



THE STATE  
of **ALASKA**  
GOVERNOR BILL WALKER

## Department of Fish and Game

DIVISION OF SUBSISTENCE  
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August 5, 2015

Ted Spraker, Chair  
Alaska Board of Game  
P.O. Box 115526  
Juneau, Alaska, 99811

Re: Division of Subsistence Analysis of August 2015 Agenda Change Requests

Due to the short turnaround allowed for review of the Agenda Change Requests (ACRs) before the board at the August 7, 2015 meeting, the Division of Subsistence analysis was not included in the versions that were sent. Following please find comments for the board's consideration.

ACR 8 (snowy owls) and ACR 9 (cormorants): A customary and traditional (C&T) use determination has not been made for either snowy owls or cormorants in Alaska to cover the fall season regulated by the Alaska Board of Game. An attachment to this letter is the 1993 customary and traditional use worksheet for migratory birds. The figures and tables are difficult to read and there is abundant new information available to ADF&G through the Division of Subsistence migratory bird harvest monitoring program. Should the board agree to take up this ACR, the division recommends addressing the lack of C&T findings. In addition, the board may wish to add GMUs 6 and 8 to the list of open areas for cormorants.

ACR 10 (Mulchatna caribou). There's a positive C&T finding in GMUs 9A, 9B, 17, 19A south of the Kuskokwim River, and 19B, and an amount reasonably necessary for subsistence of 2,100–2,400. However, management reports indicate that a good portion of the harvest of Mulchatna caribou now takes place in GMU 18, which is not listed in regulation. This availability is good news for subsistence users in GMU 18 and elsewhere; however, during division research on Lower Kuskokwim big game, local residents did express conservation concerns. Should the board agree to take up this ACR, the board may wish to also address the lack of C&T finding in GMU 18.

ACR 11 (GMU 22 brown bears). There's a positive C&T finding for brown bears in GMUs 21 and 22 combined, with an amount reasonably necessary for subsistence (ANS) of 20–25 combined for both units. Residents of Nome and White Mountain have expressed concerns over brown bears breaking into cabins and raiding fish racks.

ACR 12 (GMU 16B moose). In most years, there are more Tier II permit applications than Tier II permits awarded each year in the three Tier II hunts the board has authorized for 16B moose (TM 565,

567, and 569). Therefore, should the board agree to take up this ACR, another option to increase harvest during the winter hunt would be to increase the number of Tier II permits awarded. Additionally, another option would be to extend the Tier II season. The ANS and 2014 Tier II results are as follows:

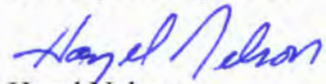
1. 16B, Redoubt Bay drainages: ANS = 10. Most closely aligns with TM569. Applications received = 104. Permits available: 80 (88% awarded).
2. 16B south of the Beluga River and north of Redoubt Bay: ANS = 29–37. Most closely aligns with TM567. Applications received = 226. Permits available = 80 (35% awarded).
3. 16B north of the Beluga River: ANS = 160–180. Most closely aligns with TM565. Applications received = 284. Permits available = 100 (35% awarded).

Please note that although Winfonet data overall may show more harvest in February, in the communities of Susitna/Alexander in 2012, out of 7 bulls harvested, 6 were harvested in December. In Skwentna, out of 8 bulls harvested in 2012, 2 were in January, 4 in February, one in September, and one in December. The division has more information in *The harvest and use of wild resources in Cantwell, Chase, Talkeetna, Trapper Creek, Alexander/Susitna, and Skwentna, Alaska, 2012* (Technical Paper No. 385), available on line at <http://www.adfg.alaska.gov/techpap/TP%20385.pdf>.

In Tyonek in 2006 there were 9 moose harvested in September, 4 in November, 3 in December, 2 in January, and 1 in February. A more recent harvest assessment (2013), however, shows a majority harvested in September. Survey respondents report that this is mainly due to snow conditions. Winter hunting opportunity is highly varied from year to year based on snow conditions for travel. A more liberal season may mean fewer adjustments inseason or having to extend the season by emergency order.

ACR 13 (GMU 20A moose). There is a positive C&T for moose in 20A outside the Fairbanks Nonsubsistence Area, and an ANS of 50–75.

Thank you for your consideration,



Hazel Nelson,  
Director

## CUSTOMARY AND TRADITIONAL USE WORKSHEET

### MIGRATORY BIRDS - STATEWIDE

Prepared by the Division of Subsistence  
Alaska Department of Fish and Game

January 1993

**Criterion 1. A long-term consistent pattern of use and reliance on the fish stock or game population that has been established over a reasonable period of time, excluding interruption by circumstances beyond the user's control, such as unavailability of the fish or game caused by migratory patterns.**

Residents of Alaska have used migratory birds as part of their annual cycle of hunting and fishing activities for hundreds of years. This use continues to the present (Wolfe et al. 1990). The total estimated annual harvest of migratory birds by Alaska residents during the mid-to-late 1980s was about 363,364 birds: 84,608 geese (23.3 percent), 259,741 ducks (71.5 percent), 5,955 cranes (1.6 percent), 6,894 swans (1.9 percent), and 5,166 "other", primarily shore and sea birds (1.7 percent) (see Fig. 3, Tables 4-8). The estimated annual harvest of migratory bird eggs was 83,603 eggs, of which the majority were gull eggs (68.8 percent) or "other sea bird" eggs (15.8 percent) (Table 8). Bird harvests by hunters from rural areas comprised 84.6 percent of the total Alaska harvest, while hunters from urban areas comprised 15.4 percent of the take (see Fig. 3). However, bird harvests, especially at the species level, are variable from year-to-year, particularly due to natural environmental factors such as cycles in species abundance and weather-influenced migration patterns.

At least 32 types of birds have been documented as used by rural resident hunters (Table 15); however the precise species composition has not been precisely determined by current harvest survey methods. During the mid-to-late 1980s, the five most commonly harvested types of birds as determined by their mean rank order for reporting rural areas were mallard, scoter, "other Canada", pintail, and teal (Fig. 28). Other harvested geese species included cackling Canada geese, snow geese, white-fronted geese, black brant, and emperor geese. Other duck species included the elder, wigeon, oldsquaw, scaup, merganser, shoveler, gadwall, bufflehead, and harlequin. Other birds reported taken include tundra swan, sandhill crane, puffin, murre, loon, gull, and tern. The geographic range of species is highly correlated with the types of birds taken by residents of particular regions and areas of the state. Harvests by community are shown in Appendix Table 1.

**Criterion 2. A use pattern recurring in specific seasons of each year.**

There appear to be four distinct seasonal patterns of bird hunting in Alaska (Fig. 25). A September through December hunting period characterizes urbanized areas (Anchorage, Fairbanks, Juneau, and the Kenai Peninsula), the southeast region, Cordova, Copper Basin, Kodiak City, the Parks Highway, and perhaps the Upper Tanana area. A September through May hunting period characterizes the Pacific-Aleutian rural areas, including Tatitlek, Chenega Bay, Port Graham, English Bay, Kodiak Island villages, south Alaska Peninsula, St. Paul, St. George, and the Aleutian Islands. A split hunting period, from April through early June and mid-August through October characterizes the subarctic coast and interior rural areas, including north Alaska Peninsula, Bristol Bay-Illamna, Yukon-Kuskokwim Delta, south Norton Sound, Tyonek-Skwentna, upper Kuskokwim, Yukon-Koyukuk area, lower Tanana, and perhaps the upper Tanana. An April through October hunting period characterizes the arctic rural areas, including the Seward Peninsula-Bering Strait, northwest Arctic, and arctic slope. Some hunting takes place outside these seasonal periods, but by and large, the seasons depicted above appear to be the most usual hunting periods for communities of the areas.

The number of birds taken by seasonal period has not been adequately documented. Based on a sample of reporting areas during the mid-to-late 1980s, it is estimated that 51.4 percent of the rural bird harvest (157,800 birds) was taken during the "spring-early summer" period, 4.4 percent (13,400 birds) during the "mid-summer" period, and 44.3 percent (136,000 birds) during the "late-summer-fall-winter" period (Wolfe et al 1990). Almost all of the urban bird harvest was taken during the "fall-winter" period.

**Criterion 3. A use pattern consisting of methods and means of harvest which are characterized by efficiency and economy of effort and cost.**

At historic contact, migratory birds were taken by darting spear, bow and arrow, nets, bolas, and drives of flightless birds, depending upon the area. Hunters have used guns to harvest migratory birds in Alaska for over a hundred years. During the mid-to-late 1980s, for hunters in rural areas, most hunting occurred in areas immediately surrounding the community. Some resident hunters, especially from urbanized areas, travelled longer distances for bird hunting. Residents of rural areas used snowmachines, boats, and other ground transportation, depending upon the season, but generally did not use aircraft. Residents of urban areas used boats, cars, trucks, and aircraft for accessing hunting areas.

**Criterion 4. The area in which the noncommercial long-term and consistent pattern of taking, use, and reliance upon the fish stock or game population has been established.**

Most rural residents harvested birds in areas close to their home communities. Most urban residents also hunted in close proximities to their communities, however some urban hunters also traveled longer distances to hunt. The approximately 307,000 birds harvested annually by rural residents were distributed among the following areas: Yukon-Kuskokwim Delta (91,200 birds), the Yukon-Koyukuk-Lower Tanana area (60,900 birds), Seward Peninsula-Norton Sound area (41,200 birds), the rural Southeast (26,000 birds), the Arctic Slope (16,600 birds), the Alaska Peninsula (16,500 birds), Northwest Arctic (13,200 birds), Kodiak Island (12,300 birds), Britol Bay-Ilamna (11,000 birds), Upper Kuskokwim (8,500 birds), Upper Tanana (4,700 birds), rural Prince William Sound (3,000 birds), and other rural areas (4,200 birds) (Table 7). The harvest of urban residents (56,122 birds) was distributed as follows: Anchorage Borough (30,872 birds), Upper Kenai Peninsula (8,019 birds), Matanuska-Susitna Borough (6,484 birds), Fairbanks North Star Borough (5,572 birds), Juneau Borough (3,453 birds), Ketchikan Gateway Borough (707 birds), and Valdez-Whittier (54 birds) (Table 6).

**Criterion 5. The means of handling, preparing, preserving, and storing fish or game which has been traditionally used by past generations, but not excluding recent technological advances where appropriate.**

In many rural areas, the bodies, heads, and feet of migratory birds commonly are cooked in soups. In other areas, only the meat and certain internal organs are eaten. Depending upon the area, birds may be used fresh, frozen, salted, or stored in seal oil. In many rural areas, the feathers and down of birds are used in crafted items. A more limited number of households use webbed feet and beaks in hand-crafted items. The lower portion of wings are used as whisk brooms in some regions. The eggs of birds historically were gathered and eaten in many areas of the state, a pattern which continues to the present in some places (Table 8).

**Criterion 6. A use pattern which includes the handing down of knowledge of fishing or hunting skills, values, and lore from generation to generation.**

Bird hunting has been practiced in Alaska since before historic contact to the present. Hunting for migratory birds is generally done by men alone or in small groups; some women also hunt migratory birds.

In Alaska, hunters commonly learn to hunt as young boys by observing relatives on trips. To practice hunting, a young boy may be given a few shells by a father or uncle. The first kills of a boy are ritually celebrated in some regions (such as the southwest, western, and arctic), and are commonly given away so as to ensure future luck. Other people learn to hunt as adults, generally accompanying hunting groups. In some areas, some people learn to shoot and hunt birds as part of hunting clubs.

There are many stories about migratory birds in the oral traditions and mythology of indigenous Alaska cultural groups. In the western region, bird images figure prominently in dances and masks.

**Criterion 7. A pattern of taking, use, and reliance where the harvest effort or products of that harvest are distributed or shared, including customary trade, barter, and gift-giving.**

Birds are commonly shared between households, as indicated by the Figs. 22-24 illustrating the percent of households using, harvesting, giving, and receiving migratory birds by region. For instance, in the median community in the Bristol Bay area, 78.6 percent of households used migratory birds while 47.4 percent harvested migratory birds. In most regions, the percent of households using migratory birds is significantly larger than households harvesting migratory, indicating that many non-hunting households receive birds from others. In general, most sharing occurs between households linked by kinship relationships, such as along parent-child and sibling-sibling lines.

**Criterion 8. A pattern that includes taking, use, and reliance for subsistence purposes upon a wide variety of the fish and game resources and that provides substantial economic, cultural, social, and nutritional elements of the subsistence way of life.**

Migratory birds are highly valued foods in Alaska. One indication of their high value is the fact that families in many areas continue to harvest migratory birds during seasons closed by International Treaty (see Criteria 2), risking arrest by following historic hunting patterns. Historically as today, the arrival of birds in spring in many areas of the state is a sign of hope, and brings joy and optimism for residents.

In Alaska, harvesting migratory birds is one type of activity for producing wild foods that occurs during an annual cycle. Migratory birds are part of a larger mix of resources taken seasonally, which differs across rural areas. In the mid-to-late 1980s, the annual harvest provided about 762,000 lbs of food to rural areas annually (including about 13,000 lbs of eggs), or about 7 lbs of food per rural resident (2.8 birds per rural resident) (Wolfe et al 1990). Generally, migratory birds comprised about 1 to 4 percent of a rural community's annual wild food harvest by weight (Fig. 30).

**References cited:**

Wolfe, Robert J. Amy W. Paige, and Cheryl Scott  
1990 The Subsistence Harvest of Migratory Birds in Alaska. Technical Paper No. 197, Division of Subsistence, Alaska Department of Fish and Game.

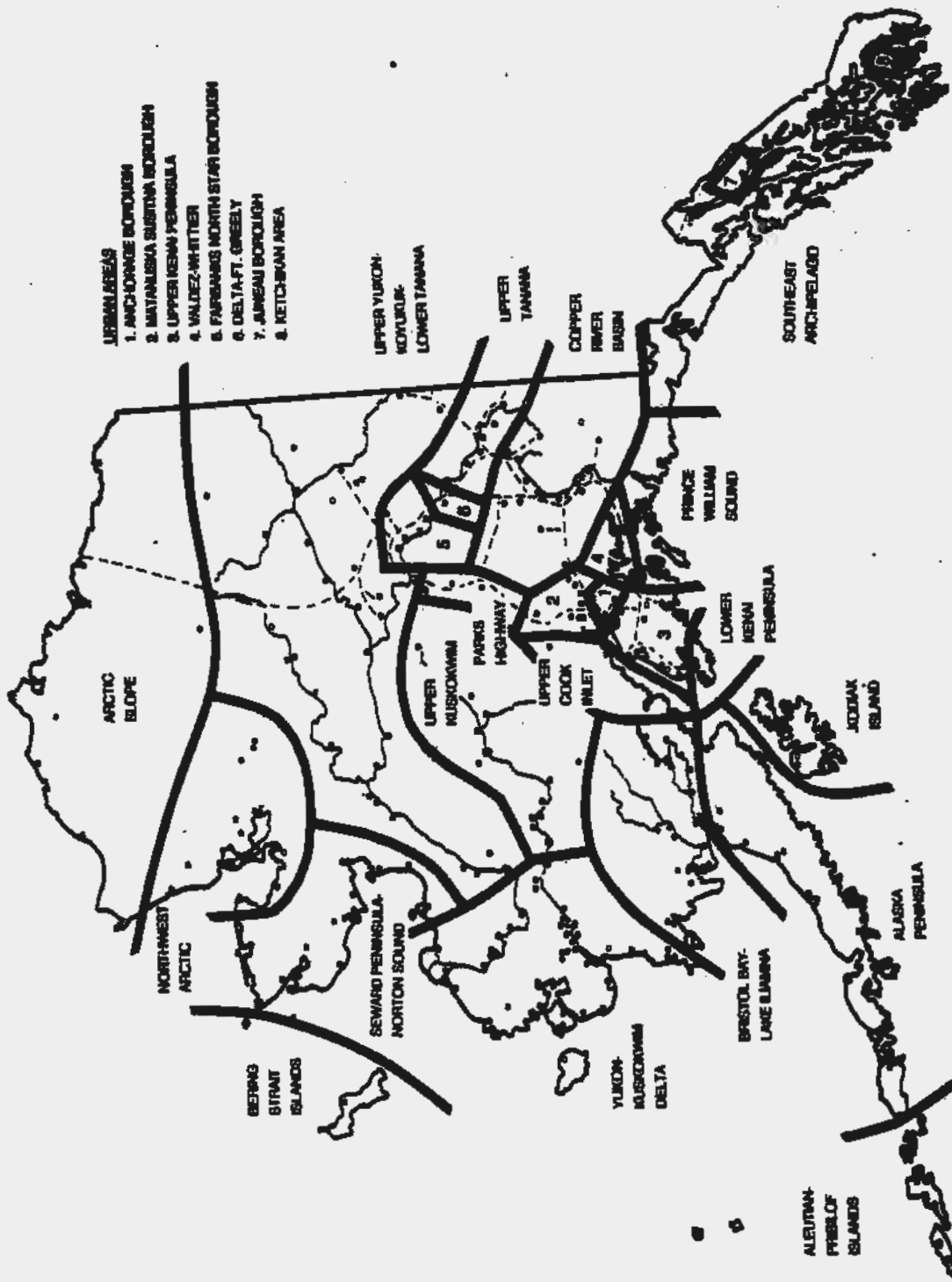
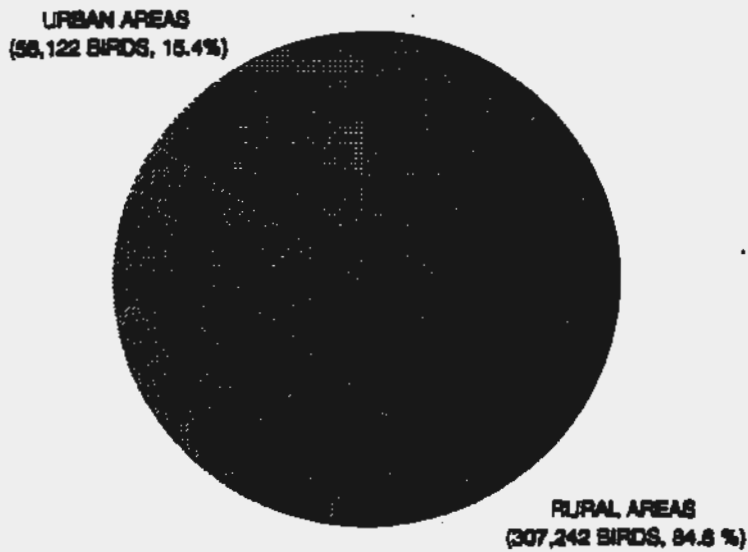
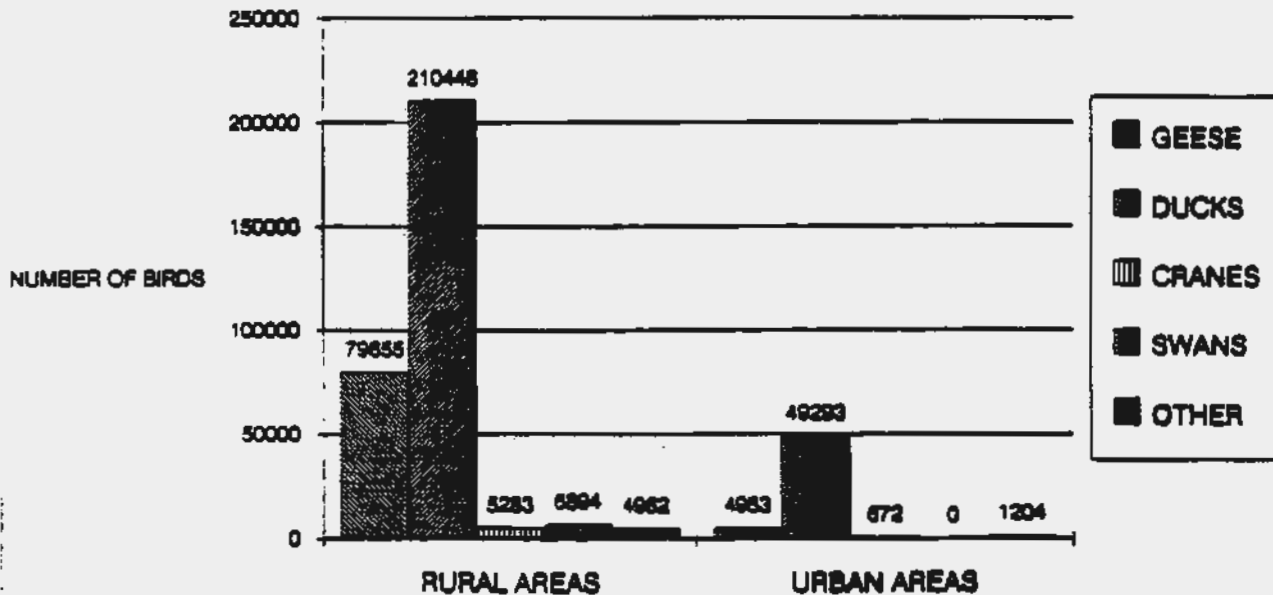


Fig. 1. Map of Rural and Urban Areas Used in the Report

**FIGURE 3. TOTAL ANNUAL MIGRATORY BIRD HARVEST BY ALASKA RURAL AND URBAN AREAS, MID-TO-LATE 1980s (NUMBER AND PERCENT OF BIRDS)**



**FIGURE 4. ANNUAL MIGRATORY BIRD HARVESTS BY ALASKA RURAL AND URBAN AREAS, MID-TO-LATE 1980s (NUMBER OF BIRDS)**



**TABLE 4. TOTAL ANNUAL HARVEST OF MIGRATORY BIRDS (NUMBER OF BIRDS) BY RURAL AND URBAN ALASKA AREAS, CIRCA 1960s**

AREA	Geese	Ducks	Cranes	Swans	Other	Total
Rural Areas	79655	210448	5283	6894	4962	307242
Urban Areas	4953	49293	672	0	1204	56122
<b>Total</b>	<b>84608</b>	<b>259741</b>	<b>5955</b>	<b>6894</b>	<b>6166</b>	<b>363364</b>

**TABLE 5. TOTAL ANNUAL HARVEST OF MIGRATORY BIRDS (NUMBER OF BIRDS) BY URBAN ALASKA AREAS, 1968-69**

AREA	Geese	Ducks	Cranes	Swans	Other	Total
Valdez-Whittier	6	48	0	0	0	54
Delta Junction-Ft. Greely	76	704	171	0	10	961
Ketchikan Borough	98	369	22	0	218	707
Juneau Borough	248	3064	35	0	108	3453
Fairbanks North Star Borough	424	5054	94	0	0	5572
Matanuska-Susitna Borough	629	5685	21	0	149	6484
Upper Kenai Peninsula	294	7688	28	0	9	8019
Anchorage Borough	3178	26681	301	0	712	30872
<b>Total</b>	<b>4953</b>	<b>49293</b>	<b>672</b>	<b>0</b>	<b>1204</b>	<b>56122</b>
<b>Percent</b>	<b>8.8</b>	<b>87.8</b>	<b>1.2</b>	<b>0.0</b>	<b>2.1</b>	<b>100.0</b>



TABLE 6.

TOTAL ANNUAL HARVEST OF MIGRATORY BIRDS (NUMBER OF BIRDS)  
BY URBAN ALASKA AREAS, BY BIRD CATEGORY, 1988-89

AREA	Sea Ducks and Mergan- sers		Canada Geese	Snow fronted Geese	White- fronted Geese	Emperor Brant Geese	Other Geese	Crane	Snipe	Total	
	Valdez-Whittier	48	0	8	0	0	0	0	0	0	54
Delta Junction-Ft. Greely	694	10	78	0	0	0	0	171	10	981	
Ketchikan Borough	315	54	78	22	0	0	0	22	218	707	
Juneau Borough	2874	390	248	0	0	0	0	35	108	3483	
Fairbanks North Star Boroug	4960	94	245	0	151	19	0	9	94	5572	
Matanuska-Susitna Borough	5685	0	565	0	21	43	0	21	149	6484	
Upper KanaI Peninsula	6573	1115	257	9	18	0	0	28	9	8019	
Anchorage Borough	25298	1383	2630	82	260	178	14	14	301	30872	
<b>TOTAL</b>	<b>46247</b>	<b>3046</b>	<b>4113</b>	<b>113</b>	<b>430</b>	<b>240</b>	<b>14</b>	<b>23</b>	<b>672</b>	<b>1204</b>	<b>56122</b>

TABLE 7.

TOTAL HARVESTS OF MIGRATORY BIRDS BY RURAL AREA, 1985  
(NUMBER OF BIRDS)

RURAL AREAS	Geese	Ducks	Cranes	Swans	Other	Total
Upper Cook Inlet	28	394	0	0	0	422
Parks Highway	39	815	4	0	0	854
Lower Kenai Peninsula	9	1178	0	0	210	1398
Copper River Basin	121	1481	95	2	0	1699
Prince William Sound	257	2754	13	0	0	3024
Upper Tanana	191	4482	17	0	0	4670
Upper Kuskokwim	1204	5179	121	0	0	6504
Bristol Bay-Iliamna Lake	1920	8842	170	98	0	11030
Kodiak Island	829	11427	0	0	0	12256
Northwest Arctic	3584	9471	33	0	89	13178
Alaska Peninsula	2920	12852	221	70	472	16535
Arctic Slope	9005	7590	0	0	4	16598
Southeast Archipelago	3717	20363	0	0	1846	25926
Seward Peninsula-Norton Sound	17913	20675	2253	381	3	41225
Upper Yukon-Koyukuk-Lower Tanana	18361	42182	292	58	0	60893
Yukon-Kuskokwim Delta	19561	60972	2064	6285	2338	81220
Total Harvest	79655	210448	5283	6894	4962	307242
Percent	25.9	68.5	1.7	2.2	1.6	100.0

TABLE 8.

TOTAL EGG HARVESTS BY RURAL AREA, 1985  
(NUMBER OF EGGS)

RURAL AREA	Geese	Ducks	Gull	Other	Total
Upper Yukon-Koyukuk-Lower Tanana	0	0	0	0	0
Upper Cook Inlet	0	0	0	0	0
Upper Kuskokwim	0	0	0	0	0
Copper River Basin	0	0	0	0	0
Parks Highway	0	0	0	0	0
Upper Tanana	0	0	0	53	53
Lower Kenai Peninsula	0	0	333	41	374
Prince William Sound	*	*	*	*	1877
Southeast Archipelago	0	0	0	2819	2819
Yukon-Kuskokwim Delta	541	1349	506	1427	3823
Kodiak Island	*	*	*	*	5865
Bristol Bay-Iliamna Lake	279	864	7867	323	9333
Northwest Arctic	*	*	*	*	13428
Seward Peninsula-Norton Sound	137	3733	8209	1885	13964
Arctic Slope	*	*	*	*	14227
Alaska Peninsula	8	641	16289	1122	18040
Total Harvest					83603
Percent	2.0	13.6	68.6	15.8	100.0

\*Egg type not reported

TABLE 15. SUBSISTENCE MIGRATORY BIRD HARVESTS BY SPECIES RANK ORDERED BY AREA

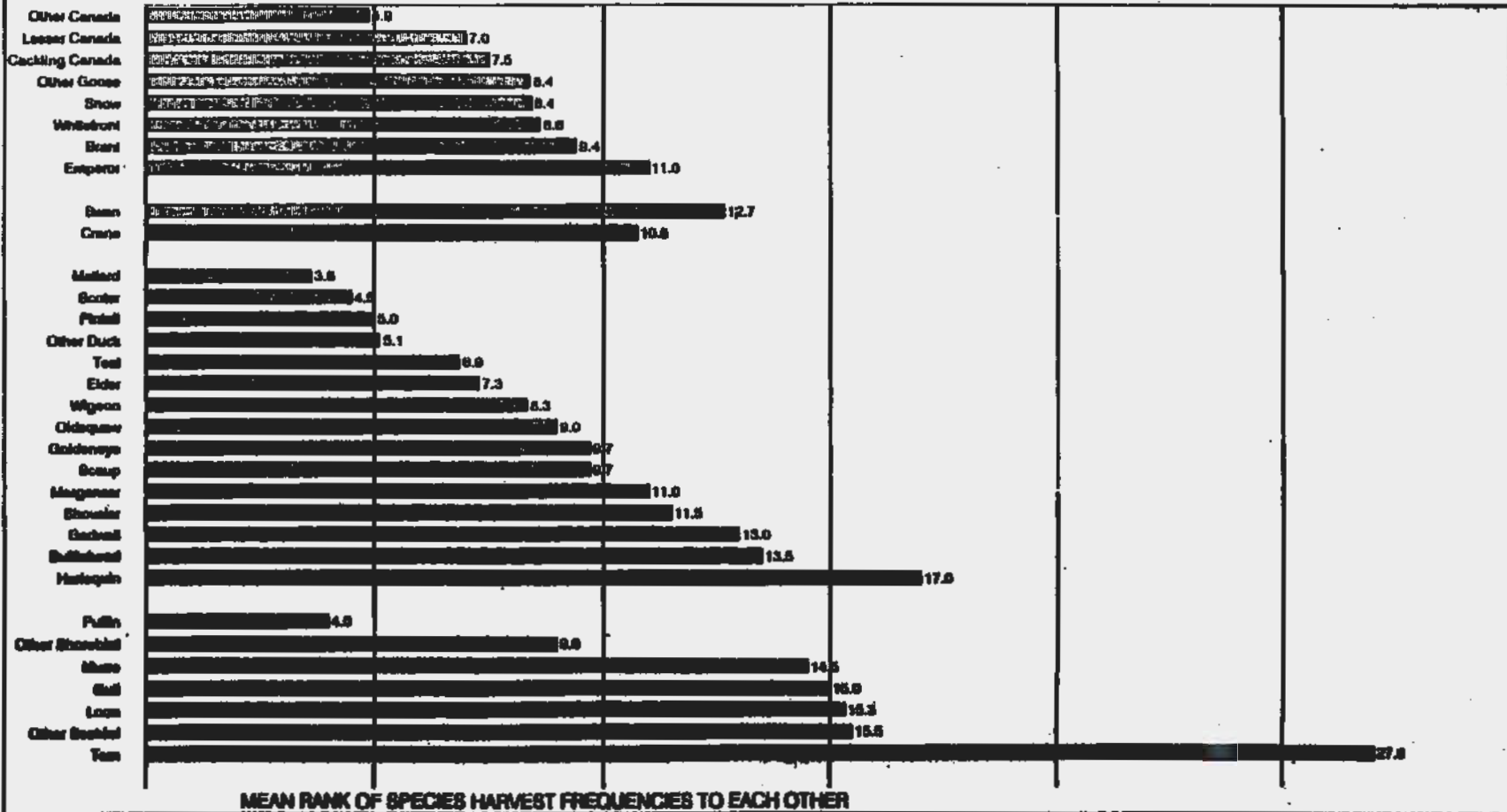
(COMMUNITIES)	SUBARCTIC AND ARCTIC COASTAL AREAS						SUBARCTIC INTERIOR AREAS			PACIFIC COASTAL AREAS			Mean Rank
	Alaska Peninsula	Bristol Bay	Yukon-Kuskokwim Delta	Seward Peninsula		North West Arctic Slope	Upper Yukon Koyukuk	Upper Tanana	Copper River Basin	Lower Kasil	Prince William Sound	Area Using	
				Norton Sound	Arctic								
	(11)	(5)	(19)	(3)	(1)	(5)	(3)	(6)	(22)	(2)	(1)	Area Using	
<b>GEESE</b>													
Other Canada	6	5		3	2	5	4	6	8			8	4.9
Lesser Canada		7	7									7	7.0
Cackling Canada		4	11									2	7.5
Other Goose	16	10				4		8		4		5	8.4
Snow	19	11	6	5	4	8	6					7	8.4
Whitefront	14	8	10	8		2	5	12	10			8	8.6
Brant	8	13	20	1	3	3	18					7	9.4
Emperor	4	9	19	12								4	11.0
<b>Swan and Crane</b>													
Swan	18	14	4	13			14		13			6	12.7
Crane	10	12	17	7	10		12	11	7			8	10.8
<b>Ducks</b>													
Mallard	3	2	3	4	8	10	2	2	1	2	3	11	3.6
Scoter	11		2	11			1			1	1	6	4.5
Pintail	5	3	1	2	7	9	3	4	6	10		10	5.0
Other Duck	1	1		14	5	7	9	1	3			6	5.1
Teal	2		8	6			11	5	5	11		7	6.9
Eider	17	6	9	10	1	1				7		7	7.3
Wigeon	13		12				7	3	2	13		6	8.3
Oldsquaw			13		9	6	8					4	9.0
Goldeneye	7		16				15	10	12	3	5	7	9.7
Scaup	15		5	9			10	13	4	12		7	9.7
Merganser			21				16			5	2	4	11.0
Shoveler			15				13	7	11			4	11.5
Gadwall	12		14									2	13.0
Bufflehead			25				18	9	9	14	6	6	13.5
Harlequin			28				17			8		3	17.0

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TABLE 15. SUBSISTENCE MIGRATORY BIRD HARVESTS BY SPECIES RANK ORDERED BY AREA

	SUBARCTIC AND ARCTIC COASTAL AREAS					SUBARCTIC INTERIOR AREAS					PACIFIC COASTAL AREAS			Mean Rank		
	Seward		North		Arctic Slope	Upper		Copper River Basin		Lower Klamath Sound	Willamette Sound	Oregon Coast				
	Yukon-Kuskokwim Delta	Peninsula	West Arctic	Yukon		Upper Tenana	River	Kenai								
(COMMUNITIES)	(11)	(5)	(19)	(3)	(1)	(5)	(3)	(6)	(22)	(2)	(1)					
Other Birds																
Puffin														4	1	4.0
Other Shorebird														9	1	9.0
Murre			23		6									6	2	14.5
Gull			24											6	2	15.0
Loon			15	15										13	3	15.3
Other Seabird	9		22												2	15.5
Tern			27												1	27.0
Geese Species	6	8	6	5	3	5	4	3	2	0	1					
Other Species	13	6	21	10	7	5	15	10	9	14	5					
Total Species	19	14	27	15	10	10	19	13	13	14	6					

**FIGURE 28. SUBSISTENCE MIGRATORY BIRD HARVESTS RANK ORDERED BY SPECIES (MEAN RANK FOR RURAL AREAS REPORTING USING SPECIES, LOW NUMBER IS HIGHER RANK)**



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FIGURE 22. COMMUNITY GIVING OF MIGRATORY BIRDS: RANGE AND MEDIAN COMMUNITIES BY AREA

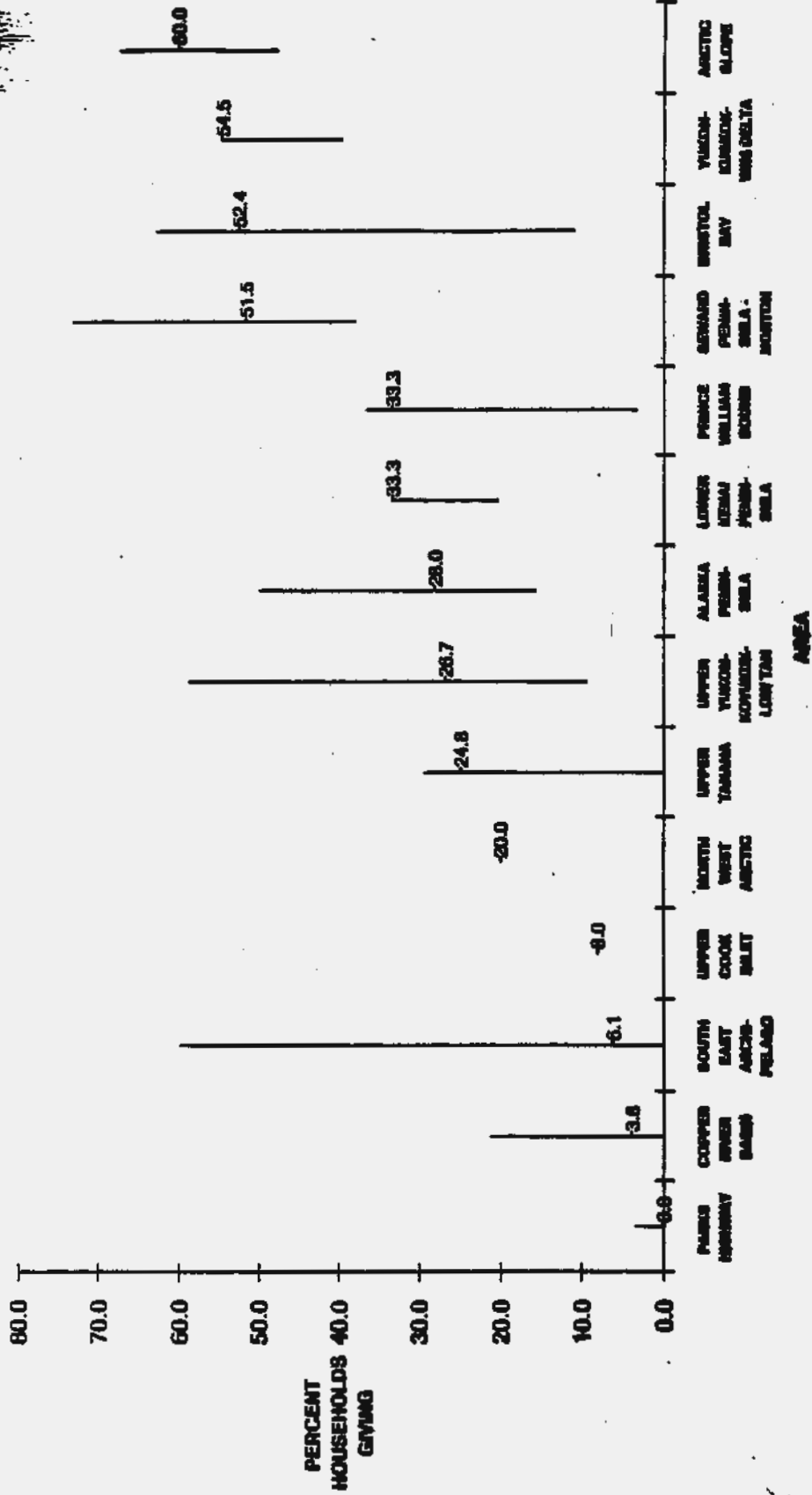
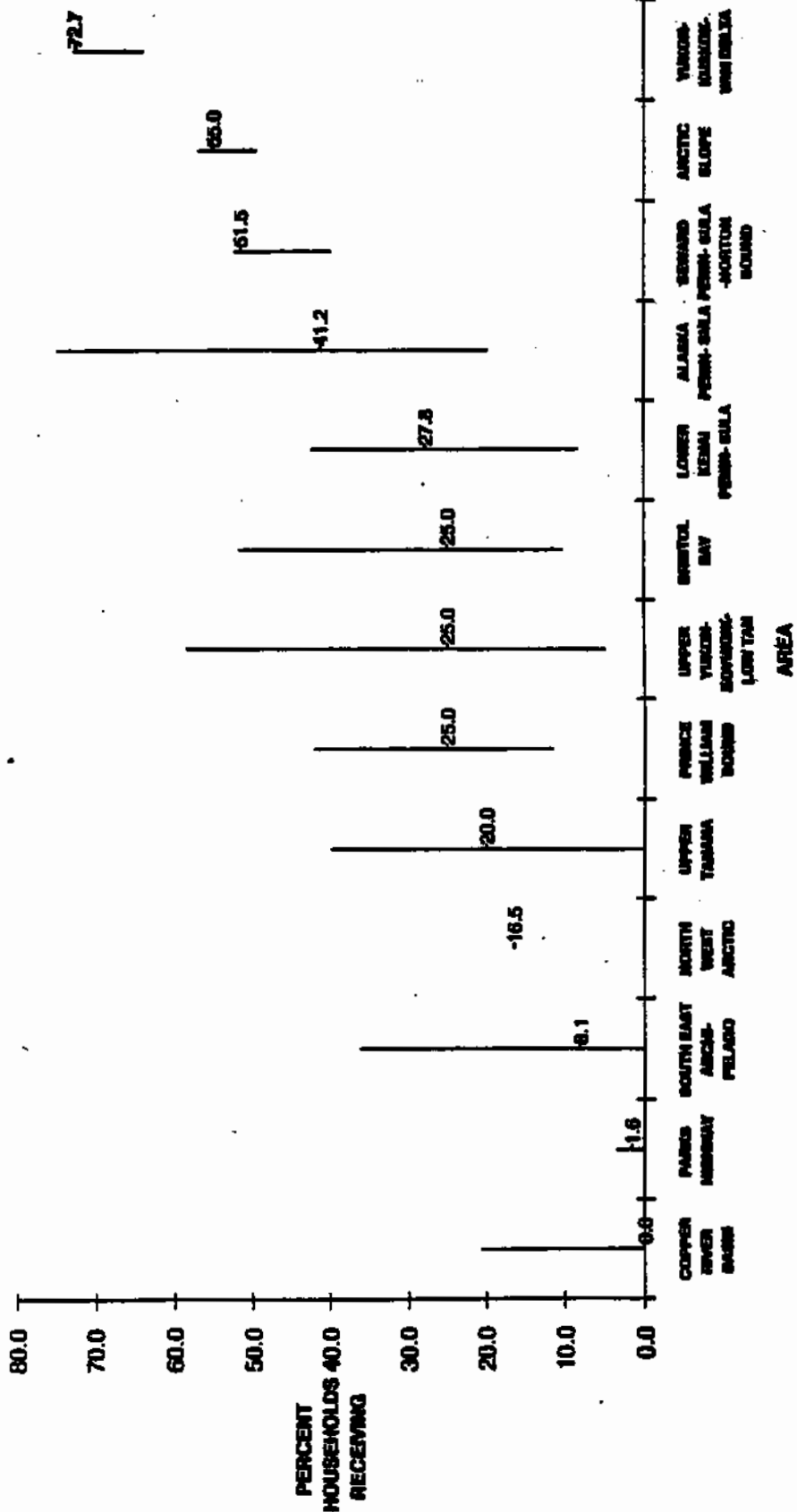
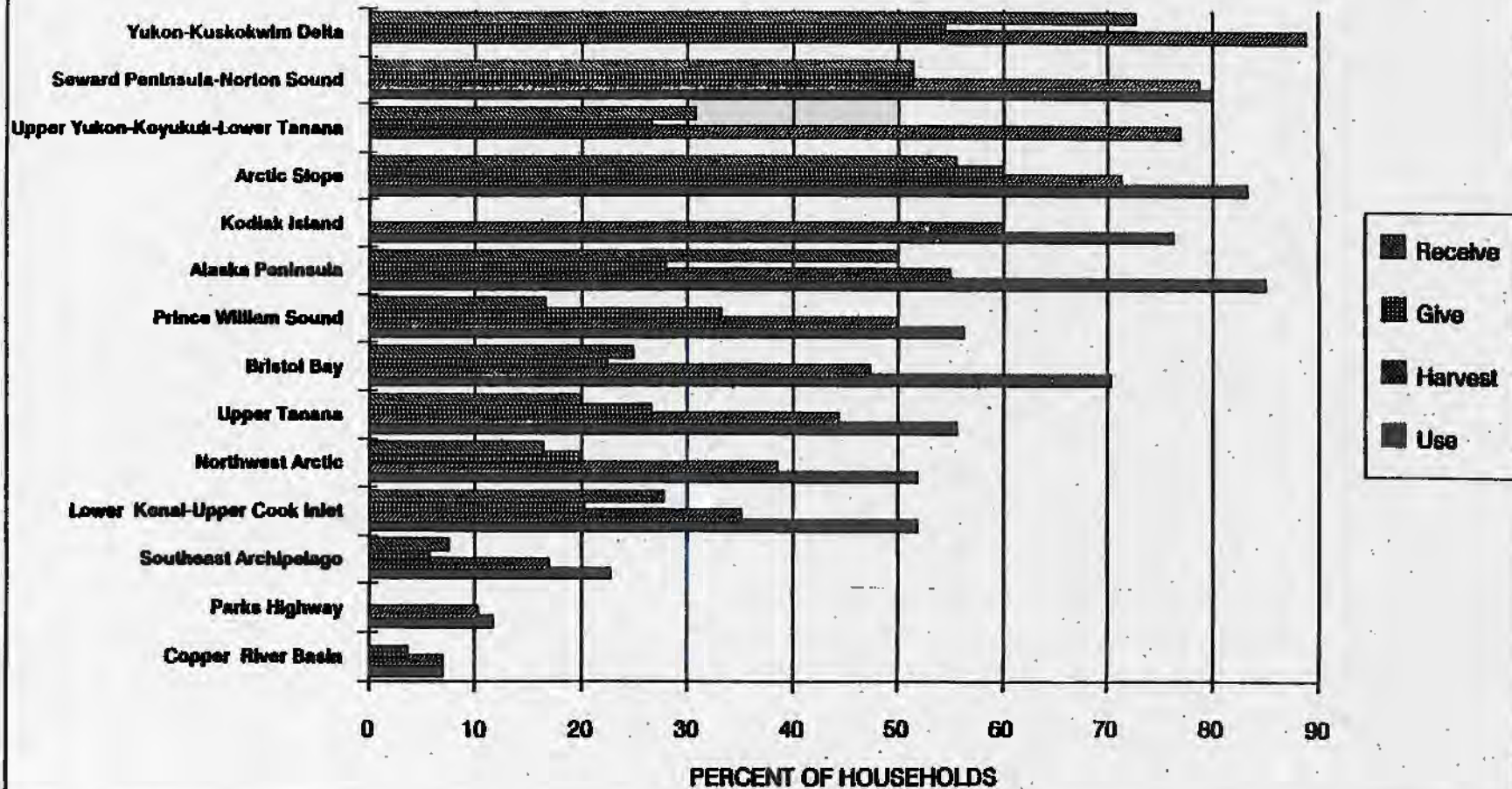


FIGURE 23. COMMUNITY RECEIVING OF MIGRATORY BIRDS: RANGE AND MEDIAN COMMUNITIES BY AREA



**FIGURE 24. PERCENT OF HOUSEHOLDS USING, HARVESTING, GIVING, AND RECEIVING MIGRATORY BIRDS BY RURAL AREA, MID-TO-LATE 1980s (MEDIAN COMMUNITY VALUE PER AREA)**



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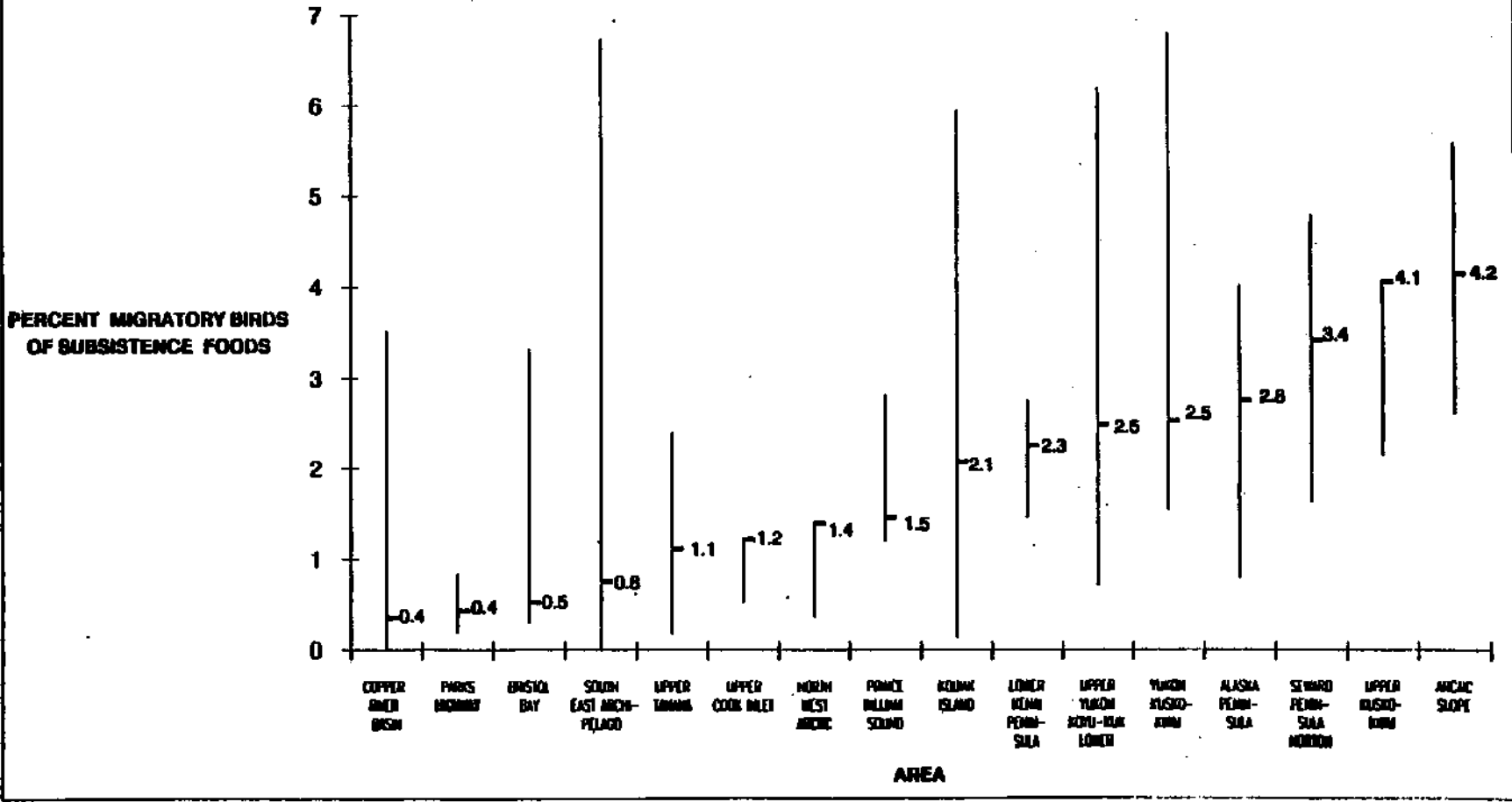
FIGURE 25. SEASONALITY OF MIGRATORY BIRD HARVESTS BY REGION AND AREA, 1980s

REGION	MIGRATORY BIRD HUNTING												SAMPLE	
	J	F	M	A	M	J	J	A	S	O	N	D		
<b>SOUTHEAST ARCHIPELAGO</b>														
SOUTHEAST	oooo	oo		oooo	oooo	oooo	oooo	Oox	XXX	XXX	XXX	XXX	XXX	9 of 32 communities
<b>PACIFIC-ALEUTIAN</b>														
PRINCE WILLIAM SD	XXXX	XXXX	XXXX					Oox	XXX	XXX	XXX	XXX	XXX	3 of 4 communities
LOWER KENAI PENIN	XXX	XXX	XXX	XXX	XXX	XXX			XXX	XXX	XXX	XXX	XXX	2 of 3 communities
KODIAK ISLAND	XXX	XXX	XXX	XXXX	XXXX			oo	XXXX	XXX	XXX	XXX	XXX	6 of 9 communities
S ALASKA PENINSULA	XXX	XXX	XXX	XXoo	X	XX			XXX	XXX	XXX			5 of 9 communities
ALEUTIAN-PRIBILOF	XXX	XXX	XXX	XXOO	OO				OOOO	OOOO	OXXX	XXox		5 of 9 communities
<b>SUBARCTIC COAST-INTERIOR</b>														
N ALASKA PENINSULA				XXXX	XXXX	X		XXXX	XXX	XXX				7 of 7 communities
BRISTOL BAY-ILIAMNA				oXXX	XXXX	OO		ooOO	OXXX	XXOO				11 of 18 communities
YUKON-KUSK DELTA			oooo	ooxx	XXXX	XXOO	OOOO	XXXX	XXX	XXox	oooo			17 of 38 communities
S NORTON SOUND				XXXX	XXox	oooo		Ox	XXX	ooo				3 of 3 communities
UPPER COOK INLET				XX	XXX	XXXX		x	XXX	XXX				2 of 2 communities
UPPER KUSKOKWIM				ooXX	XXX	XXox	OOOO	XXXX	XXox	OO				9 of 13 of communities
U YUKON-KOYUKUK				oXXX	XXX	XXox	XXXX	XXX	XXX	OO				15 of 32 communities
<b>ARCTIC</b>														
SEWARD PEN-BERING	OOOO	OOOO	OOOO	XXXX	XXX	XXX	XXX	XXX	XXX	XXX	XXXX	OOOO	OOOO	9 of 17 communities
NORTHWEST ARCTIC				O	OXXX	XXX	XXX	XXX	XXX	XXX	XX			7 of 11 communities
ARCTIC SLOPE			o	OOOX	XXX	XXX	XXX	XXX	XXX					7 of 11 communities
<b>ROAD NETWORK</b>														
UPPER TANANA			o	oooo	OOOO	oooo	OOOO	OOOO	XXX	XXOO				5 of 7 communities

Percent of communities hunting: o = 1-24%; O = 25-49%; x = 50-74%; X = 75-100%

537

**FIGURE 30. NUTRITIONAL CONTRIBUTION OF MIGRATORY BIRDS TO SUBSISTENCE DIET, RANGE AND MEDIAN COMMUNITIES BY AREA**



APPENDIX TABLE 1

ESTIMATED NUMBER OF MIGRATORY BIRDS AND EGGS HARVESTED  
BY RURAL ALASKA COMMUNITIES, EXPANDED TO 1988 COMMUNITY POPULATIONS

	NUMBER OF BIRDS					TOTAL BIRDS	NUMBER OF EGGS				TOTAL EGGS
	GEESSE	DUCKS	CRANES	SWANS	OTHER		GOOSE	DUCK	GULL	OTHER	
<b>SOUTHEAST ARCHIPELAGO</b>											
Angoon	46	242	0	0	0	288				0	0
Bal. of Petersburg Census SA*	41	216	0	0	14	271				27	27
Bal. of Wrangell Census SA *	29	152	0	0	10	191				19	19
Beecher Pass	85	833	0	0	0	918				0	0
Cape Pole	281	1000	0	0	625	1906				0	0
Coffman Cove	12	228	0	0	0	240				0	0
Craig	57	455	0	0	172	684				0	0
Edna Bay	15	152	0	0	54	221				24	24
Elfin Cove	0	0	0	0	0	0				0	0
Guetavus	21	256	0	0	10	287				0	0
Haines	0	654	0	0	74	727				0	0
Hollis	3	23	0	0	11	37				0	0
Hoonah	83	774	0	0	7	863				295	295
Hydaburg	29	151	0	0	0	181				643	643
Hyder	68	106	0	0	43	216				0	0
Kake	8	252	0	0	0	260				0	0
Kasaan	0	25	0	0	0	25				0	0
Klawock	73	186	0	0	0	258				571	571
Klukwan	14	36	0	0	0	49				0	0
Metlakatla	241	1024	0	0	14	1278				0	0
Meyers Chuck	53	212	0	0	68	333				0	0
North Whale Pass	8	42	0	0	0	50				0	0
Pelican	33	191	0	0	23	246				57	57
Petersburg	1851	5468	0	0	126	7274				0	0
Point Baker	17	49	0	0	0	66				0	0
Port Protection	8	89	0	0	9	106				0	0
Port Alexander	9	103	0	0	0	111				0	0
Saxman	2	79	0	0	39	120				0	0
Sitka	197	3950	0	0	246	4394				0	0
Skagway	7	89	0	0	0	96				0	0
Tenakee Springs	37	166	0	0	19	218				0	0
Thorne Bay	22	377	0	0	13	412				0	0
Wrangell	422	1775	0	0	197	2394				0	0
Yakutat	145	1010	0	0	57	1211				1183	1183
TOTAL FOR REGION	3717	20383	0	0	1846	25955				2819	2819
<b>PRINCE WILLIAM SOUND</b>											
Chanega Bay	8	151	0	0	0	157					32
Cordova (includes Eyak)	232	2226	13	0	0	2471					1358
San Juan Bay	0	66	0	0	0	66					0
Tattler	19	311	0	0	0	330	0	89	257	142	457
TOTAL FOR REGION	257	2754	13	0	0	3024					1877
<b>LOWER KENAI PENINSULA</b>											
English Bay	0	498	0	0	179	676	0	0	203	28	231
Port Graham	0	554	0	0	30	584	0	0	130	13	141
Seidovia	9	127	0	0	0	136	0	0	0	0	0
TOTAL FOR REGION	9	1179	0	0	210	1397	0	0	333	41	372

APPENDIX TABLE 1  
(CONTINUED)

ESTIMATED NUMBER OF MIGRATORY BIRDS AND EGGS HARVESTED  
BY RURAL ALASKA COMMUNITIES, EXPANDED TO 1988 COMMUNITY POPULATIONS

	NUMBER OF BIRDS					TOTAL BIRDS	NUMBER OF EGGS				TOTAL EGGS
	GEESSE	DUCKS	CRANES	SWANS	OTHER		GOOSE	DUCK	GULL	OTHER	
<b>KODIAK ISLAND</b>											
Aktiek	268	909	0	0	0	1177					348
Bal. of Kodiak Island Census SA*	33	851	0	0	0	884					350
Chiniak	5	100	0	0	0	105					165
Kariuk	3	1337	0	0	0	1340					25
Kodiak City	59	1528	0	0	0	1587					1007
Kodiak Coast Guard Station	38	150	0	0	0	186					0
Larsen Bay	4	1108	0	0	0	1111					504
Old Harbor	187	1888	0	0	0	2075					1188
Ouzinkle	229	2810	0	0	0	2839					1648
Port Lions	3	930	0	0	0	933					144
TOTAL FOR REGION	829	11427	0	0	0	12256					5685
<b>ALASKA PENINSULA</b>											
Chignik Bay	47	103	0	0	0	150	0	0	0	0	0
Chignik Lagoon	26	139	0	0	0	165	0	0	0	0	0
Chignik Lake	22	331	0	0	21	374	0	0	468	0	468
Cold Bay *	129	571	9	3	20	733	1	43	1071	77	1192
Egegik	2	862	0	0	39	703	3	39	819	0	962
False Pass	182	574	0	0	0	756	0	0	894	0	894
Ivanof Bay	86	188	0	0	0	262	0	0	79	0	79
King Cove *	449	1991	33	11	71	2554	2	148	3732	270	4152
King Salmon*	531	2359	39	13	64	3026	0	0	0	0	0
Naknek*	313	1390	23	8	50	1784	0	0	0	0	0
Nelson Lagoon	39	294	0	0	0	333	0	3	136	46	184
Perryville	1	179	0	0	0	180	0	0	1016	0	1016
Pilot Point	160	412	50	17	53	693	0	78	1123	2	1203
Port Heiden	200	416	8	0	16	639	0	48	2118	398	2563
Sand Point *	550	2442	40	13	87	3134	2	182	4578	331	5093
South Naknek*	160	710	12	4	25	911	0	0	0	0	0
Ugashik	21	112	9	1	5	148	0	100	134	0	234
TOTAL FOR REGION	2920	12862	221	70	472	16536	8	841	16269	1122	18040
<b>BRISTOL BAY</b>											
Aleknagik *	71	328	8	4	0	408	9	29	279	14	331
Bal. of Bristol Bay Census Area *	13	62	1	1	0	77	2	5	53	3	62
Bal. of Dillingham Census Area *	48	214	4	2	0	268	8	19	183	9	217
Clark's Point *	31	143	3	2	0	178	4	13	122	6	145
Dillingham	374	2810	15	0	0	3199	0	0	301	19	321
Ekwok	31	208	0	1	0	238	0	0	0	0	0
Igrugig	18	119	0	0	0	137	0	24	72	72	187
Iliamna	24	42	0	0	0	67	0	75	285	16	378
Kokhanok	13	114	1	0	0	129	0	0	164	0	184
Koilganek	212	859	1	16	0	1088	10	31	148	0	187
Lavelock	163	458	12	5	0	638	178	488	970	15	1648
Manokotak	357	772	99	42	0	1270	40	0	2480	0	2520

APPENDIX TABLE 1  
(CONTINUED)

ESTIMATED NUMBER OF MIGRATORY BIRDS AND EGGS HARVESTED  
BY RURAL ALASKA COMMUNITIES, EXPANDED TO 1985 COMMUNITY POPULATIONS

	NUMBER OF BIRDS					TOTAL BIRDS	NUMBER OF EGGS				TOTAL EGGS
	GEESE	DUCKS	CRANES	SWANS	OTHER		GOOSE	DUCK	GULL	OTHER	
New Stuyahok	198	891	8	2	0	897	0	0	277	0	277
Newhalen	18	147	0	7	0	169	0	37	908	32	977
Nondalton	78	511	0	4	0	593	0	28	181	71	277
Pedro Bay	8	131	0	0	0	137	0	19	484	18	501
Port Alsworth	21	88	0	0	0	109	0	0	0	0	0
Portage Creek *	14	63	1	1	0	79	2	6	54	3	64
Togiak *	218	1008	19	11	0	1254	28	89	861	43	1021
Twin Hills*	17	80	1	1	0	99	2	7	68	3	81
TOTAL FOR REGION	1920	8842	170	98	0	11030	279	884	7887	323	9333
YUKON-KUSKOKWIM DELTA											
SOUTH COAST											
Eek *	313	1121	83	180	130	1808	8	22	11	100	139
Kipruk *	497	1780	132	258	207	2870	9	35	18	158	220
Kongigariak *	354	1270	94	182	147	2047	8	28	13	113	157
Kwigillingok *	297	1085	79	182	124	1716	5	21	11	95	132
Tuntutuliak	357	1278	95	183	148	2061	8	25	13	114	158
Total for Subregion	1817	6514	483	932	758	10803	33	128	65	578	805
ADDITIONAL SOUTH COAST											
Goodnews Bay *	585	558	5	9	0	1188	5	21	11	93	130
Platinum *	158	150	1	2	0	312	1	5	3	25	35
Quinhagak	1100	1048	8	17	0	2174	10	39	20	178	244
Total for Subregion	1843	1758	14	28	0	3642	17	65	33	294	409
MID COAST											
Chetarnak *	580	1078	56	150	85	1917	25	33	34	33	125
Chevak	1058	2086	107	288	184	3581	48	83	65	84	240
Hooper Bay	1362	2685	138	371	212	4747	82	81	84	83	310
Mekoryuk *	302	590	31	82	47	1052	14	18	19	18	69
Newtok *	411	804	42	112	84	1432	19	24	25	25	94
Nightmute *	304	594	31	83	47	1059	14	18	19	18	69
Scammon Bay	803	1181	81	184	94	2104	27	38	37	37	137
Toksook Bay *	719	1408	73	198	112	2505	33	43	44	44	164
Tununak	631	1235	84	172	98	2200	29	38	39	38	144
Total for Subregion	5937	11518	603	1817	922	20997	270	384	387	380	1352
NORTH COAST											
Alakanuk *	1238	1351	108	214	4	2914	84	29	0	8	98
Emmonak	1365	1489	119	236	5	3213	70	32	0	8	108
Kotik	911	983	79	157	3	2144	47	21	0	4	72
Sheldon Point *	278	301	24	48	1	650	14	7	0	1	22
Totals for Subregion	3789	4134	330	658	13	8922	198	89	0	17	301
LOWER KUSKOKWIM RIVER											
Akiachak *	398	3078	48	198	48	3767	3	88	0	7	79
Akiak *	250	1838	29	125	29	2372	2	43	0	4	50
Aniak	417	3228	48	208	48	3947	3	72	0	7	83
Atkasutluk *	203	1589	23	101	23	1820	2	35	0	4	40
Kasigluk*	351	2718	40	175	41	3323	3	61	0	8	70

APPENDIX TABLE 1  
(CONTINUED)

ESTIMATED NUMBER OF MIGRATORY BIRDS AND EGGS HARVESTED  
BY RURAL ALASKA COMMUNITIES, EXPANDED TO 1986 COMMUNITY POPULATIONS

	NUMBER OF BIRDS					TOTAL BIRDS	NUMBER OF EGGS				TOTAL EGGS
	GEESE	DUCKS	CRANES	SWANS	OTHER		GOOSE	DUCK	GULL	OTHER	
Kwethluk	473	3662	55	236	59	4485	4	82	0	8	94
Lower Kalskag*	243	1884	28	122	28	2305	2	42	0	4	48
Napaklak*	259	2005	30	129	30	2454	2	45	0	5	52
Napaklak*	263	2032	30	131	30	2486	2	45	0	5	52
Nunapitchuk	308	2387	36	154	36	2821	2	53	0	8	61
Oscarville	55	422	6	27	6	517	0	9	0	1	11
Tulksak	278	2153	32	139	32	2634	2	48	0	5	55
Upper Kalskag*	133	1033	15	67	15	1254	1	23	0	2	27
Totals for Subregion	3632	28106	419	1815	420	34391	28	629	0	65	722
<b>YUKON RIVER</b>											
Marshall (Fortuna Lodge)	231	538	22	141	25	957	0	11	5	10	28
Mountain Village	560	1305	54	342	60	2321	0	26	13	24	63
Pilot Station*	349	813	34	213	35	1448	0	16	8	15	39
Pitka's Point	87	203	8	53	9	361	0	4	2	4	10
Russian Mission	190	442	18	118	20	788	0	9	4	8	21
Saint Marys (Andreasky)	376	876	37	229	41	1559	0	17	9	15	42
Totals for Subregion	1792	4176	174	1093	193	7429	0	63	41	78	202
Bethel	751	4668	41	148	33	5638	0	0	0	32	32
TOTAL FOR REGION	19581	60972	2084	6285	2338	91221	541	1349	506	1427	3822
<b>UPPER COOK INLET</b>											
Western Sustna	19	181	0	0	0	200					
Tyonek	9	213	0	0	0	222					
TOTAL FOR REGION	28	394	0	0	0	422					
<b>UPPER KUSKOKWIM</b>											
Bal. of Aniak Census Subarea*	50	218	5	0	0	271					0
Bal. of McGrath-Holy Cross CSA*	80	344	8	0	0	433					0
Chuathbaluk*	98	418	10	0	0	526					0
Crooked Creek*	99	425	10	0	0	534					0
Lake Minchumina*	28	118	3	0	0	149					0
Lime Village*	38	152	4	0	0	204					0
McGrath	343	1372	34	0	0	1750					0
Nikolai	158	827	17	0	0	1009					0
Red Devil*	33	142	3	0	0	178					0
Sleetmute*	102	439	10	0	0	551					0
Sparrevohn Air Force Base*	12	51	1	0	0	64					0
Stony River*	72	310	7	0	0	390					0
Takotna*	43	182	4	0	0	229					0
Tatalina Station CDP*	10	44	1	0	0	55					0
Telida*	30	128	3	0	0	161					0
TOTAL FOR REGION	1204	5179	121	0	0	6903					0

APPENDIX TABLE 1  
(CONTINUED)

ESTIMATED NUMBER OF MIGRATORY BIRDS AND EGGS HARVESTED  
BY RURAL ALASKA COMMUNITIES, EXPANDED TO 1985 COMMUNITY POPULATIONS

	NUMBER OF BIRDS					TOTAL BIRDS	NUMBER OF EGGS				TOTAL EGGS
	GEESSE	DUCKS	CRANES	SWANS	OTHER		GOOSE	DUCK	GULL	OTHER	
<b>UPPER YUKON-KOYUKUK- LOWER TANANA</b>											
Allakaket	547	1580	16	12	0	2155					0
Anvik*	211	484	3	1	0	700					0
Arctic Village*	336	770	5	1	0	1113					0
Bal. of Koyukuk-Mid Yukon CSA*	2198	5043	34	7	0	7283					0
Bal. of Yukon Flats Census SA*	104	239	2	0	0	346					0
Beaver	518	666	7	0	0	1190					0
Bettles	13	67	0	0	0	80					0
Birch Creek*	74	169	1	0	0	244					0
Campion Station*	31	70	0	0	0	101					0
Central*	107	245	2	0	0	354					0
Chalkytsik*	236	549	4	1	0	792					0
Chicken*	122	280	2	0	0	405					0
Circle*	239	549	4	1	0	792					0
Eagle*	494	1132	8	2	0	1636					0
Eagle Village*	201	461	3	1	0	666					0
Fort Yukon	3190	7702	29	10	0	10930					0
Galena	537	1886	19	0	0	2442					0
Grayling*	572	1313	9	2	0	1896					0
Holy Cross*	605	1389	9	2	0	2006					0
Hughes	258	573	0	0	0	831					0
Huslia	800	1488	28	0	0	2313					0
Indian Mountain C DP*	33	76	1	0	0	110					0
Kaltag*	707	1623	11	2	0	2343					0
Koyukuk*	364	835	6	1	0	1206					0
Manley Hot Springs*	224	514	3	1	0	742					0
Minto	592	1563	0	0	0	2155					0
Nenana*	1384	3175	22	4	0	4585					0
Nulato*	936	2146	15	3	0	3102					0
Rampart*	150	344	2	0	0	497					0
Ruby*	613	1407	10	2	0	2031					0
Shageluk*	368	841	6	1	0	1214					0
Stevens Village	170	476	10	0	0	656					0
Tanana	759	975	15	0	0	1749					0
Venetie*	603	1383	9	2	0	1998					0
Wiseman*	64	146	1	0	0	211					0
TOTAL FOR REGION	18362	42162	292	58	0	60874					0
<b>SEWARD-NORTON SOUND</b>											
Bal. of Nome Census Area*	444	509	55	10	0	1019	4	117	259	60	441
Brevig Mission	815	218	6	3	0	1042	13	283	242	289	807
Elm*	863	990	108	20	0	1980	8	228	584	116	856
Golovin	503	498	90	17	1	1109	21	53	390	160	624
Koyuk*	736	843	92	17	0	1688	7	194	429	99	730
Nome*	5301	6087	668	87	0	12130	5	112	248	57	421
Port Clarence*	142	163	18	3	0	326	1	38	83	19	141
Saint Michael*	1046	1198	130	24	0	2398	10	276	610	140	1037
Shaktocik*	594	681	74	14	0	1362	6	157	347	80	589
Shishmaref	890	1092	16	0	0	1999	0	662	1515	63	2230

65,000 Timber  
Swans  
in the  
state

APPENDIX TABLE 1  
(CONTINUED)

ESTIMATED NUMBER OF MIGRATORY BIRDS AND EGGS HARVESTED  
BY RURAL ALASKA COMMUNITIES, EXPANDED TO 1986 COMMUNITY POPULATIONS

	NUMBER OF BIRDS					TOTAL BIRDS	NUMBER OF EGGS				TOTAL EGGS
	GEESE	DUCKS	CRANES	SWANS	OTHER		GOOSE	DUCK	GULL	OTHER	
Stebbins	1798	2913	413	77	0	5198	13	358	791	182	1344
Teller*	900	1031	112	21	0	2064	9	238	525	121	892
Umanakleet*	2785	3189	344	83	0	6342	27	731	1614	371	2792
Wales*	521	597	85	12	0	1195	5	138	304	70	517
White Mountain*	597	585	74	14	0	1370	6	158	348	80	592
TOTAL FOR REGION	17913	20875	2253	381	3	41224	137	3733	8209	1885	13962
<b>BERING STRAITS</b>											
Diomedes											
Gambell	3953	7713	0	0	37382	49048					
Savoonga											
TOTAL FOR REGION											
<b>NORTHWEST ARCTIC</b>											
Ambler*	158	418	1	0	4	581					593
Bal. of Northwest Arctic Bor. CA*	53	139	0	0	1	194					198
Buckland*	153	408	1	0	4	566					578
Deering*	95	251	1	0	2	349					358
Kiana*	242	642	2	0	8	893					911
Kivalina	221	222	1	0	46	490	0	0	21	274	296
Kobuk*	40	107	0	0	1	148					151
Kotzebue	1587	4543	16	0	0	6146					6459
Noatak*	204	541	2	0	5	752					787
Noorvik*	327	887	3	0	8	1205					1229
Selawik*	384	585	3	0	9	1342					1369
Shungnak*	140	370	1	0	3	515					525
TOTAL FOR REGION	3584	9471	33	0	69	13178					13428
<b>ARCTIC SLOPE</b>											
Anaktuvuk Pass*	399	344	0	0	0	744					833
Atkasuk*	319	275	0	0	0	594					505
Bal. of Barrow-Point Hope CSA*	32	27	0	0	0	59					51
Bal. of Prudhoe Bay-Kaktovik CSA	170	148	0	0	0	318					269
Barrow	3047	4122	0	0	0	7169					8178
Cape Lisburne*	18	18	0	0	0	34					29
Deadhorse*	0	0	0	0	0	0					0
Kaktovik	719	352	0	0	0	1072					558
Nuiqsut	1134	327	0	0	0	1461					221
Point Hope*	1002	894	0	0	1	1898					1587
Point Lay	669	668	0	0	3	1341					851
Prudhoe Bay*	0	0	0	0	0	0					0
Wainwright	1495	448	0	0	0	1943					1351
TOTAL FOR REGION	9005	7590	0	0	4	16598					14227
<b>COPPER RIVER BASIN</b>											
Chistochina	10	46	10	0	0	66					0
Chitina	2	24	0	0	0	26					0
Copper Center	45	183	15	0	0	243					0
East Glenn Highway	13	148	33	0	0	191					0
Gakona	0	140	0	0	0	140					0



APPENDIX TABLE 1  
(CONTINUED)

ESTIMATED NUMBER OF MIGRATORY BIRDS AND EGGS HARVESTED  
BY RURAL ALASKA COMMUNITIES, EXPANDED TO 1985 COMMUNITY POPULATIONS

	NUMBER OF BIRDS					TOTAL BIRDS	NUMBER OF EGGS				TOTAL EGGS
	GEESE	DUCKS	CRANES	SWANS	OTHER		GOOSE	DUCK	GULL	OTHER	
Glennallen	0	40	0	0	0	40					0
Gulkana	22	36	0	0	0	58					0
Kenny Lake	0	90	0	0	0	90					0
Lake Louise	0	12	0	0	0	12					0
McCarthy	0	46	0	0	0	46					0
Mentasta	0	54	0	0	0	54					0
Mentasta Pass	0	53	0	2	0	55					0
Nabesna Road	0	0	0	0	0	0					0
North Siana Homestead	0	13	0	0	0	13					0
Paxson	6	395	21	0	0	422					0
Siana	0	0	0	0	0	0					0
Sourdough	0	22	0	0	0	22					0
South Siana Homestead	0	0	0	0	0	0					0
South Wrangell Mountains	8	16	0	0	0	24					0
Tazilna	13	65	16	0	0	94					0
Tonsina	2	102	0	0	0	104					0
West Glenn Highway	0	0	0	0	0	0					0
TOTAL FOR REGION	121	1461	86	2	0	1669					0
<b>PARKS HIGHWAY</b>											
Anderson	3	416	2	0	0	421					0
Cantwell	0	20	0	0	0	20					0
Chase	2	21	0	0	0	23					0
Gold Creek	0	12	0	0	0	12					0
Healy	20	112	1	0	0	133					0
Hurricane-Broad Pass	0	9	0	0	0	9					0
McKinley Park Village	10	25	1	0	0	35					0
Totals for Sample	47	552	5	0	0	607					0
TOTAL FOR REGION	35	616	4	0	0	653					0
<b>UPPER TANANA</b>											
Chisana	0	3	0	0	0	3					0
Dot Lake	0	60	0	0	0	60					0
Healy Lake*	5	128	0	0	0	133					1
Northway	128	1866	1	0	0	2088					0
Tanacross	38	332	0	0	0	370					19
Tertin	1	621	0	0	0	622					9
Tok	19	1362	15	0	0	1396					23
Totals for Sample	170	4351	19	0	0	4539					45
TOTAL FOR REGION	191	4462	17	0	0	4670					53

\* Unsurveyed communities for which harvests were extrapolated from surveyed communities.

APPENDIX TABLE 1  
(CONTINUED)

ESTIMATED NUMBER OF MIGRATORY BIRDS AND EGGS HARVESTED  
BY RURAL ALASKA COMMUNITIES, EXPANDED TO 1988 COMMUNITY POPULATIONS

	NUMBER OF BIRDS					TOTAL BIRDS	NUMBER OF EGGS				TOTAL EGGS
	GEESE	DUCKS	CRANES	SWANS	OTHER		GOOSE	DUCK	GULL	OTHER	
Glennallen	0	40	0	0	0	40					0
Gulkana	22	38	0	0	0	58					0
Kenny Lake	0	90	0	0	0	90					0
Lake Louise	0	12	0	0	0	12					0
McCarthy	0	46	0	0	0	46					0
Mentasta	0	54	0	0	0	54					0
Mentasta Pass	0	53	0	2	0	55					0
Nabeena Road	0	0	0	0	0	0					0
North Siana Homestead	0	13	0	0	0	13					0
Paxson	6	395	21	0	0	422					0
Siana	0	0	0	0	0	0					0
Sourdough	0	22	0	0	0	22					0
South Siana Homestead	0	0	0	0	0	0					0
South Wrangell Mountains	8	16	0	0	0	24					0
Tazlina	13	65	16	0	0	94					0
Tonsina	2	102	0	0	0	104					0
West Glenn Highway	0	0	0	0	0	0					0
TOTAL FOR REGION	121	1481	95	2	0	1699					0
<b>PARKS HIGHWAY</b>											
Anderson	3	418	2	0	0	421					0
Cantwell	0	20	0	0	0	20					0
Chase	2	21	0	0	0	23					0
Gold Creek	0	12	0	0	0	12					0
Healy	20	112	1	0	0	133					0
Hurricane-Broad Pass	0	9	0	0	0	9					0
McKinley Park Village	10	25	1	0	0	36					0
Totals for Sample	47	552	5	0	0	607					0
TOTAL FOR REGION	35	615	4	0	0	653					0
<b>UPPER TANANA</b>											
Chisana	0	3	0	0	0	3					0
Dot Lake	0	60	0	0	0	60					0
Healy Lake*	5	128	0	0	0	133					1
Northway	128	1968	1	0	0	2096					0
Tanacross	38	332	0	0	0	370					19
Tedlin	1	621	0	0	0	622					9
Tok	19	1362	15	0	0	1396					23
Totals for Sample	170	4351	16	0	0	4536					45
TOTAL FOR REGION	191	4462	17	0	0	4670					53

\* Unsurveyed communities for which harvests were extrapolated from surveyed communities.