautluak	X	-	-	X
	Kasigluk	X	-	X	X
	Kwethluk	X	X	X	X
	Lower Kalskag	X	-	X	X
	Napakiak	-	-	-	X
	Napaskiak	-	X	X	X
	Nunapitchuk	X	X	-	X
	Oscarville	-	-	X	X
	Tuluksak	-	X	X	-
	Upper Kalskag	-	X	X	-
<i>Central Kuskokwim</i>					
	Chuathbaluk	X	-	-	-
	Crooked Creek	X	-	X	-
	Lime Village	-	-	X	-
	Red Devil	-	-	-	X
	Sleetmute	-	-	X	X
	Stony River	X	-	X	-
<i>Bethel</i>					
	Bethel	X	X	X	X
Bering Strait-Norton Sound					
<i>St. Lawrence/Diomedes Is.</i>					
	Diomedes	-	X	-	X
	Gambell	X	X	-	X
	Savoonga	X	X	-	X
<i>Bering Strait Mainland Villages</i>					
	Brevig Mission	X	-	-	X
	Elim	X	X	-	-
	Golovin	-	X	-	X
	Koyuk	-	X	-	X
	Shaktoolik	-	-	-	X
	Shishmaref	X	X	-	-
	Saint Michael	X	-	-	X
	Stebbins	-	X	-	X
	Teller	X	X	-	-
	Unalakleet	X	-	-	X
	Wales	X	X	-	-
	White Mountain	X	-	-	X
<i>Nome</i>					
	Nome	X	X	-	X

-continued-

Region		2004	2005	2006	2007
	<i>Subregion</i>				
	<i>Village</i>				
Northwest Arctic					
	<i>Northwest Arctic Villages</i>				
	Ambler	-	-	-	-
	Buckland	-	-	X	-
	Deering	-	-	-	-
	Kiana	-	-	-	-
	Kivalina	-	-	-	-
	Kobuk	-	-	X	-
	Noatak	-	-	-	-
	Noorvik	-	-	-	-
	Selawik	-	-	X	-
	Shungnak	-	-	X	-
	<i>Kotzebue</i>				
	Kotzebue	-	-	-	-
North Slope					
	<i>North Slope Villages</i>				
	Anaktuvak Pass	-	X	-	X
	Atkasuk	-	X	-	X
	Kaktovik	-	X	-	X
	Nuiqsut	-	-	-	-
	Point Hope	-	X	-	-
	Point Lay	-	X	-	-
	Wainwright	-	X	-	X
	<i>Barrow</i>				
	Barrow	-	X	-	X
Interior Alaska					
	<i>Mid-Yukon/Upper Kuskokwim</i>				
	Anvik	X	X	X	-
	Grayling	-	X	X	-
	Holy Cross	X	X	X	-
	Lake Minchumina	X	-	X	-
	McGrath	-	-	-	-
	Nikolai	X	X	X	-
	Shageluk	-	X	-	-
	Takotna	-	X	-	-
	Tanana	-	-	-	-
	<i>Yukon/Koyukuk</i>				
	Alatna	X	-	X	X
	Bettles/Evansville	-	-	X	-
	Coldfoot	-	-	-	-
	Galena	X	-	-	-
	Hughes	X	-	-	-
	Huslia	X	-	-	-
	Kaltag	X	-	-	-
	Koyukuk	X	X	-	-
	Nulato	X	X	-	-
	Ruby	X	X	-	-
	Wiseman	-	-	-	-

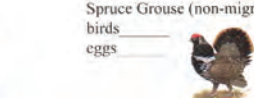
-continued-

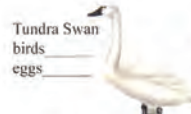
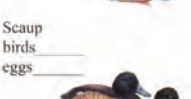
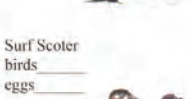
Region		2004	2005	2006	2007
<i>Subregion</i>					
Village					
Allakaket		x	-	x	x
<i>Upper Yukon</i>					
Arctic Village		-	-	x	-
Beaver		-	-	x	x
Birch Creek		-	-	-	x
Central		-	-	x	-
Chalkyitsik		-	-	x	x
Circle		-	-	x	x
Fort Yukon		x	-	x	x
Rampart		-	-	-	-
Stevens Village		-	-	-	-
Venetie		-	-	x	x
<i>Tanana Villages</i>					
Dot Lake		x	-	-	-
Eagle		x	-	-	-
Healy Lake		-	-	-	-
Manley Hot Springs		x	-	-	-
Minto		-	-	x	-
Nenana		x	-	x	-
Northway		x	-	-	-
Tanacross		-	-	x	-
Tetlin		-	-	-	-
Dry Creek		-	-	-	-
<i>Tok</i>					
Tok		-	-	x	-
Upper Copper River					
<i>Upper Copper River</i>					
Cantwell		-	-	-	x
Cheesh'na (Chistochina)		x	-	-	x
Chitina		x	-	-	-
Copper Center		x	-	-	x
Gakona		x	-	-	x
Gulkana		x	-	-	x
Mentasta Lake		x	-	-	x
Tazlina		-	-	-	-
Southeast Alaska					
<i>Southeast Alaska</i>					
Craig ^a		-	-	-	-
Hoonah ^a		-	-	-	-
Hydaburg ^a		-	-	-	-
Yakutat ^b		-	-	-	-

a. Villages eligible to harvest only the eggs of glaucous-winged gulls.

b. Village eligible to harvest only the eggs of glaucous-winged gulls, Aleutian terns, and Arctic terns.

Appendix B.–Harvest report forms (~20% of original size).

SUBSISTENCE HOUSEHOLD SURVEY SPRING (APRIL 1 - JUNE 30)			
PLEASE WRITE TOTAL NUMBER OF BIRDS CAUGHT AND EGGS GATHERED.			
Yellow-billed Loon birds _____ eggs _____ 	Red-throated Loon birds _____ eggs _____ 	Common Loon birds _____ eggs _____ 	Pacific Loon birds _____ eggs _____ 
Auklet birds _____ eggs _____ 	Murre birds _____ eggs _____ 	Cormorant birds _____ eggs _____ 	Kittiwake birds _____ eggs _____ 
Guillemot birds _____ eggs _____ 	Mew Gull birds _____ eggs _____ 	Sabine's Gull birds _____ eggs _____ 	Glaucous Gull birds _____ eggs _____ 
Arctic Tern birds _____ eggs _____ 	Puffin birds _____ eggs _____ 	Bristle-thighed Curlew birds _____ eggs _____ 	Godwit birds _____ eggs _____ 
Whimbrel birds _____ eggs _____ 	Golden Plover birds _____ eggs _____ 	Small Shorebird birds _____ eggs _____ 	Unidentified Duck birds _____ eggs _____ 
Ptarmigan (non-migratory) birds _____ eggs _____ 	Spruce Grouse (non-migratory) birds _____ eggs _____ 	Other Bird birds _____ eggs _____ 	
Surveyor Notes _____ Date of Pick-up: _____ VH Code: _____		Comments: _____ FORM 7-FW-103 OMB NO. 1018-0124 APPROVAL EXPIRES 01/31/10	

SUBSISTENCE HOUSEHOLD SURVEY SPRING (APRIL 1 - JUNE 30)			
PLEASE WRITE TOTAL NUMBER OF BIRDS CAUGHT AND EGGS GATHERED.			
Tundra Swan birds _____ eggs _____ 	Sandhill Crane birds _____ eggs _____ 	White-fronted Goose birds _____ eggs _____ 	Lesser Canada Goose birds _____ eggs _____ 
Cackling Canada Goose birds _____ eggs _____ 	Lesser Snow Goose birds _____ eggs _____ 	Emperor Goose birds _____ eggs _____ 	Black Brant birds _____ eggs _____ 
Pintail birds _____ eggs _____ 	Mallard birds _____ eggs _____ 	Wigeon birds _____ eggs _____ 	Shoveler birds _____ eggs _____ 
Green-winged Teal birds _____ eggs _____ 	Scaup birds _____ eggs _____ 	Canvasback birds _____ eggs _____ 	Bufflehead birds _____ eggs _____ 
Harlequin birds _____ eggs _____ 	Goldeneye birds _____ eggs _____ 	Long-tailed duck birds _____ eggs _____ 	White-winged Scoter birds _____ eggs _____ 
Black Scoter birds _____ eggs _____ 	Surf Scoter birds _____ eggs _____ 	Common Merganser birds _____ eggs _____ 	Red-breasted Merganser birds _____ eggs _____ 
Common Eider birds _____ eggs _____ 	King Eider birds _____ eggs _____ 	Spectacled Eider birds _____ eggs _____ 	Steller's Eider birds _____ eggs _____ 
VH Code: _____			

SUBSISTENCE HOUSEHOLD SURVEY

SUMMER (JULY 1 - AUG. 31)

PLEASE WRITE TOTAL NUMBER OF BIRDS CAUGHT AND EGGS GATHERED.

Tundra Swan birds _____ eggs _____		White-fronted Goose birds _____ eggs _____		Lesser Canada Goose birds _____ eggs _____	
Cackling Canada Goose birds _____ eggs _____		Lesser Snow Goose birds _____ eggs _____		Emperor Goose birds _____ eggs _____	
Pintail birds _____ eggs _____		Mallard birds _____ eggs _____		Wigeon birds _____ eggs _____	
Green-winged Teal birds _____ eggs _____		Scaup birds _____ eggs _____		Canvasback birds _____ eggs _____	
Harlequin birds _____ eggs _____		Goldeneye birds _____ eggs _____		Long-tailed duck birds _____ eggs _____	
Black Scoter birds _____ eggs _____		Surf Scoter birds _____ eggs _____		Common Merganser birds _____ eggs _____	
Common Eider birds _____ eggs _____		King Eider birds _____ eggs _____		Spectacled Eider birds _____ eggs _____	
				Steller's Eider birds _____ eggs _____	

VH Code: _____

SUBSISTENCE HOUSEHOLD SURVEY

SUMMER (JULY 1 - AUG. 31)

PLEASE WRITE TOTAL NUMBER OF BIRDS CAUGHT AND EGGS GATHERED.

Yellow-billed Loon birds _____ eggs _____		Red-throated Loon birds _____ eggs _____		Common Loon birds _____ eggs _____		Pacific Loon birds _____ eggs _____	
Auklet birds _____ eggs _____		Murre birds _____ eggs _____		Cormorant birds _____ eggs _____		Kittiwake birds _____ eggs _____	
Guillemot birds _____ eggs _____		Mew Gull birds _____ eggs _____		Sabine's Gull birds _____ eggs _____		Glaucous Gull birds _____ eggs _____	
Arctic Tern birds _____ eggs _____		Puffin birds _____ eggs _____		Bristle-thighed Curlew birds _____ eggs _____		Godwit birds _____ eggs _____	
Whimbrel birds _____ eggs _____		Golden Plover birds _____ eggs _____		Small Shorebird birds _____ eggs _____		Unidentified Duck birds _____ eggs _____	
Ptarmigan (non-migratory) birds _____ eggs _____		Spruce Grouse (non-migratory) birds _____ eggs _____		Other Bird birds _____ eggs _____			

Surveyor Notes _____

Comments: _____

Date of Pick-up: _____

VH Code: _____

FORM 7-FW-103
OMB NO. 1018-0124
APPROVAL EXPIRES 01/31/10

SUBSISTENCE HOUSEHOLD SURVEY

FALL (SEPT. 1 - OCT. 31)

PLEASE WRITE TOTAL NUMBER OF BIRDS CAUGHT AND EGGS GATHERED.

Tundra Swan birds _____ eggs _____		White-fronted Goose birds _____ eggs _____	Lesser Canada Goose birds _____ eggs _____
Cackling Canada Goose birds _____ eggs _____		Lesser Snow Goose birds _____ eggs _____	Emperor Goose birds _____ eggs _____
Pintail birds _____ eggs _____		Mallard birds _____ eggs _____	Wigeon birds _____ eggs _____
Green-winged Teal birds _____ eggs _____		Scaup birds _____ eggs _____	Canvasback birds _____ eggs _____
Harlequin birds _____ eggs _____		Goldeneye birds _____ eggs _____	Long-tailed duck birds _____ eggs _____
Black Scoter birds _____ eggs _____		Surf Scoter birds _____ eggs _____	Common Merganser birds _____ eggs _____
Common Eider birds _____ eggs _____		King Eider birds _____ eggs _____	Spectacled Eider birds _____ eggs _____
			Steller's Eider birds _____ eggs _____
			

VH Code: _____

SUBSISTENCE HOUSEHOLD SURVEY

FALL (SEPT. 1 - OCT. 31)

PLEASE WRITE TOTAL NUMBER OF BIRDS CAUGHT AND EGGS GATHERED.

Yellow-billed Loon birds _____ eggs _____	Red-throated Loon birds _____ eggs _____	Common Loon birds _____ eggs _____	Pacific Loon birds _____ eggs _____
			
Auklet birds _____ eggs _____	Murre birds _____ eggs _____	Cormorant birds _____ eggs _____	Kittiwake birds _____ eggs _____
			
Guillemot birds _____ eggs _____	Mew Gull birds _____ eggs _____	Sabine's Gull birds _____ eggs _____	Glaucous Gull birds _____ eggs _____
			
Arctic Tern birds _____ eggs _____	Puffin birds _____ eggs _____	Bristle-thighed Curlew birds _____ eggs _____	Godwit birds _____ eggs _____
			
Whimbrel birds _____ eggs _____	Golden Plover birds _____ eggs _____	Small Shorebird birds _____ eggs _____	Unidentified Duck birds _____ eggs _____
			
Ptarmigan (non-migratory) birds _____ eggs _____	Spruce Grouse (non-migratory) birds _____ eggs _____	Other Bird birds _____ eggs _____	
			

Surveyor Notes _____

Date of Pick-up: _____

VH Code: _____

Comments: _____

FORM 7-FW-103
OMB NO. 1018-0124
APPROVAL EXPIRES 01/31/10

Appendix C.—Species represented in the 3 versions of the harvest report form and their distribution range in Alaska.

Species category Species/species group	Versions and regions of the harvest report forms										
	Southern Coastal Alaska form				Main form					Interior Alaska form	
	Gulf of Alaska/ Cook Inlet	Kodiak Archipelago	Aleutian/ Pribilof Islands	^a South Alaska Peninsula	Bristol Bay	Yukon- Kuskokwim Delta	Bering Strait/ Norton Sound	North- west Arctic	North Slope	Interior	Upper Copper River
Ducks											
Wigeon <i>Anas americana</i>	x	x	x	x	x	x	x	x	x	x	x
Green-winged teal <i>A. crecca</i> (1), Blue-winged teal <i>A. discors</i> (2)	x (1, 2)	x (1, 2)	x (1)	x (1)	x (1)	x (1)	x (1)	x (1)	x (1)	x (1, 2)	x (1, 2)
Mallard <i>A. platyrhynchos</i>	x	x	x	x	x	x	x	x	x	x	x
Pintail <i>A. acuta</i>	x	x	x	x	x	x	x	x	x	x	x
Shoveler <i>A. clypeata</i>	x	x	x	x	x	x	x	x	x	x	x
Black scoter <i>Melanitta nigra</i>	x	x	x	x	x	x	x	x	x	x	x
Surf scoter <i>M. perspicillata</i>	x	x	x	x	x	x	x	x	x	x	x
White-winged scoter <i>M. fusca</i>	x	x	x	x	x	x	x	x	x	x	x
Bufflehead <i>Bucephala albeola</i>	x	x	x	x	x	x	x	x	x (-)	x	x
Goldeneye Common goldeneye <i>B. clangula</i> (1), Barrow's goldeneye <i>B. islandica</i> (2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1)	x (1)	x (-)	x (1, 2)	x (1, 2)
Canvasback <i>Aythya valisineria</i>	x	x	x	x	x	x	x	x	x (-)	x	x
Scaup Greater scaup <i>A. marila</i> (1), Lesser scaup <i>A. affinis</i> (2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1)	x (1, 2)	x (1, 2)
Common eider <i>Somateria mollissima</i>	x	x	x	x	x	x	x	x	x	-	-
King eider <i>S. spectabilis</i>	x	x	x	x	x	x	x	x	x	-	-
Spectacled eider <i>S. fischeri</i> *	x (-)	x (-)	x (-)	x (-)	x	x	x	x	x	-	-
Steller's eider <i>Polysticta stelleri</i> *	x	x	x	x	x	x	x	x	x	-	-
Harlequin duck <i>Histrionicus histrionicus</i>	x	x	x	x	x	x	x	x	x (-)	x	x
Long-tailed duck <i>Clangula hyemalis</i>	x	x	x	x	x	x	x	x	x	x	x
Common merganser <i>Mergus merganser</i>	x	x	x	x	x	x	x	x	x (-)	x	x
Red-breasted merganser <i>M. serrator</i>	x	x	x	x	x	x	x	x	x	x	x
Duck (unidentified)	x	x	x	x	x	x	x	x	x	x	x
Geese											
Black brant <i>Branta bernicla</i>	x	x	x	x	x	x	x	x	x	x (-)	x (-)
Cackling Canada goose <i>B. hutchinsii</i>	x	x	x	x	x	x	x	x	x	-	-
Lesser Canada goose <i>B. canadensis</i>	x	x	x	x	x	x	x	x	x (-)	x	x
White-fronted goose <i>Anser albifrons</i>	x	x	x	x	x	x	x	x	x	x	x
Emperor goose <i>Chen canagica</i> *	x	x	x	x	x	x	x	x	x (-)	-	-

-continued-

Species category Species/species group	Versions and regions of the harvest report forms										
	Southern Coastal Alaska form				Main form					Interior Alaska form	
	Gulf of Alaska/ Cook Inlet	Kodiak Archipelago	Aleutian/ Pribilof Islands	^a South Alaska Peninsula	Bristol Bay	Yukon- Kuskokwim Delta	Bering Strait/ Norton Sound	North- west Arctic	North Slope	Interior	Upper Copper River
Lesser snow goose <i>C. caerulescens</i>	x	x	x	x	x	x	x	x	x	x	x
Swans											
Tundra swan <i>Cygnus columbianus</i> (1), Trumpeter swan <i>C. buccinator</i> * (2)	x (1, 2)	x (1)	x (1)	x (1)	x (1)	x (1)	x (1)	x (1)	x (1)	x (1, 2)	x (1, 2)
Cranes											
Sandhill crane <i>Grus canadensis</i>	x	x	x	x	x	x	x	x	x	x	x
Grouse											
Spruce grouse <i>Falci pennis canadensis</i>	-	-	-	-	x	x	x	x	x	-	-
Grouse (unidentified) Spruce grouse <i>F. canadensis</i> (1), Ruffed grouse <i>Bonasa umbellus</i> (2), Sharp-tailed grouse <i>Tympanuchus phasianellus</i> (3)	- (1, 2)	-	-	-	-	-	-	-	-	x (1, 2, 3)	x (1, 2, 3)
Ptarmigan Willow ptarmigan <i>Lagopus lagopus</i> (1), Rock ptarmigan <i>L. muta</i> (2), White-tailed ptarmigan <i>L. leucura</i> (3)	x (1, 2, 3)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2, 3)	x (1, 2, 3)
Seabirds											
Cormorant Pelagic cormorant <i>Phalacrocorax pelagicus</i> (1), Double-crested cormorant <i>P. auritus</i> (2), Red-faced cormorant <i>P. urile</i> * (3)	x (1, 2, 3)	x (1, 2, 3)	x (1, 2, 3)	x (1, 2, 3)	x (1, 2, 3)	x (1, 3)	x (1)	x (1)	x (-)	-	-
Arctic tern <i>Sterna paradisaea</i> (1), Aleutian tern <i>S. aleutica</i> (2)	x (1)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1)	x (1)	x (1)
Black-legged kittiwake <i>Rissa tridactyla</i>	x	x	x	x	-	-	-	-	-	-	-
Red-legged kittiwake <i>R. brevirostris</i>	x	x	x	x	-	-	-	-	-	-	-
Kittiwake <i>R. tridactyla</i>	-	-	-	-	x	x	x	x	x (-)	-	-
Sabine's gull <i>Xema sabini</i> (1), Bonaparte's gull <i>Larus philadelphia</i> (1)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1)	x (1)	x (1)	- (2)	- (2)
Mew gull <i>Larus canus</i>	- (x)	- (x)	-	-	x	x	x	x	x (-)	x	x
Glaucous-winged gull <i>L. glaucescens</i>	x	x	x	x	- (x)	-	-	-	-	-	-
Glaucous gull <i>L. hyperboreus</i>	-	-	-	-	x	x	x	x	x	x (-)	x (-)
Herring gull <i>L. argentatus</i>	x	x	x	x	-	-	- (x)	-	-	x	x

-continued-

Species category	Versions and regions of the harvest report forms										
	Southern Coastal Alaska form				Main form					Interior Alaska form	
	Gulf of Alaska/ Cook Inlet	Kodiak Archipelago	Aleutian/ Pribilof Islands	^a South Alaska Peninsula	Bristol Bay	Yukon-Kuskokwim Delta	Bering Strait/ Norton Sound	North-west Arctic	North Slope	Interior	Upper Copper River
Species/species group											
Auklet Cassin's auklet <i>Ptychoramphus aleuticus</i> (1), Crested auklet <i>Aethia cristatella</i> (2), Least auklet <i>A. pusilla</i> (3), Parakeet auklet <i>A. psittacula</i> (4), Whiskered auklet <i>A. pygmaea</i> (5), Rhinoceros auklet <i>Cerorhinca monocerata</i> (6)	x (1, 2, 3, 4, 6)	x (1, 2, 3, 4, 6)	x (1, 2, 3, 4, 5, 6)	x (1, 2, 3, 4, 5, 6)	x (1, 2, 3, 4, 6)	x (2, 3, 4, 6)	x (2, 3, 4, 6)	x (2, 3, 4, 6)	x (-)	-	-
Murre Common murre <i>Uria aalge</i> (1), Thick-billed murre <i>U. lomvia</i> (2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	-	-
Guillemot Pigeon guillemot <i>Cephus Columba</i> (1), Black guillemot <i>C. grille</i> (2)	x (1)	x (1)	x (1)	x (1)	x (1)	x (1)	x (1)	x (1, 2)	x (2)	-	-
Puffin Tufted puffin <i>F. cirrhata</i> (1), Horned puffin <i>Fratercula corniculata</i> (2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (1, 2)	x (-)	-	-
Shorebirds											
Black oystercatcher <i>Haematopus bachmani</i>	x	x	x	x	-	-	-	-	-	-	-
Whimbrel <i>Numenius phaeopus</i> *	- (x)	-	-	- (x)	x	x	x	x	x	x	x
Bristle-thighed curlew <i>N. tahitiensis</i> *	x (-)	x	x (-)	x (-)	x (-)	x	x	x (-)	x (-)	-	-
Godwit Bar-tailed godwit <i>Limosa lapponica</i> (1), Hudsonian godwit <i>L. haemastica</i> * (2), Marbled godwit <i>L. fedoa</i> * (3)	x (2)	x (-)	x (-)	x (1)	x (1, 2, 3)	x (1, 2)	x (1, 2)	x (1, 2)	x (1)	x (2)	x (-)
Golden plover American golden plover <i>Pluvialis dominica</i> * (1), Pacific golden plover <i>P. squatarola</i> * (2), Black-bellied plover <i>P. fulva</i> (3)	x (1, 2, 3)	x (1, 2, 3)	x (1, 2, 3)	x (1, 2, 3)	x (1, 2, 3)	x (1, 2, 3)	x (1, 2, 3)	x (1, 2, 3)	x (1, 3)	x (1, 2, 3)	x (1, 2, 3)

-continued-

Versions and regions of the harvest report forms

Species category	Southern Coastal Alaska form				Main form					Interior Alaska form	
	Gulf of Alaska/ Cook Inlet	Kodiak Archipelago	Aleutian/ Pribilof Islands	*South Alaska Peninsula	Bristol Bay	Yukon-Kuskokwim Delta	Bering Strait/ Norton Sound	North-west Arctic	North Slope	Interior	Upper Copper River
Species/species group											
Small shorebird Dunlin <i>Calidris alpina</i> (1),	x	x	x	x	x	x	x	x	x	x	x
Pectoral Sandpiper <i>C. melanotos</i> * (2), Rock	(1, 2, 3,	(1, 2, 3, 4, 5,	(1, 3, 4, 6,	(1, 2, 3, 4,	(1, 2, 3,	(1, 2, 3, 4, 5,	(1, 2, 3, 4,	(1, 2, 3,	(1, 2, 4, 5,	(1, 2, 3, 4,	(1, 2, 3, 4,
Sandpiper <i>C. ptilocnemis</i> * (3), Western	4, 5, 6, 7,	6, 7, 12, 14,	7, 12, 14,	5, 6, 7, 12,	4, 5, 6,	6, 7, 12, 13,	5, 6, 7, 12,	4, 5, 6,	6, 7, 8, 9,	5, 6, 7, 12,	5, 6, 7, 12,
Sandpiper <i>C. mauri</i> (4), Semipalmated	12, 14,	15, 16, 17, 18,	18, 19,	14, 15, 16,	7, 12,	14, 15, 16, 17,	13, 14, 15,	7, 12,	10, 11, 12,	14, 15, 16,	14, 15, 16,
Sandpiper <i>C. pusilla</i> (5), Least Sandpiper <i>C.</i>	15, 16,	19, 20, 21, 22,	22, 26,	17, 18, 19,	14, 15,	18, 19, 20, 21,	16, 17, 18,	13, 14,	13, 14,	17, 18, 21,	17, 18, 21,
<i>minutilla</i> (6), Baird's Sandpiper <i>C. bairdii</i>	17, 18,	25, 26, 27, 28,	27, 28,	20, 21, 22,	16, 17,	22, 25, 26, 27,	19, 20, 21,	15, 16,	15, 18,	22, 23, 25,	22, 23, 25,
(7), White-rumped Sandpiper <i>C. fuscicollis</i> *	20, 21,	29)	29)	25, 26, 27,	18, 19,	28, 29)	22, 25, 26,	17, 18,	19, 20,	26, 27, 28,	26, 27, 28,
(8), Stilt Sandpiper <i>C. himantopus</i> * (9),	22, 25,			28, 29)	20, 21,		27, 28, 29)	19, 20,	21, 22,	19)	19)
Red-necked Stint <i>C. ruficollis</i> * (10), Stilt	26, 27,				22, 25,			21, 22,	23, 24,		
Sandpiper <i>C. himantopus</i> * (11), Sanderling	28)				26, 27,			25, 26,	26, 27,		
<i>C. alba</i> * (12), Sharp-tailed Sandpiper <i>C.</i>					28, 29)			27, 28,	28, 29)		
<i>acuminata</i> (13), Semipalmated Plover								29)			
<i>Charadrius semipalmatus</i> * (14), Lesser											
Yellowlegs <i>Tringa flavipes</i> (15), Greater											
Yellowlegs <i>T. melanoleuca</i> (16), Solitary											
Sandpiper <i>T. solitaria</i> * (17), Spotted											
Sandpiper <i>Actitis macularia</i> (18), Ruddy											
Turnstone <i>Arenaria interpres</i> (19), Black											
Turnstone <i>A. melanocephala</i> * (20), Surfbird											
<i>Aphirza virgata</i> * (21), Wandering Tattler											
<i>Heteroscelus incanus</i> * (22), Upland Sandpiper											
<i>Bartramia longicauda</i> * (23), Buff-breasted											
Sandpiper <i>Tryngites subruficollis</i> * (24), Short-											
billed Dowitcher <i>Limnodromus driseus</i> * (25),											
Long-billed Dowitcher <i>L. scolopaceus</i> (26),											
Wilson's Snipe <i>Gallinago delicata</i> (27), Red-											
necked Phalarope <i>Phalaropus lobatus</i> (28),											
Red Phalarope <i>P. fulicaria</i> (29)											
Grebes and Loons											
Common loon <i>Gavia immer</i>	x	x	x	x	x	x	x	x	x (-)	x	x
Pacific loon <i>G. pacifica</i> (1), Arctic loon <i>G.</i>	x	x	x	x	x	x	x	x	x	x	x
<i>arctica</i> (2)	(1)	(1)	(1)	(1)	(1)	(1, 2)	(1, 2)	(1, 2)	(1, 2)	(1)	(1)
Red-throated loon <i>G. stellata</i>	x	x	x	x	x	x	x	x	x	x	x
Yellow-billed loon <i>G. adamsii</i> *	x	x	x	x	x	x	x	x	x	-	-
Red-necked grebe <i>Podiceps griseana</i> (1),	-	-	-	-	-	-	-	-	-	x	x
Horned grebe <i>P. auritus</i> (2)	(1, 2)	(1, 2)	(1, 2)	(1, 2)	(1, 2)	(1, 2)	(1, 2)	(1, 2)		(1, 2)	(1, 2)
Other/Unknown Bird	x	x	x	x	x	x	x	x	x	x	x

-continued-

- Sources* For information on distribution range of species: Johnson and Herter (1989), National Geographic Society (1999), The Birds of North America Series, Sea Duck Joint Venture (2003-2005), Denlinger (2006), Johnson et al. (2007), Alaska Shorebird Group (2008), Bowman (2008), Richard Lancot (USFWS, Pers. Communication), Eric Taylor (USFWS, Pers. Communication), Donna Dewhurst (USFWS, Pers. Communication), Davis Irons (USFWS, Pers. Communication), Chris Dau (USFWS, Pers. Communication), Daniel Rosenberg (ADF&G, Pers. Communication).
- a. South Alaska Peninsula is a subregion of the Bristol Bay region; most of the Bristol Bay region is surveyed with the Main Form, but the South Alaska Peninsula is surveyed with the Southern Coastal Alaska form.
 - x The species/species group is represented in the harvest report form used in the region. Numbers in parenthesis indicate the species or the composition of species likely to occur in each region.
 - The species/species group is not represented in the harvest report form used in the region.
 - x (-) The species is represented in the harvest report form but it is unlikely to occur in the region.
 - (x) The species is not represented in the harvest report form but likely occurs in the region.
 - * Species closed to harvest of birds or eggs, at least in certain management units.

Appendix D.–Formulas to calculate subregion estimated harvests, variances, and confidence intervals (3-stage stratified cluster sampling).

$$X_s = \frac{N_{1s}}{n_{1s}} \left[\sum_{i=1}^h \frac{N_{2si}}{n_{2si}} \left[\sum_{j=1}^{h_i} \frac{N_{3sij}}{n_{3sij}} \left[\sum_{k=1}^{n_{3sij}} x_{sijk} \right] \right] \right]$$

This formula, used to calculate estimated harvest at the subregional level, does account for missing strata, but it does not account for missing seasons. If a whole season is missing for any village, complementary analytical procedures are necessary to implement mean replacement.

$$Var(X_s) = N_{1s}^2 \left(1 - \frac{n_{1s}}{N_{1s}}\right) \frac{s_{1s}^2}{n_{1s}} + \frac{N_{1s}}{n_{1s}} \left[\sum_{i=1}^h N_{2si}^2 \left(1 - \frac{n_{2si}}{N_{2si}}\right) \frac{s_{2si}^2}{n_{2si}} \right] + \frac{N_{1s}}{n_s} \left[\sum_{i=1}^h \frac{N_{2si}}{n_{2si}} \left[\sum_{j=1}^{h_i} N_{3sij}^2 \left(1 - \frac{n_{3sij}}{N_{3sij}}\right) \frac{s_{3sij}^2}{n_{3sij}} \right] \right]$$

$$CI(X_s) = t_{1/\alpha} \times \sqrt{\text{var}(X_s)}$$

$$CIP(X_s) = t_{1/\alpha} \times \sqrt{\text{var}(X_s)} \frac{1}{X_s}$$

Where:

$$s_{1s}^2 = \frac{\sum_{i=1}^h \left[\sum_{j=1}^{h_i} \left[\sum_{k=1}^{n_{3sij}} (x_{sijk} - \bar{x}_s)^2 \right] + (\bar{x}_{sij} - \bar{x}_s)^2 p_{3sij} \right]}{n_{1s}}$$

$$p_{3sij} = N_{3sij} - n_{3sij}$$

$$s_{2si}^2 = \frac{\sum_{j=1}^{h_i} \left[\sum_{k=1}^{n_{3sij}} (x_{sijk} - \bar{x}_{si})^2 \right] + (\bar{x}_{sij} - \bar{x}_{si})^2 p_{3sij}}{n_{2si}}$$

$$s_{3sij}^2 = \frac{\sum_{k=1}^{n_{3sij}} (x_{sijk} - \bar{x}_{sij})^2}{n_{3sij}}$$

$$\bar{x}_s = \frac{\frac{N_{1s}}{n_{1s}} \left[\sum_{i=1}^h \frac{N_{2si}}{n_{2si}} \left[\sum_{j=1}^{h_i} \frac{N_{3sij}}{n_{3sij}} \left[\sum_{k=1}^{n_{3sij}} x_{sijk} \right] \right] \right]}{N_{1s}}$$

$$\bar{x}_{si} = \frac{\frac{N_{2si}}{n_{2si}} \left[\sum_{j=1}^{h_i} \frac{N_{3sij}}{n_{3sij}} \left[\sum_{k=1}^{n_{3sij}} x_{sijk} \right] \right]}{N_{2si}}$$

$$\bar{x}_{sij} = \frac{\frac{N_{3sij}}{n_{3sij}} \left[\sum_{k=1}^{n_{3sij}} x_{sijk} \right]}{N_{3sij}}$$

- X_s = Subregion estimated harvest.
- $\text{Var}(X_s)$ = Variance of subregional harvest estimate.
- CI = Confidence interval.
- CIP = Confidence interval percentile.
- s = Subscript that denotes first-stage units (subregion).

- i = Subscript that denotes second-stage units (sampled strata, or harvest level).
 j = Subscript that denotes third-stage unit (sampled strata).
 k = Subscript that denotes households.
 h = Total number of villages sampled in a subregion.
 h_i = Total number of strata sampled in the village.
 N_{1s} = Total number of households in subregion s .
 n_{1s} = Total number of households in sampled villages in subregion s .
 N_{2s} = Total number of households in all strata of a village in subregion s .
 n_{2s} = Total number of households in sampled strata of a village in subregion s .
 N_{3s} = Total number of households in each stratum of a village in subregion s .
 n_{3s} = Number of households sampled in each stratum of a village in subregion s .
 x_{sijk} = Individual household reported harvest.
 s_1^2 = First-stage sample variance.
 s_2^2 = Second-stage sample variance.
 s_3^2 = Third-stage sample variance.
 $\bar{x}$ = Weighted household harvest mean.
 $\bar{x}_r$ = mean household harvest at subregional level.
 $\bar{x}_{si}$ = mean household harvest at village level.
 $\bar{x}_{sij}$ = mean household harvest at harvest level.
 P_{3sij} = Factor to account for variance of non-sampled households for which a mean harvest was applied.
 $t_{1/\alpha}$ = Student's t distribution value with tail area probability α .
Note The term " N_{2si}/n_{2s} " accounts for missing stratum at the village level; this term equals 1 if all strata in the village have been surveyed. For instance:

	None	Low	High	
Total households	20	40	20	$N_{2si} = 80$
Sampled households	0	20	20	$n_{2si} = 60$

Appendix E.–Formulas to calculate region estimated harvests, variances, and confidence intervals (4-stage stratified sampling).

$$X_r = \frac{N_{1r}}{n_{1r}} \left[\sum_{s=1}^h \frac{N_{2rs}}{n_{2rs}} \left[\sum_{i=1}^{h_s} \frac{N_{3rsi}}{n_{3rsi}} \left[\sum_{j=1}^{h_{si}} \frac{N_{4rsij}}{n_{4rsij}} \left[\sum_{k=1}^{n_{4rsij}} x_{rsijk} \right] \right] \right] \right]$$

Note: This formula, used to calculate estimated harvest at the regional level, does account for missing strata, but it does not account for missing seasons. If a whole season is missing for any village, complementary analytical procedures are necessary to implement mean replacement.

$$\begin{aligned} Var(x) = & N_{1r}^2 \left(1 - \frac{n_{1r}}{N_{1r}} \right) \frac{s_{1r}^2}{n_{1r}} + \frac{N_{1r}}{n_{1r}} \left[\sum_{s=1}^h N_{2rs}^2 \left(1 - \frac{n_{2rs}}{N_{2rs}} \right) \frac{s_{2rs}^2}{n_{2rs}} \right] + \frac{N_{1r}}{n_{1r}} \left[\sum_{s=1}^h \frac{N_{2rs}}{n_{2rs}} \left[\sum_{i=1}^{h_s} N_{3rsi}^2 \left(1 - \frac{n_{3rsi}}{N_{3rsi}} \right) \frac{s_{3rsi}^2}{n_{3rsi}} \right] \right] \\ & + \frac{N_{1r}}{n_{1r}} \left[\sum_{s=1}^h \frac{N_{2rs}}{n_{2rs}} \left[\sum_{i=1}^{h_s} \frac{N_{3rsi}}{n_{3rsi}} \left[\sum_{j=1}^{h_{si}} N_{4rsij}^2 \left(1 - \frac{n_{4rsij}}{N_{4rsij}} \right) \frac{s_{4rsij}^2}{n_{4rsij}} \right] \right] \right] \end{aligned}$$

$$CI(X_r) = t_{1/\alpha} \times \sqrt{\text{var}(X)}$$

$$CIP(X_r) = t_{1/\alpha} \times \sqrt{\text{var}(X)} \frac{1}{X_r}$$

Where:

$$s_{1r}^2 = \frac{\sum_{s=1}^h \left[\sum_{i=1}^{h_s} \left[\sum_{j=1}^{h_{si}} \left[\sum_{k=1}^{n_{4rsij}} (x_{rsijk} - \bar{x}_r)^2 \right] + (\bar{x}_{rsij} - \bar{x}_r)^2 p_{4rsij} \right] \right]}{n_{1r}} \quad p_{4rsij} = N_{4rsij} - n_{4rsij}$$

$$s_{2rs}^2 = \frac{\sum_{i=1}^{h_s} \left[\sum_{j=1}^{h_{si}} \left[\sum_{k=1}^{n_{4rsij}} (x_{rsijk} - \bar{x}_{rs})^2 \right] + (\bar{x}_{rsij} - \bar{x}_{rs})^2 p_{4rsij} \right]}{n_{2rs}}$$

$$s_{3rsi}^2 = \frac{\sum_{j=1}^{h_{si}} \left[\sum_{k=1}^{n_{4rsij}} (x_{rsijk} - \bar{x}_{rsi})^2 \right] + (\bar{x}_{rsij} - \bar{x}_{rsi})^2 p_{4rsij}}{n_{3rsi}} \quad s_{4rsij}^2 = \frac{\sum_{k=1}^{n_{4rsij}} (x_{rsijk} - \bar{x}_{rsij})^2}{n_{4rsij}}$$

$$\bar{x}_r = \frac{N_{1r}}{n_{1r}} \left[\sum_{s=1}^h \frac{N_{2rs}}{n_{2rs}} \left[\sum_{i=1}^{h_s} \frac{N_{3rsi}}{n_{3rsi}} \left[\sum_{j=1}^{h_{si}} \frac{N_{4rsij}}{n_{4rsij}} \left[\sum_{k=1}^{n_{4rsij}} x_{rsijk} \right] \right] \right] \right]$$

$$\bar{x}_{rs} = \frac{N_{2rs}}{n_{2rs}} \left[\sum_{i=1}^{h_s} \frac{N_{3rsi}}{n_{3rsi}} \left[\sum_{j=1}^{h_{si}} \frac{N_{4rsij}}{n_{4rsij}} \left[\sum_{k=1}^{n_{4rsij}} x_{rsijk} \right] \right] \right]$$

$$\bar{x}_{rsi} = \frac{N_{3rsi}}{n_{3rsi}} \left[\sum_{j=1}^{h_{si}} \frac{N_{4rsij}}{n_{4rsij}} \left[\sum_{k=1}^{n_{4rsij}} x_{rsijk} \right] \right]$$

$$\bar{x}_{rsij} = \frac{N_{4rsij}}{n_{4rsij}} \left[\sum_{k=1}^{n_{4rsij}} x_{rsijk} \right]$$

X_r = Region estimated harvest.
 $\text{Var}(X_r)$ = Variance of region harvest estimate.

- r = Subscript denoting first-stage units (region).
 s = Subscript denoting second-stage units (subregion).
 i = Subscript denoting third-stage units (sampled strata, or harvest level).
 j = Subscript denoting fourth-stage unit (strata).
 k = Subscript denoting individual households.
 h = Total sampled subregions in region r .
 h_s = total sampled villages in subregion s .
 h_{si} = Total sample strata in the village.
 N_{1r} = Total number of households in region r .
 n_{1r} = Total number of households in sampled subregions in region r .
 N_{2rs} = Total number of households in subregion s .
 n_{2rs} = Total number of households in sampled villages in subregion s .
 N_{3rsi} = Total number of households in all strata of a village.
 n_{3rsi} = Total number of households in sampled strata of a village.
 N_{4rsij} = Total number of households in each stratum of a village.
 n_{4rsij} = Number of households sampled in each stratum of a village.
 x_{rsijk} = Individual household reported harvest.
 s_1^2 = First-stage sample variance.
 s_2^2 = Second-stage sample variance.
 s_3^2 = Third-stage sample variance.
 s_4^2 = Fourth-stage sample variance.
 $\bar{x}$ = Weighted household harvest mean.
 $\bar{x}_r$ = mean household harvest at region level.
 $\bar{x}_{rs}$ = mean household harvest at subregion level.
 $\bar{x}_{rsi}$ = mean household harvest at village level.
 $\bar{x}_{rsij}$ = mean household harvest at harvest level.
 P_{4rsij} = Factor to account for variance of non-sampled households for which a mean harvest was applied.
CI = Confidence interval.
CIP = Confidence interval percentile.
 $t_{1/\alpha}$ = Student's t distribution value with tail area probability α .
Note The term " N_{3rsi}/n_{3rsi} " accounts for missing stratum at the village level; this term equals 1 if all strata in the village have been surveyed. For instance:

	None	Low	High	
Total households	20	40	20	$N_{3rsi} = 80$
Sampled households	0	20	20	$n_{3rsi} = 60$