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Table 19i: DISTRIBUTION OF HARVESTED FOODS TO EACH OUZINKIE HOUSEHOLD BY FOOD CATEGORY, 1982-1983[1,2,3,4]

	Akhiok	Karluk	Larsen Bay	Old Harbor	Ouzinkie	Port Lions	Kodiak	Elsewhere
Game	0	0	0	0	2.5 84%	.1 10%	.2 10%	.1 10%
Fish/Shellfish	0	* 3%	0	0	4.8 88%	.2 9%	.2 13%	.1 6%
Ducks/Birds	0	0	0	0	3.5 84%	.1 6%	.2 6%	.1 3%
Plants/Berries	0	0	0	0	1.3 69%	0	.1 6%	.1 6%

1. Numbers indicate the mean number of households in each place giving harvested foods to each Ouzinkie household. Symbol "*" is used when mean is less than .05.
2. Percentages indicate the percent of Ouzinkie households receiving any harvested food from each community.
3. Data are for a 12 month period, most often from June 1982 through May 1983. See methodology section for details.
4. Because of rounding and the computer techniques used to deal with missing data, the column, row, and category totals may not always equal 100% or the totals expected from the addition of constituent numbers.

Source: Data from KANA 1983 survey; table prepared by Subsistence Division, Alaska Department of Fish and Game.

Table 19j: DISTRIBUTION OF HARVESTED FOODS FROM EACH OUZINKIE HOUSEHOLD BY FOOD CATEGORY, 1982-1983[1,2,3,4]

	Akhiok	Karluk	Larsen Bay	Old Harbor	Ouzinkie	Port Lions	Kodiak	Elsewhere
Game	0	0	0	0	1.6 52%	.1 6%	.2 19%	.2 16%
Fish/Shellfish	0	0	0	0	4.1 78%	* 3%	.6 28%	.4 25%
Ducks/Birds	0	0	0	0	1.7 56%	0	.2 16%	.2 13%
Plants/Berries	0	0	0	0	.5 41%	.1 6%	* 6%	.1 6%

1. Numbers indicate the mean number of households in each place receiving harvested foods from each Ouzinkie household. Symbol "*" is used when mean is less than .05.
2. Percentages indicate the percent of Ouzinkie households giving any harvested food to each community.
3. Data are for a 12 month period, most often from June 1982 through May 1983. See methodology section for details.
4. Because of rounding and the computer techniques used to deal with missing data, the column, row, and category totals may not always equal 100% or the totals expected from the addition of constituent numbers.

Source: Data from KANA 1983 survey; table prepared by Subsistence Division, Alaska Department of Fish and Game.

Table 19k: DISTRIBUTION OF HARVESTED FOODS TO EACH PORT LIONS HOUSEHOLD BY FOOD CATEGORY, 1982-1983[1,2,3,4]

	Akhiok	Karluk	Larsen Bay	Old Harbor	Ouzinkie	Port Lions	Kodiak	Elsewhere
Game	0	0	0	.1 6%	.1 6%	.8 38%	.2 10%	.1 8%
Fish/Shellfish	0	.1 6%	* 4%	.1 8%	.2 8%	2.6 83%	.4 17%	.1 8%
Ducks/Birds	0	0	0	0	.1 8%	.8 48%	* 2%	0
Plants/Berries	0	0	* 2%	* 2%	* 2%	.5 29%	* 2%	* 4%

1. Numbers indicate the mean number of households in each place giving harvested foods to each Port Lions household. Symbol "*" is used when mean is less than .05.
2. Percentages indicate the percent of Port Lions households receiving any harvested food from each community.
3. Data are for a 12 month period, most often from June 1982 through May 1983. See methodology section for details.
4. Because of rounding and the computer techniques used to deal with missing data, the column, row, and category totals may not always equal 100% or the totals expected from the addition of constituent numbers..

Source: Data from KANA 1983 survey; table prepared by Subsistence Division, Alaska Department of Fish and Game.

Table 19 DISTRIBUTION OF HARVESTED FOODS FROM EACH PORT LIONS HOUSEHOLD BY FOOD CATEGORY, 1982-1983[1,2,3,4]

	Akhiok	Karluk	Larsen Bay	Old Harbor	Ouzinkie	Port Lions	Kodiak	Elsewhere
Game	0	0	0	* 4%	.2 6%	1.1 43%	.4 NA	.1 NA
Fish/Shellfish	0	0	* 2%	* 2%	.4 19%	3.0 70%	1.4 NA	.6 NA
Ducks/Birds	0	0	0	0	.2 6%	.6 30%	.2 NA	.1 NA
Plants/Berries	0	0	0	* 2%	0	.4 19%	.2 NA	.2 NA

1. Numbers indicate the mean number of households in each place receiving harvested foods from each Port Lions household. Symbol "*" is used when mean is less than .05.
2. Percentages indicate the percent of Port Lions households giving any harvested food to each community. "NA" means not available.
3. Data are for a 12 month period, most often from June 1982 through May 1983. See methodology section for details.
4. Because of rounding and the computer techniques used to deal with missing data, the column, row, and category totals may not always equal 100% or the totals expected from the addition of constituent numbers.

Source: Data from KANA 1983 survey, table prepared by Subsistence Division, Alaska Department of Fish and Game.

Table 19m: DISTRIBUTION OF HARVESTED FOODS TO EACH KODIAK HOUSEHOLD BY FOOD CATEGORY, 1982-1983[1,2,3,4]

	Akhiok	Karluk	Larsen Bay	Old Harbor	Ouzinkie	Port Lions	Kodiak	Elsewhere
Game	* 1%	* 1%	.1 3%	* 3%	* 2%	* 3%	.9 47%	.1 5%
Fish/Shellfish	* 2%	.1 7%	.1 4%	.1 3%	.1 6%	* 3%	2.7 80%	* 5%
Ducks/Birds	* 1%	* 1%	* 1%	* 1%	* 1%	* 1%	.1 6%	* 1%
Plants/Berries	* 1%	* 1%	* 1%	* 1%	* 1%	* 1%	.2 12%	* 2%

1. Numbers indicate the mean number of households in each place giving harvested foods to each Kodiak household. Symbol "*" is used when mean is less than .05.
2. Percentages indicate the percent of Kodiak households receiving any harvested food from each community.
3. Data are for a 12 month period, most often from June 1982 through May 1983. See methodology section for details.
4. Because of rounding and the computer techniques used to deal with missing data, the column, row, and category totals may not always equal 100% or the totals expected from the addition of constituent numbers.

Source: Data from KANA 1983 survey; table prepared by Subsistence Division, Alaska Department of Fish and Game.

Table 19n: DISTRIBUTION OF HARVESTED FOODS FROM EACH KODIAK HOUSEHOLD BY FOOD CATEGORY, 1982-1983[1,2,3,4]

	Akhiok	Karluk	Larsen Bay	Old Harbor	Ouzinkie	Port Lions	Kodiak	Elsewhere
Game	0	0	0	* 1%	* 1%	* 1%	.6 29%	.1 3%
Fish/Shellfish	0	0	0	* 1%	* 1%	* 2%	2.2 62%	.5 22%
Ducks/Birds	0	0	.1 1%	0	0	* 1%	* 1%	.1 1%
Plants/Berries	0	0	.1 1%	0	0	* 1%	.4 16%	.1 6%

1. Numbers indicate the mean number of households in each place receiving harvested foods from each Kodiak household. Symbol "*" is used when mean is less than .05.
2. Percentages indicate the percent of Kodiak households giving any harvested food to each community.
3. Data are for a 12 month period, most often from June 1982 through May 1983. See methodology section for details.
4. Because of rounding and the computer techniques used to deal with missing data, the column, row, and category totals may not always equal 100% or the totals expected from the addition of constituent numbers.

Source: Data from KANA 1983 survey; table prepared by Subsistence Division, Alaska Department of Fish and Game.

Table 19o: DISTRIBUTION OF HARVESTED FOODS TO EACH KODIAK CITY NATIVE HOUSEHOLD BY FOOD CATEGORY, 1982-1983[1,2,3,4]

	Akhiok	Karluk	Larsen Bay	Old Harbor	Ouzinkie	Port Lions	Kodiak	Elsewhere
Game	* 3%	.1 9%	0	* 3%	.1 6%	.2 9%	1.9 57%	.1 6%
Fish/Shellfish	* 3%	.1 14%	* 3%	* 3%	.1 9%	.3 9%	2.8 80%	* 3%
Ducks/Birds	.1 6%	* 3%	0	0	* 3%	.2 6%	.4 23%	* 3%
Plants/Berries	0	0	0	0	0	0	.3 20%	0

1. Numbers indicate the mean number of households in each place giving harvested foods to each Kodiak City Native household. Symbol "*" is used when mean is less than .05.
2. Percentages indicate the percent of Kodiak City Native households receiving any harvested food from each community.
3. Data are from a 12 month period, most often from June 1982 through May 1983. See methodology section for details.
4. Because of rounding and the computer techniques used to deal with missing data, the column, row, and category totals may not always equal 100% or the totals expected from the addition of constituent numbers.

Source: Data from KANA 1983 survey, table prepared by Subsistence Division, Alaska Department of Fish and Game.

Table 19p: DISTRIBUTION OF HARVESTED FOODS FROM EACH KODIAK CITY NATIVE HOUSEHOLD BY FOOD CATEGORY, 1982-1983[1,2,3,4]

	Akhiok	Karluk	Larsen Bay	Old Harbor	Ouzinkie	Port Lions	Kodiak	Elsewhere
Game	0	0	0	0	0	.2 6%	.9 40%	.1 9%
Fish/Shellfish	0	0	0	0	0	.2 6%	1.8 51%	.3 14%
Ducks/Birds	0	0	0	0	0	.1 3%	.6 17%	0
Plants/Berries	0	0	0	0	0	0	.5 11%	.2 9%

1. Numbers indicate the mean number of households in each place receiving harvested foods from each Kodiak City Native household.
2. Percentages indicate the percent of Kodiak City Native households giving any harvest food to each community.
3. Data are for a 12 month period, most often from June 1982 through May 1983. See methodology section for details.
4. Because of rounding and the computer techniques used to deal with missing data, the column, row, and category totals may not always equal 100% or the totals expected from the addition of constituent numbers.

Source: Data from KANA 1983 survey; table prepared by Subsistence Division, Alaska Department of Fish and Game.

on average, gave game to 1.3 Larsen Bay households, .1 Ouzinkie households, 1.4 Kodiak City households, and .7 households outside the study communities. About 45 percent of Karluk's households gave game to households in Larsen Bay, 5 percent to Ouzinkie households, 60 percent to Kodiak households, and 20 percent to households in locations other than the study communities.

Resource Use Areas

Areas used for non-commercial harvest of fish and game by the six rural communities on Kodiak Island were mapped by the Subsistence Division and Habitat Division of ADF&G with the cooperation of the Kodiak Area Native Association (KANA) in 1983. Figures 9 and 10 depict the overall contemporary resource use areas of these communities. Information on areas used by residents of the road connected area was provided by the KANA survey conducted in 1983 (Table 20, Figure 11). The following preliminary accounts of areas used by communities are taken from these data sources. Final maps and more detailed information on use areas will be available from the Habitat Guide Project, Alaska Department of Fish and Game, in 1984. Previous subsistence use area mapping was done by the Kodiak Island City and Borough as part of the Coastal Zone Management program; these maps should also be consulted.

Akhiok

Akhiok residents use the coastal and adjacent inland areas from Kiavik Bay to Cape Trinity, all of the coastline of Alitak Bay, Portage Bay, Deadman Bay, and Olga Bay, and the coastal and inland areas from Cape Alitak to Cape Grant for the harvest of fish and game

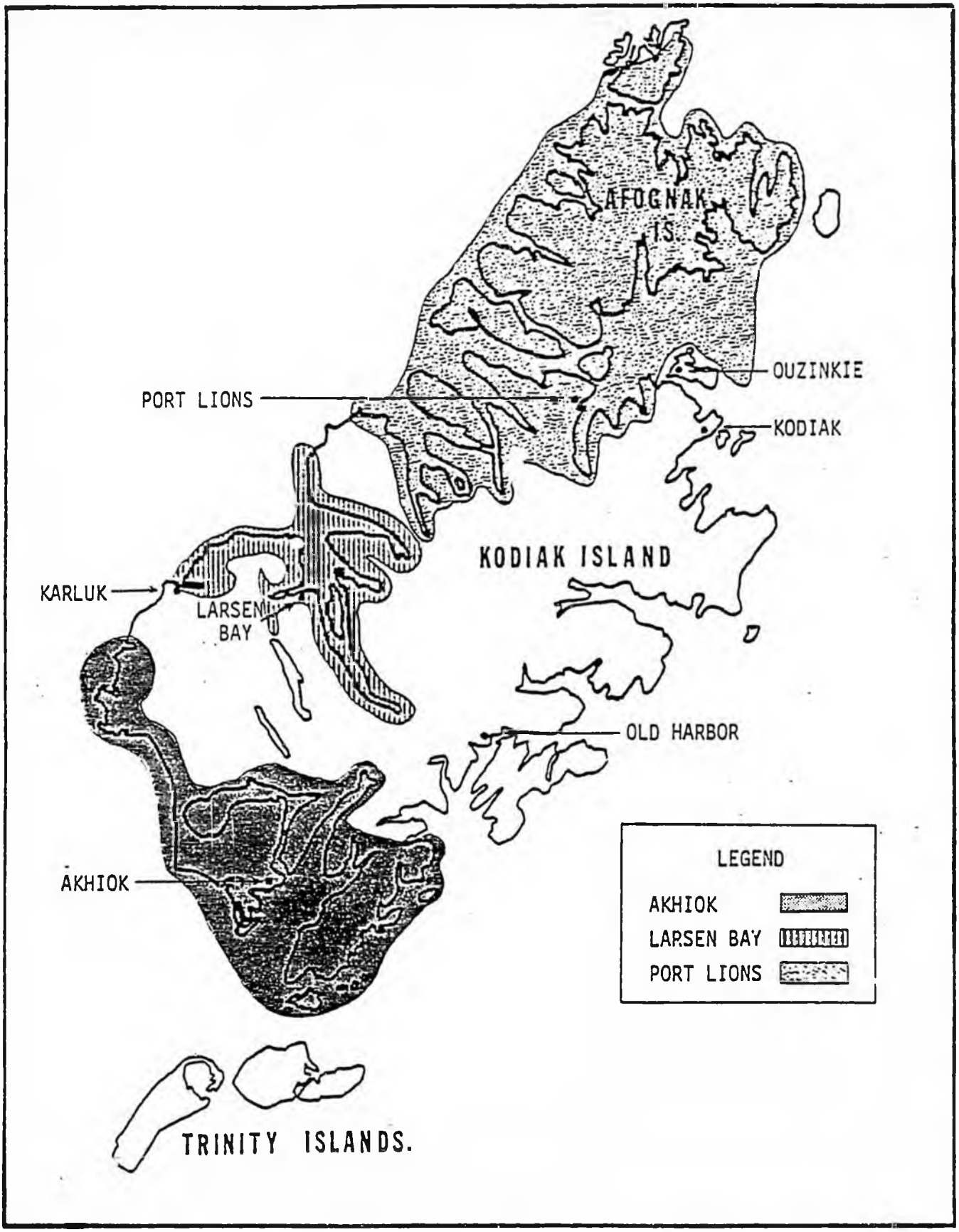

Figure 9. Resource Use Areas: Akhiok, Larsen Bay, Port Lions, 1982-1983.

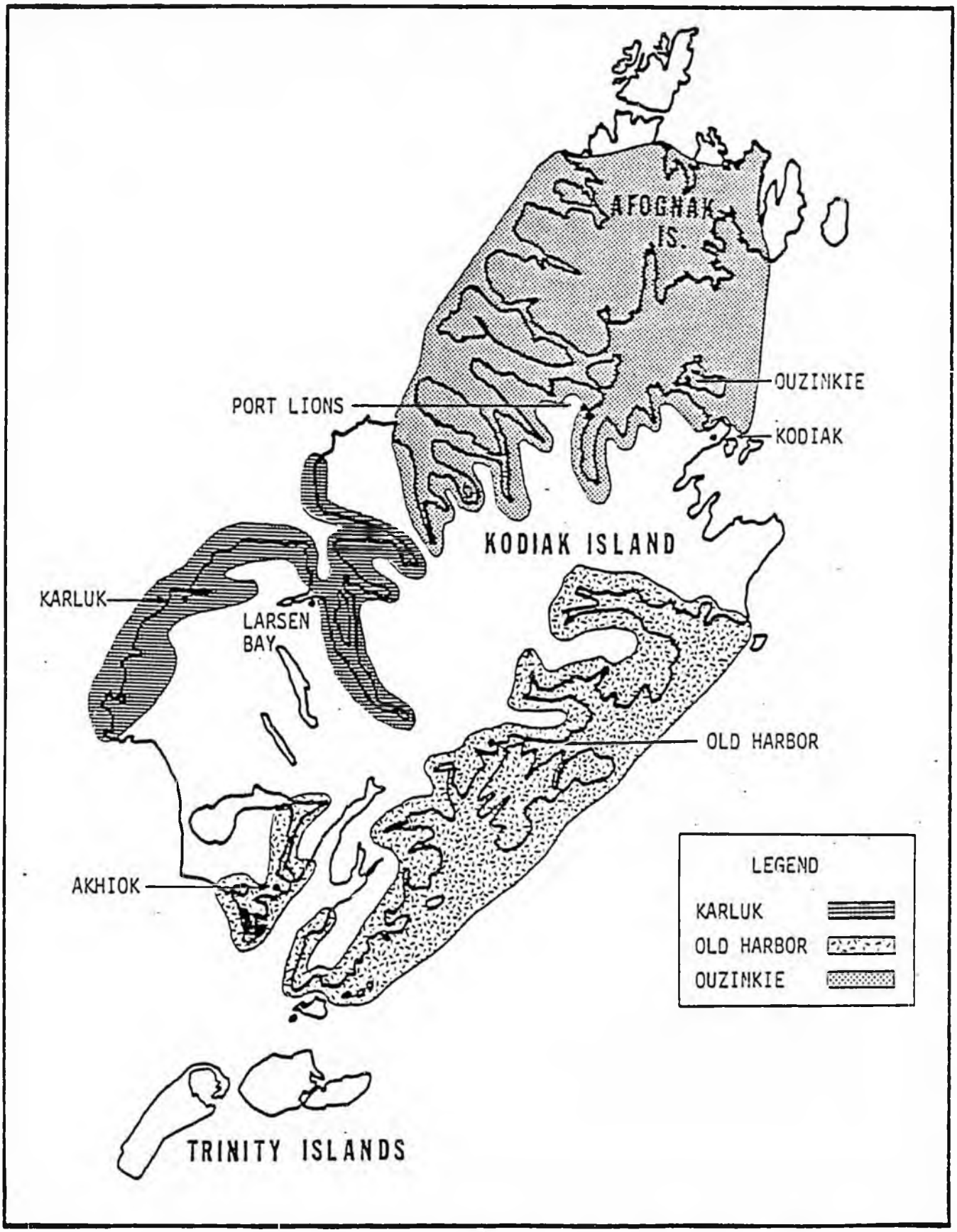

Figure 10. Resource Use Areas: Karluk, Old Harbor, Ouzinkie, 1982-1983.

Table 20: USE INTENSITY FOR HUNTING AND FISHING AREAS BY TYPE OF HARVEST BY HOUSEHOLD, KODIAK ROAD-CONNECTED POPULATION, 1982-1983[1,2,3,4]

	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Alaska Pen.	Kenai Pen.	Other
	Percent of households using each area (Mean number of trips for each household in each area)							
Salmon Fishing	74% (11.1)	2% (.2)	5% (.2)	6% (.2)	15% (.6)	2% (.4)	1% (-)	2% (.1)
Halibut Fishing	48% (4.0)	1% (-)	3% (-)	2% (.1)	5% (.1)	- (-)	- (-)	1% (-)
Freshwater Fishing	37% (4.8)	1% (-)	1% (.1)	5% (.4)	3% (.1)	- (-)	- (-)	1% (-)
Clam Harvesting	56% (2.5)	1% (-)	2% (-)	3% (.1)	3% (.1)	5% (.1)	- (-)	1% (-)
Crab Harvesting	30% (3.3)	5% (.3)	3% (.1)	1% (-)	2% (.1)	1% (-)	- (-)	1% (-)
Deer Hunting	34% (2.1)	1% (-)	3% (.2)	6% (.3)	12% (.5)	- (-)	- (-)	1% (-)
Br. Bear Hunting	2% (.2)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)
Waterfowl Hunting	8% (.4)	- (-)	- (-)	- (-)	3% (-)	- (-)	- (-)	- (-)
Marine Mammal Hunting	1% (.1)	- (-)	- (-)	- (-)	- (-)	- (-)	- (-)	1% (-)
ANY HARVEST ACTIVITY[5]	90%	8%	7%	12%	24%	7%	1%	4%

1. Data are from general sample of the road-connected area, including Kodiak City, Bells Flats, Women's Bay, Monashka Bay, and Service Area One.
2. Data are rounded to nearest percent and nearest decimal point. The symbol "-" indicates that percent use is less than .5% or mean number of trips is less than .05.
3. Data are for a 12 month period, most often from June 1982 through May 1983. See methodology section for details.
4. Because of rounding and the computer techniques used to deal with missing data, the column, row, and category totals may not always equal 100% or the totals expected from the addition of constituent numbers.
5. Trip data are not available for this category.

Source: Data from KANA 1983 survey; table prepared by Subsistence Division, Alaska Department of Fish and Game.

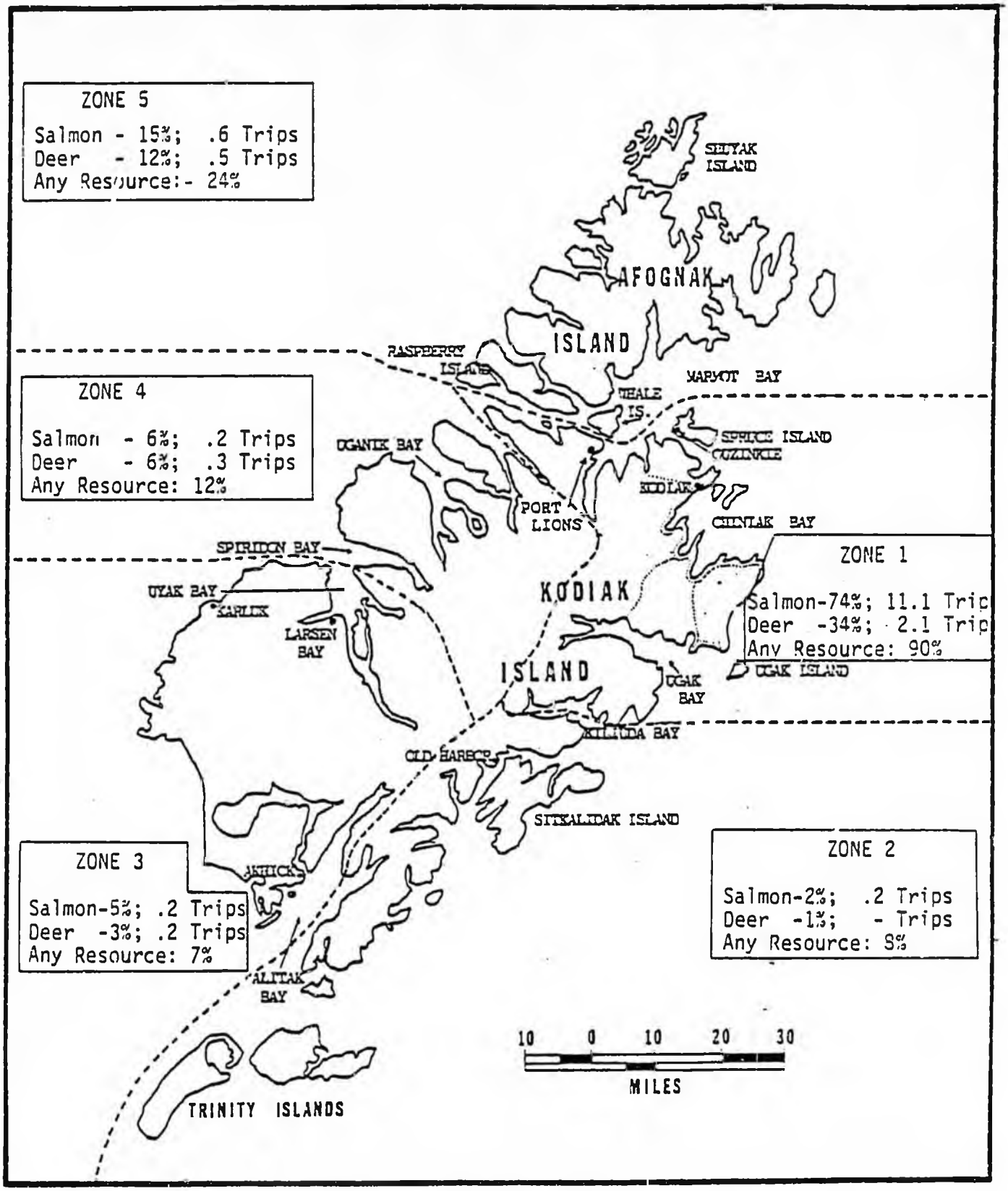

Figure 11. Use Intensity for Hunting and Fishing Areas by Type of Harvest, Kodiak Road-Connected Areas, 1982-1983.

resources for local consumption. Twoheaded Island, Geese Islands and the Aiatalik Island group are also important for resource harvest. Tugidak and Sitkinak Islands were used for resource harvesting in historic times, but little resource harvesting has taken place in recent years. Additional coastal areas may be used incidentally for resource harvesting when Akhiok residents are travelling by boat to other communities or commercial fishing.

Coastal habitats are of particular importance for the harvest of seal and sea lion which are hunted along rocky shores and of clams, crabs and other marine invertebrates, many of which are harvested from the intertidal zone. Deer and waterfowl are hunted in beach areas as well as inland. Anadromous fish species and marine fish are harvested in coastal areas.

The area bounded by a line crossing Alitak Bay from Cape Alitak and to Humpy Cove to the south and a line drawn north from Stockholm Point at the entrance to Olga Bay encompasses the resource harvesting area intensively used by Akhiok residents. Most salmon, halibut and other marine fish, clams and other invertebrates, and deer are harvested in this area. The other coastal areas listed are also regularly used particulary for the harvest of seal and sea lion and for salmon harvesting when fishing in areas closer to the village site is poor.

Karluk

Karluk residents use the coastal and adjacent inland areas from Inner Seal Rock near Gurney Bay to the mouth of the Karluk River, from the Karluk River mouth to Harvester Island, and all of the coastal area of Uyak and Spiridon Bays extending to Cape Kuliuk. Additional coastal

areas south of Gurney Bay may have been utilized at previous times.

Coastal hunting for seal, sea lion, waterfowl and deer provides a substantial amount of food for community residents. The coastal areas facing Shelikof Strait are frequently stormy and have few good moorages. Karluk residents frequently hunt and fish in the less exposed areas of Uyak and Spiridon Bays. Very close relationships exist between the two communities of Karluk and Larsen Bay.

Larsen Bay

Larsen Bay residents use the coastal and adjacent inland areas from the mouth of the Karluk River to Harvester Island, as well as that of Uyak Bay, Larsen Bay, and Spiridon Bay extending to Cape Kuliuk to the north.

These coastal areas of Uyak and Spiridon Bay are used intensively for hunting of seal, sea lion, deer, and waterfowl and for fishing for virtually all species taken by community residents. The coastal area between Harvester Island and Karluk River is used during frequent trips made by Larsen Bay residents to Karluk.

Old Harbor

Old Harbor residents use the coastal and adjacent inland areas from Narrow Cape in the northeast to Geese Channel in the southwest. Include are the coastlines and waters of Ugak Bay, Kiliuda Bay, Sitkalidak Strait, Kaiugnak Bay and Kaguyak Bay. Sitkalidak Island, Towheaded Island, and Geese Islands are also utilized.

Silver, pink, and chum salmon, halibut, crab, deer, waterfowl, seal and sea lion are the species that account for the greatest part of fish

and game harvest by Old Harbor residents in these areas.

Ouzinkie and Port Lions

Residents of Ouzinkie and Port Lions fish and hunt the coastlines, bays and adjacent inland areas of a large portion of north and northwest Kodiak Island and of the southern half of Afognak Island. Areas bounded by Ban Island in the northwest, Miners Point in the west, Spruce Cape in the east, and Tolstoi Point in the northeast, are used by Ouzinkie residents. Included are the coastal areas and waters of Tonki Bay, Marmot Strait, Izhut Bay, Marmot Bay, Kizhuyak Bay, Kupreanof Strait, Viekoda Bay, Uganik Passage, Uganik Bay, Rasberry Strait, Malina Bay, and Panamarof Bay. Coastal areas, waters, and inland portions of Spruce Island, Whale Island, Rasberry Island, and Uganik Island are also used. Areas close to communities are used more intensively, particularly for harvesting salmon.

Kodiak Road Connected Area

The areas most intensively used by Kodiak residents are those reachable by road or open skiff. These include Ugak Bay, Chiniak Bay, Monashka Bay, and into Narrow Strait, Kupreanof Bay, and Marmot Bay. Areas further from town are regularly used by hunters and fishermen on longer trips. Because of the large population of the road connected area, the great number of boats owned by local residents, and the high interest in fishing and hunting, almost the whole coastline of the Kodiak archipelago receives some use from Kodiak residents. This is demonstrated in Table 20 and by Figure 11. For example, 74 percent of the Kodiak General sample reported some salmon fishing activity in Zone 1, that area generally accessible by

road or a short trip by boat from Kodiak. The mean number of salmon fishing trips taken within this zone was 11.1 per household. However, portions of this sample also reported fishing for salmon in other parts of the Kodiak Island region, the Alaska Peninsula, and the Kenai Peninsula.

Seasonal Rounds of Wild Resource Use

Figures 12 through 17 present the seasonal round of wild resource use for each of the six non-road connected communities in the Kodiak Island area. Each figure depicts the time of year, in units of quarter months, when some harvesting of a particular resource occurs. The figures do not indicate when most of the harvest of a resource takes place, but only presence or absence of harvest during a particular quarter month. For example, residents of Akhick typically harvest red salmon from May through February. Harvesting of silver salmon begins in mid July and ends in late October. Halibut are taken year round.

SEASONAL ROUND OF RESOURCE HARVESTS: AKHIOK 1982-1983[1,2,3,4,5]

SPECIES	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
FISH												
Red Salmon	xxxx	xxxx			xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
King Salmon						xxxx	xxxx	xxxx	xxxx			
Silver Salmon							xx	xxxx	xxxx	xxxx		
Pink Salmon							xxx	xxxx	xxx			
Chum Salmon						xx	xxxx	xxxx	xxxx	x		
Halibut	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Dolly Varden	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Steelhead (Rainbow)	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Butter Clams	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Crab:												
King Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Tanner Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Dungeness Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
GAME												
Deer	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Hare	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Ptarmigan	xxxx	xxxx	xxxx	xxxx					xxxx	xxxx	xxxx	xxxx
Ducks	xxxx	xxxx	xxxx	xxxx					xxxx	xxxx	xxxx	xxxx
Geese	xxxx	xxxx	xxxx	xxxx	xxxx						xxxx	xxxx
Harbor Seal	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Sea Lion	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

1. Each "x" represents one quarter of a month.
2. An "x" means that named species are typically harvested during indicated time period.
3. The symbol "?" means that harvest during indicated time period has not been documented but may occur.
4. Refer to Tables 2 to 5 for magnitude of harvest and use.
5. Seasonal round data for other species is on file with the Subsistence Division, ADF&G.

Source: 1983 Field Interviews, Subsistence Division, Alaska Department of Fish and Game.

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TO ASSURE LEGIBILITY

road or a short trip by boat from Kodiak. The mean number of salmon fishing trips taken within this zone was 11.1 per household. However, portions of this sample also reported fishing for salmon in other parts of the Kodiak Island region, the Alaska Peninsula, and the Kenai Peninsula.

Seasonal Rounds of Wild Resource Use

Figures 12 through 17 present the seasonal round of wild resource use for each of the six non-road connected communities in the Kodiak Island area. Each figure depicts the time of year, in units of quarter months, when some harvesting of a particular resource occurs. The figures do not indicate when most of the harvest of a resource takes place, but only presence or absence of harvest during a particular quarter month. For example, residents of Akhick typically harvest red salmon from May through February. Harvesting of silver salmon begins in mid July and ends in late October. Halibut are taken year round.

Figure 12.

SEASONAL ROUND OF RESOURCE HARVESTS: AKHIOK 1982-1983[1,2,3,4,5]

SPECIES	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
FISH												
Red Salmon	xxxx	xxxx			xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
King Salmon						xxxx	xxxx	xxxx	xxxx			
Silver Salmon							xx	xxxx	xxxx	xxxx		
Pink Salmon							xxx	xxxx	xxx			
Chum Salmon						xx	xxxx	xxxx	xxxx	x		
Halibut	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Dolly Varden	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Steelhead (Rainbow)	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Butter Clams	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Crab:												
King Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Tanner Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Dungeness Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
GAME												
Deer	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Hare	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Ptarmigan	xxxx	xxxx	xxxx	xxxx					xxxx	xxxx	xxxx	xxxx
Ducks	xxxx	xxxx	xxxx	xxxx					xxxx	xxxx	xxxx	xxxx
Geese	xxxx	xxxx	xxxx	xxxx	xxxx						xxxx	xxxx
Harbor Seal	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Sea Lion	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

1. Each "x" represents one quarter of a month.
2. An "x" means that named species are typically harvested during indicated time period.
3. The symbol "?" means that harvest during indicated time period has not been documented but may occur.
4. Refer to Tables 2 to 5 for magnitude of harvest and use.
5. Seasonal round data for other species is on file with the Subsistence Division, ADF&G.

Source: 1983 Field Interviews, Subsistence Division, Alaska Department of Fish and Game.

Figure 13.

SEASONAL ROUND OF RESOURCE HARVESTS: KARLUK 1982-1983[1,2,3,4,5]

SPECIES	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
FISH												
Red Salmon					xxx	xxxx	xxxx	xxxx	x			
King Salmon					xxx	xxxx	x					
Silver Salmon							xx	xxxx	xxxx	xxx		
Pink Salmon							xx	xxx				
Chum Salmon							xx	xxx				
Halibut						xxxx	xxxx	xxxx	xxxx			
Dolly Varden	xx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Steelhead (Rainbow)					xxxx				xx	xxxx	xxxx	xx
Butter Clams	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Crab:												
King Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Tanner Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Dungeness Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
GAME												
Deer	x???	????	????	????	????	????	????	xxxx	xxxx	xxxx	xxxx	xxxx
Hare	xxxx	xxxx									xxxx	xxxx
Ptarmigan	xxxx	xxxx	xxxx								xxxx	xxxx
Ducks	xxxx	xxxx	xxxx	xxx						xx	xxxx	xxxx
Geese				xxxx								
Harbor Seal	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Sea Lion	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

1. Each "x" represents one quarter of a month.
2. An "x" means that named species are typically harvested during indicated time period.
3. The symbol "?" means that harvest during indicated time period has not been documented but may occur.
4. Refer to Tables 2 to 5 for magnitude of harvest and use.
5. Seasonal round data for other species is on file with the Subsistence Division, ADF&G.

Source: 1983 Field Interviews, Subsistence Division, Alaska Department of Fish and Game.

Figure 14.
SEASONAL ROUND OF RESOURCE HARVESTS: LARSEN BAY 1982-1983[1,2,3,4,5]

SPECIES	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
FISH												
Red Salmon						xxxx	xxxx	xxxx	xxxx	xxx		
King Salmon					xxxx	xxxx	xxx					
Silver Salmon							xxxx	xxxx	xxxx	xxxx	xxxx	xxx
Pink Salmon						xxxx	xxxx	xxxx	xxxx	xxx		
Chum Salmon						xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	x
Halibut	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Dolly Varden		x	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx			
Steelhead (Rainbow)	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Butter Clams	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Crab:												
King Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Tanner Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Dungeness Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
GAME												
Deer	xxxx	????	????	????	????	????	????	xxxx	xxxx	xxxx	xxxx	xxxx
Hare	xxxx	xxxx	xxx						xxxx	xxxx	xxxx	xxxx
Ptarmigan	xxxx	xxxx	xxxx	xxxx					xxxx	xxxx	xxxx	xxxx
Ducks	(in season only, Oct. 8 to Jan. 22)											
Geese	(rarely present locally)							xxxx	xxxx	xxxx	xxxx	
Harbor Seal	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Sea Lion	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

1. Each "x" represents one quarter of a month.
2. An "x" means that named species are typically harvested during indicated time period.
3. The symbol "?" means that harvest during indicated time period has not been documented but may occur.
4. Refer to Tables 2 to 5 for magnitude of harvest and use.
5. Seasonal round data for other species is on file with the Subsistence Division, ADF&G.

Source: 1983 Field Interviews, Subsistence Division, Alaska Department of Fish and Game.

Figure 15.

SEASONAL ROUND OF RESOURCE HARVEST: OLD HARBOR 1982-1983[1,2,3,4,5]

SPECIES	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
FISH												
Red Salmon	xxxx	x			xx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
King Salmon							xxxx	xxxx				
Silver Salmon								xx	xxxx	xxxx	xxxx	xx
Pink Salmon						x	xxxx	xxxx	x			
Chum Salmon								xx	xxxx	xx		
Halibut					xxxx	xxxx	xxxx	xxxx	xxxx			
Dolly Varden	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Steelhead (Rainbow)	(rarely found)											
Butter Clams	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Crab:												
King Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Tanner Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Dungeness Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
GAME												
Deer	xxxx	????	????	????	????	????	????	xxxx	xxxx	xxxx	xxxx	xxxx
Hare	xxxx	xxxx	xxxx								xxxx	xxxx
Ptarmigan	xxxx	xxxx	xxxx								xxxx	xxxx
Ducks	xxxx	xxxx	xxxx							xxxx	xxxx	xxxx
Geese	xxxx	xxxx	xxxx							xxxx	xxxx	xxxx
Harbor Seal	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Sea Lion	xxxx	xxxx	xxxx								xxxx	xxxx
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

1. Each "x" represents one quarter of a month.
2. An "x" means that named species are typically harvested during indicated time period.
3. The symbol "?" means that harvest during indicated time period has not been documented but may occur.
4. Refer to Tables 2 to 5 for magnitude of harvest and use.
5. Seasonal round data for other species is on file with the Subsistence Division, ADF&G.

Source: 1983 Field Interviews, Subsistence Division, Alaska Department of Fish and Game.

Figure 16.

SEASONAL ROUND OF RESOURCE HARVEST: OUZINKIE 1982-1983[1,2,3,4,5]

SPECIES	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
FISH												
Red Salmon					xx	xxxx						
King Salmon	(not usually present)											
Silver Salmon								xx	xxxx	xxxx	xxxx	
Pink Salmon							xxxx	xxxx	xxxx	xxxx		
Chum Salmon							xxxx	xxxx	xxxx	xxxx		
Halibut	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Dolly Varden				xxxx	xxxx	xxxx	xxxx	xxxx				
Steelhead (Rainbow)				xxxx	xxx				xxxx	xxxx		
Butter Clams	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Crab:												
King Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Tanner Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Dungeness Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
GAME												
Deer	x???	????	????	????	????	????	????	xxxx	xxxx	xxxx	xxxx	xxxx
Hare	xxxx	xxxx	xxxx							xxxx	xxxx	xxxx
Ptarmigan	xxxx	xxxx	xxxx							xxxx	xxxx	xxxx
Ducks	xxxx	xxxx	xxxx	xxxx	xxxx				xxxx	xxxx	xxxx	xxxx
Geese				xxxx	xxxx			xx	xxxx	xx		
Harbor Seal	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Sea Lion	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

1. Each "x" represents one quarter of a month.
2. An "x" means that named species are typically harvested during indicated time period.
3. The symbol "?" means that harvest during indicated time period has not been documented but may occur.
4. Refer to Tables 2 to 5 for magnitude of harvest and use.
5. Seasonal round data for other species is on file with the Subsistence Division, ADF&G.

Source: 1983 Field Interviews, Subsistence Division, Alaska Department of Fish and Game.

Figure 17.
SEASONAL ROUND OF RESOURCE HARVESTS: PORT LIONS 1982-1983[1,2,3,4,5]

SPECIES	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
FISH												
Red Salmon					xxxx	xxxx	xxxx	xxxx	xx			
King Salmon				xx	xxxx	xxxx	xxxx	xxxx	xx			
Silver Salmon								xxx	xxxx	xxxx	xxxx	
Pink Salmon						xx	xxxx	xxxx				
Chum Salmon						xx	xxxx	xxxx	xx			
Halibut	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Dolly Varden				xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xx	
Steelhead (Rainbow)						xx	xxxx	xxxx	xx			
Butter Clams	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Crab:												
King Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Tanner Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Dungeness Crab	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
GAME												
Deer	xxxx							xxxx	xxxx	xxxx	xxxx	xxxx
Hare	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Ptarmigan	xxxx	xxxx									xxxx	xxxx
Ducks	xxxx	xxxx	xxxx							xxxx	xxxx	xxxx
Geese				xxxx	xxxx				xxxx	xxxx		
Harbor Seal	xxxx	xxxx	xxxx	xxxx				xxxx	xxxx	xxxx	xxxx	xxxx
Sea Lion	xxxx	xxxx	xxxx	xxxx				xxxx	xxxx	xxxx	xxxx	xxxx
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.

1. Each "x" represents one quarter of a month.
2. An "x" means that named species are typically harvested during indicated time period.
3. The symbol "?" means that harvest during indicated time period has not been documented but may occur.
4. Refer to Tables 2 to 5 for magnitude of harvest and use.
5. Seasonal round data for other species is on file with the Subsistence Division, ADF&G.

Source: 1983 Field Interviews, Subsistence Division, Alaska Department of Fish and Game.

VII. ISSUES AND CONCERNS

During the course of the research for this Guide, the following issues and concerns were expressed by residents of the Kodiak Island region. These are listed below, in no special order, and are included here in order to stimulate further thought and discussion.

1) The current permitting system for regulating subsistence fishing has caused problems for resource users and managers. Returns of permits to the Department of Fish and Game for all areas of Kodiak Island have been poor and therefore harvest and effort data derived from the permits is probably not reliable.
2) Hunting and fishing licenses and permits must be made more readily available to residents of rural areas.
3) Brown bear. Communities on the southern part of the island have experienced difficulties with nuisance bears. Also, residents of these communities report that there is little possibility for subsistence hunting of bears under current regulations.
4) Waterfowl. Non-migratory birds have traditionally been taken throughout the year, but current regulations prohibit this harvest.
5) Deer: seasons. Rural residents report that the current seasons for hunting deer are too restrictive, because they depend on this resource as a major food source for most of the year.
6) Deer: bag limits. Current limits do not permit traditional hunting in which a proficient hunter many supply a number of families with meat.
7) Crab. Crab has been an important food item for Kodiak residents who have either caught their own crab or gotten crab from commercial catches. The recent closure of commercial king crab

fishing and the restriction of subsistence crabbing to waters of 25 fathoms or less will tend to eliminate crab as a food source while these regulations are in effect.

8) Marine mammals. Significant use of marine mammals continues to occur in rural communities, with seal and sea lion taken year round. The availability of these resources could be affectd by changes to the Marine Mammals Act, imposition of bag and or season limits on harvests, or the introduction of new user groups. Development of the bottom fishing industry may result in increased incidental kills of marine mammals, and a subsequent decrease in the population of these species.

9) User conflicts exist in a number of areas, including:

   a) On the Karluk River, Karluk residents report conflicts with sportsfishing over the salmon resource. The Karluk River offers world class sport fishing, but Karluk residents gain little from the industry and feel that their access to subsistence resources is threatened.

   b) Hunting and fishing pressure may diminish resource availability for rural residents in areas easily reached by land or boat from the Kodiak road-connected area. Old Harbor's traditional use of Ugak Bay; Ouzinkie's traditional use of Monashka Bay, Narrow Strait, Kizhuyak Bay, and much of Marmot Bay; and Port Lions' traditional use of Kizhuyak Bay, the Kupreanof and Raspberry Strait areas, Afognak Bay, and Kazakof Bay are affected by the hunting and fishing of the large population of the road-connected area.

   c) Potential conflicts exist between subsistence fishing and sport fishing on road accessible areas near the City of Kodiak. Buskin

River and Russian Creek will most likely be the first drainages for which regulatory change will be considered.

10) Examination of Tables 13 and 14 and Figures 5 and 6 will reveal that during the study period, the mean household use quantities of red, silver, and pink salmon, halibut, crab, and deer fell below the "desired" use levels in some communities. These discrepancies may indicate other topics which may become regulatory concerns in the future.

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APPENDIX A

Table 21: FACTORS USED TO CONVERT FROM NUMBERS OF ANIMALS TO FOOD WEIGHT, KODIAK ISLAND SURVEY, 1982-1983

Species	Usable Weight	Source
Fish		
Red Salmon	4.21 lbs.	Conversion factors were derived by taking average round weights for fish caught commercially on Kodiak (ADF&G, 1982) and multiplying these weights by standard factors used to determine food weight from round weight for salmon species (from Mike Dean, ADF&G, personal communication). Factors used were: Red .78; King .73; Silver .75; Pink .85; Dog .73
King Salmon	12.92 lbs.	
Silver Salmon	5.70 lbs.	
Pink Salmon	2.72 lbs.	
Dog Salmon	5.55 lbs.	
Herring	.50 lbs.	Researcher estimate.
Halibut	25.00 lbs.	
Cod	1.00 lbs.	
Flounder	1.00 lbs.	
Bass	1.00 lbs.	
Snapper	2.00 lbs.	
Dolly Varden	1.40 lbs.	Reported value (Behnke, 1982).
Steelhead	1.40 lbs.	
Pollock	1.00 lbs.	Researcher estimate.
Rockfish	2.00 lbs.	
Irish Lords	1.00 lbs.	
Game		
Deer	43.20 lbs.	Estimates supplied by Roger Smith, (ADF&G) Kodiak area game biologist (personal communication)
Reindeer	62.50 lbs.	
Elk	225.00 lbs.	
Goat	61.50 lbs.	
Brown Bear	300.00	Researcher estimate based on hunter reports.
Moose	540.00	Reported value (Behnke, 1982).
Harbor Seal	45.00 lbs.	Researcher estimate based on hunter reports. Also see reported live weights (Pitcher and Calkirs, 1979; Calkins and Pitcher, 1982)
Sea Lion	200.00 lbs.	
Hare	2.00 lbs.	Reported values (Behnke, 1982).
Ptarmimgan	.70 lbs.	

Species	Usable Weight	Source
Ducks	2.50 lbs.	Reported value (Thomas, 1982).
Geese	5.00 lbs.	Reported value (Wolfe, 1983).
Bird Eggs	.05 lbs.	Researcher estimate.
Invertebrates		
King Crab	2.30 lbs.	Personal communication, Lee Stratton, ADF&G, and Jim Major, Eastpoint Processors, Kodiak. Also see reported commercial harvest weight (Nippes et al, 1983).
Tanner Crab	1.60 lbs.	
Dungeness Crab	.70 lbs.	
All Clams, Cockles, Geoducks, Mussels, Gumboots, Sea Urchins	5.00 lbs./ 5 gal. bucket	Researcher estimate, also personal communication, Ron Stanek, ADF&G, for razor clams.
Octopus	4.00 lbs.	Researcher estimate.

These conversion factors were used to convert number of animals harvested to weight of usable meat or fish in pounds. Conversion factors are based on published reports of species average live weight or average harvest weight when these exist. In other cases the best estimates of field biologists, researchers, and community informants have been used. For fish species, conversion is based on headed, gutted weight of carcass. For game species, conversion is based on weight of meat and bones usually used by hunters after dressing, skinning, and trimming takes place.

Conversion factors are very conservative. In some communities use may be made of additional parts of fish and game species for human consumption, consumption by dogs and domestic animals, and for garden fertilizer

APPENDIX B

Table 22: EXTRAPOLATION OF SURVEY DATA FOR ALL OF KODIAK

The extrapolation of harvest figures and weights from sample data to the total census population of Kodiak required the following assumptions and calculatons:

1. It was assumed that households that were not surveyed had the same family size and harvest characteristics as households that were surveyed in each community or sample.

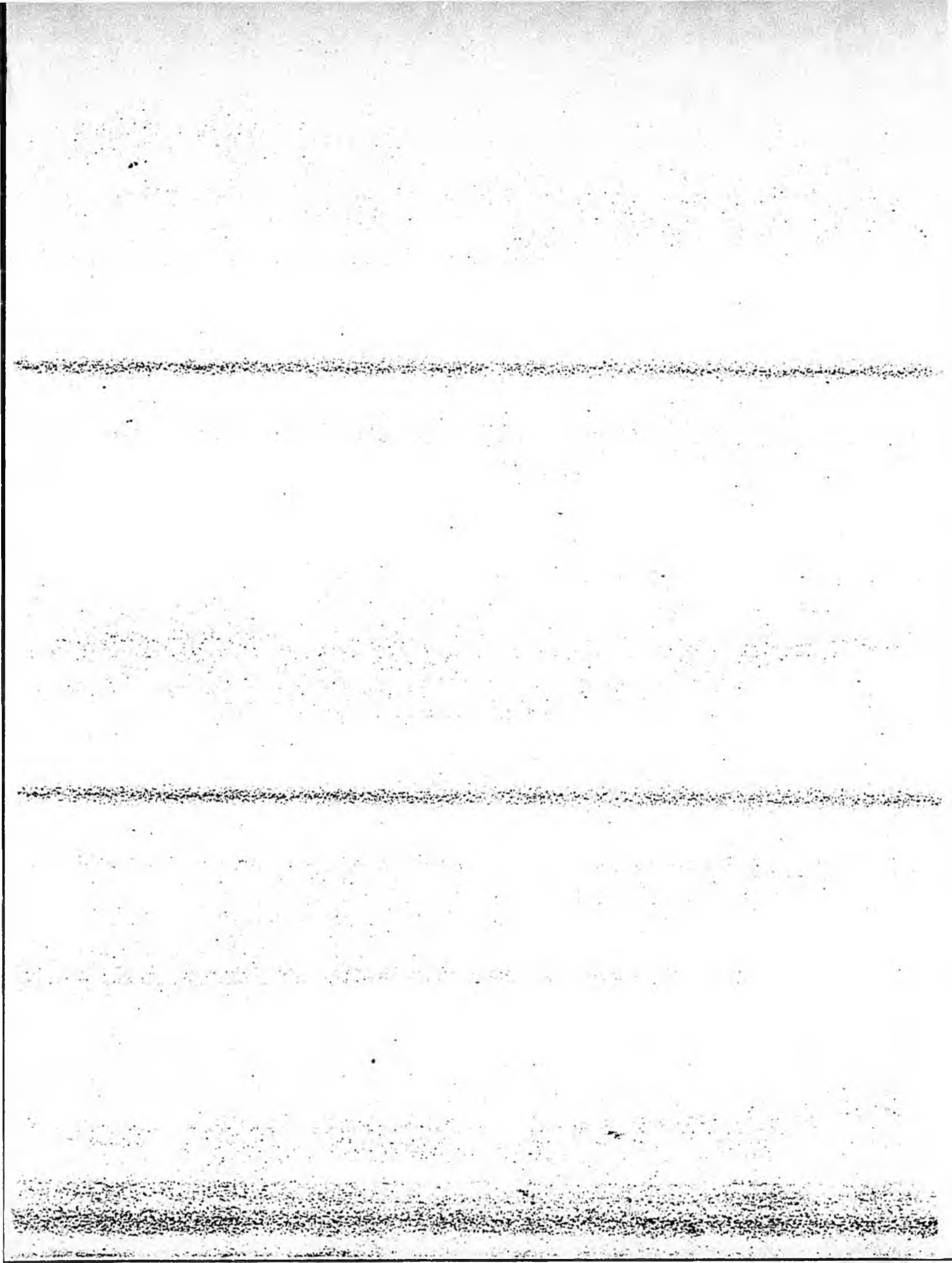
2. It was assumed that the rural population living away from surveyed communities had the same family size and harvest characteristics as the population living in rural communities who were surveyed.

3. Number of households in each category was determined by dividing the census population by the average household size of the surveyed population for each community or sample:

Community/ Sample	Household Size[4]	Population[5]	Estimated Number of Households
Akhiok	3.81	103	27.0
Karluk	3.95	102	25.8
Larsen Bay	4.16	180	43.3
Old Harbor	3.79	355	93.7
Ouzinkie	3.34	233	69.8
Port Lions	3.30	291	88.2
Kodiak City[1]	3.32	8,247	2,484.0
Chiniak/ Pasagshak[2]	3.91	611	156.3
Coast Guard	2.41	1,995	827.8
Rural No Community[3]	3.63	597	164.5
TOTAL	3.19	12,714	3,980.4

1. This area includes Kodiak city, Service Area 1, Women's Bay, Bells Flats, and Monashka Bay.
2. Note that this projection is based on a very limited sample.
3. Note that no surveys were administered to this group.
4. Household size is based on survey data.
5. Population figures are from Kodiak City and Borough Census, 1983.

4. Harvest totals and harvest food weight in Tables 15 and 16 were calculated by multiplying household harvest and harvest food weight figures from Tables 2 through 5 by derived numbers of households.



- How paid - lump sum after Jan. 1, 86 -
- SS # 267-08-8580
-

send to:
Mary Margaret Brady
Accounting -

(1)

PROPOSAL TO MONITOR THE PLACER MINING DEMONSTRATION GRANT PROGRAM

SUBMITTED TO: SENATOR BETTYE FAHRENKAMP
ALASKA STATE LEGISLATURE
POUCH V
JUNEAU, ALASKA · 99811

BY: JOHN REEVES
P.C. BOX 81941
FAIRBANKS, ALASKA
99708

DATE: MAY 21, 1985

(1)

INTRODUCTION

On June 22, 1984 Governor Sheffield signed Senate Bill 461 into law. This Bill authorized the Commissioners of Natural Resources and Environmental Conservation to administer the Innovative Gold Recovery (DNR), Water Use Reduction (DNR), Water Pollution Control (DEC), and Waste Disposal (DEC), Demonstration Grants Program established under AS 46.16.00 - AS 46.16.100.

DNR and DEC were each allocated 1.5 million dollars and authorized to distribute grant funds in allotments up to $100,000 to qualified applicants for purposes of testing new and innovative ideas and technology at placer mining operations.

A Review Committee established in Sec. 46.16.010 was responsible for reviewing and making recommendations on each application. The six member review Committee independently scored each application and submitted their joint recommendations to Commissioners Wunnicke and Ross on March 25, 1985. As primary technical reviewer of the Grant Proposals for ADEC, I was responsible for reviewing the proposals and making recommendations to the review committee and the Commissioners on the particulars of each application.

A total of 82 grant applications (41 each for DEC, DNR) were received, 15 of which were submitted under the "Emergency Regulations". The applications submitted under the Emergency Regulations were scored and ranked first. Of these 15, four were recommended for DNR grants and two for DEC grants. Twenty-six additional projects were recommended for funding after final review.

(2)

Support for the grant program by both the Legislature and the Governor has clearly demonstrated the State's commitment to the placer mining industry by funding research into mining techniques that will both enhance the economic viability of the industry concurrent with improving water quality.

It was the Legislature's intent to make available to placer miners the necessary capital to experiment with new and innovative ideas in gold recovery, pollution control, water use reduction and waste disposal. It was also the Legislature's intent to draw from the practical experience of innovative miners themselves rather than generate theoretical research projects which may not have offered solutions to the complex issues facing the placer miners and regulatory agencies alike.

Sec. 46.14.090 states "All information generated as a result of grants made under this chapter is public information. The Commissioner of Natural Resources and the Commissioner of Environmental Conservation shall compile, analyze, and distribute the information for the benefit of the placer mining industry and State and Federal government."

The Chairman of the Placer Mining Demonstration Grant Review Committee, Earl Beistline, in a letter dated March 25, 1985 to Commissioners Wurnicke and Ross stated, "If the program is not adequately monitored, the credibility of the entire program and the departments will be affected." Mr. Beistline also addressed the need for adequate funding and department personnel to be made available to assure appropriate dissemination of the results and to assure that information gained is presented clearly and understandably.

DNR and DEC have demonstrated their commitment to fulfilling their statutory obligations under Sec. 4a.16.090 by committing 5 full time employees to the process of compiling, analyzing and distributing the information obtained in the grants program. However only one of those employees, Glenn Miller (DNR), is familiar with the industry. With the exception of one student intern, none of the other project personnel are familiar with placer mining or have ever seen an operating placer mine.

Almost one million dollars was placed into the operating budgets of DNR, DEC, and ADF&G by the 1984 Legislature to fulfill the intent of SB 407 which failed. This money was allocated to the resource agencies to begin gathering data for the accurate classification of Alaska's waters.

Although considerable time and effort was spent in the field during the 1984 mining season by agency personnel, study results have not yet been issued. There is ongoing research work being done at present and work again will be done in the field during 1985 paid for by the SB 407 money.

Besides the data being generated by miners participating in the SB 461 program there will be data generated by the agencies in both the SB 461 program as well as that resulting from research paid for by SB 407 monies.

Because placer mining is at a critical point, because the next session of the Legislature may need to take legislative action and because of the need to insure that these appropriations have been used for intended purposes to carry out Legislative intent, it is important that the Legislature be kept abreast of developments as they unfold.

(4)

PROPOSAL

I propose, as a contractor for the Alaska State Legislature, to monitor the programs enacted by the Departments of Natural Resources, Environmental Conservation and Fish and Game to fulfill the legislative intent of SB 461 and the "Spirit" of SB 407 of the thirteenth Legislative session.

In monitoring the programs developed for SB 461 I will:

1. Prepare a summary of each of the grant projects.
2. Monitor the progress of each of the projects including field visits.
3. Monitor agency management of grant contracts.
4. Prepare and submit monthly reports on the status of the program and individual grant projects.
5. Prepare a final report for the start-up of the second half of the fourteenth legislative session summarizing the information generated from the demonstration programs; evaluating the results of the projects and their potential application in resolving placer mining issues, making recommendations and evaluating the performance of the managing agencies.

(5)

In monitoring the programs developed under funds appropriated by SB 407 I will:

1. Research, summarize and evaluate study programs and results generated during the 1984 season.
2. Summarize study programs to be carried out during the 1985 season.
3. Prepare and submit a report on items 1 & 2 by July 30, 1985.
4. Prepare a final report for the start up of the second half of the fourteenth Legislative Session summarizing the information generated by the SB 407 monies over the 1984 and 1985 seasons; evaluating the results of the research studies and their potential application in resolving placer mining issues; make recommendations; and evaluating the performance of the managing agencies.

As a Legislative contact I would expect to be provided copies of all correspondence relating to the grants program and research paid for by SB 407 funds by the managing agencies as well as field notes, sampling data, inter-office/agency memos, agency staff and status reports and budgetary information. It would also be desirable to accompany agency personnel during inspections of the various projects.

SCHEDULE AND BUDGET

Start-up - June 1, 1985

*Fees - $55.00 per hour

Total Hours - 450

Contract Amount - $24,750

Monthly reports will be submitted at the end of each month with a final report submitted no later than November 30, 1985.

20 hours/wk for 20 wks.	400 hrs @ $55 =	$22,000
Final Report	40 hrs @ $55 =	2,200
Clerical Support	27.5 hrs @ $20 =	550
		$24,750

*Fees include: transportation, administrative costs, lodging.

(7)

RESUME

JOHN REEVES

Education

1971-1974 University of Florida- Undergraduate work in wildlife ecology.

1981-1983 University of Alaska, Fairbanks- Undergraduate work in Natural Resource Management.

Experience

Placer Mining Program Manager, State of Alaska, Department of Environmental Conservation. May 1984 - May 1985

Duties: Monitored placer mining activity and provided technical assistance to placer miners on mining techniques and the design and construction of wastewater treatment facilities. Assisted in the development of State and Federal policy for placer mining. Managed the Placer Mining Wastewater Treatment Technology Project. Served as the primary technical reviewer for ADEC and the Water Use Board on Placer Mining Demonstration Grant Program (SB 461). Reviewed and prepared Department comments on Resource Management plans. Wrote RFP's; selected

scoping and review committees; interviewed consulting firms; evaluated research proposals; negotiated with contractors for state funded research projects. Initiated Enforcement actions when necessary.

Environmental Field Officer II, State of Alaska, Department of Environmental Conservation. May 1982 - May 1984

Duties: Reviewed wastewater treatment plans and permit applications. Assisted other State and Federal agencies in placer program development. Performed field inspections independently and in conjunction with tri-agency team. Offered technical assistance and made recommendations to improve waste water quality by evaluating field data and site-specific conditions at placer mining operations. Was project coordinator for the Commissioner's Task Force, and was Chairman of 2 sub-committees for the resolution of placer mining conflicts. Wrote reports, developed management guidelines, reviewed work plans and managed travel budget.

Environmental Field Officer I, State of Alaska, Department of Environmental Conservation. October 1981 - May 1982

Duties: Reviewed annual placer mining permit applications. Performed mine site inspections and water quality sampling for compliance and research. Provided technical assistance to miners on pollution abatement measures. Investigated complaints and resolved conflicts when possible.

Goldminer, Miller Creek Mining Co., Central, Alaska.

April 1979 - October 1980

Performed exploration and production activities for placer mining. Constructed settling ponds, set up recycle operations, built and maintained sumps, tailraces, berms, bypasses, pipelines, and reservoirs. Other duties included welding, washing plant construction, mechanic, heavy equipment operator, rock-raker, stacking tailings, stripping overburden, building access roads, and assisting in cleanups and moving operations.

Memberships:

Fairbanks North Star Borough

Board of Equalization 1984-1985 Chairman 1985

Fairbanks North Star Borough

Planning Commission 1985 Commissioner

Fairbanks Convention and Visitors Bureau

1983-1985 Member

Greater Fairbanks Chamber of Commerce

1983-1985 Member

SUBSISTENCE-BASED SOCIOECONOMIC SYSTEMS IN ALASKA: AN INTRODUCTION

Robert J. Wolfe, Ph.D.
Research Director
Division of Subsistence
Alaska Department of Fish and Game
Juneau, Alaska
November 1983
(Revised December 1984)

One of the major research endeavors of the Division of Subsistence of the Alaska Department of Fish and Game is to describe and understand a type of socioeconomic system in Alaska which may be termed a "subsistence-based socioeconomic system." A subsisence-based socioeconomic system is an economy and society where fishing and hunting for local use play important roles. Communities with subsistence-based systems are economically and socially dependent on fishing and hunting for local use. Without access to the natural resource base of fish, game, and plants, the communities could not exist as they do today.

There appear to be several characteristics of a subsistence-based socioeconomic system. Characteristic features include the following: a community-wide seasonal round of subsistence activities; high participation rates in fishing and hunting activities; substantial outputs of fish and game products for local use; a domestic mode of production; extensive non-commercial distribution and exchange networks; traditional systems of land use and occupancy; and a mixed economy combining subsistence and commercial sectors. This paper briefly describes each of these features illustrated with materials drawn from several communities where the Division

of Subsistence has conducted work which are examples of this taxonomic type of socioeconomic system. The locations of these communities are depicted in Figures 1 and 2.

Seasonal Round of Subsistence Activities

The first characteristic of a subsistence-based socioeconomic system in Alaska is the presence of a community-wide seasonal round of fishing and hunting activities. The economic activities of a community follow a yearly cycle, based on the seasonal appearence of fish and game resources. The seasonal round of production activities is complex and differs in detail between communities, as illustrated in Figures 3 and 4 which depict seasonal rounds for two areas -- communities along the Yukon River delta, and the community of Tyonek along Upper Cook Inlet. The seasonal round is a regular pattern, although fluctuations appear in it from year to year depending upon the availability of resources, weather conditions, and other factors.

Participation

A second characteristic of a subsistence-based socioeconomic system is high participation in fishing and hunting activities within the community. Figures 5 and 6 show participation rates in selected subsistence activities by households in Nondalton near Lake Clark, and in Tyonek. Figure 5 shows that between 60-75 percent of Nondalton households harvested sockeye each year during a three years' study period. Between 50-60 percent harvested whitefish, while 60-70 percent harvested caribou. Figure 6 shows participation rates in descending order in Tyonek during 1978-82. As will be described below, households which did not harvest certain resources typically receive products through distribution and exchange networks.

Outputs

A third characteristic of subsistence-based systems is that production outputs of fish and game are substantial. Figure 7 shows food outputs for six communities near the Yukon River delta and for Nondalton, in pounds dressed weight per household per year, in 1980. The sample of 88 Yukon Delta area households interviewed in 1981 on average produced 4,600 pounds of fish and game, or about 780 pounds per household member. These are substantial outputs, reflecting the high dependencies of these communities on fish and game. The economic base of these communities is "food extractive" in nature. This contrasts with the economic bases of other Alaska communities such as trade, goverment services, finance, defense, and manufacturing.

There is as yet little information documenting trends in subsistence outputs. What little information exists for Yukon Delta communities suggests there has been no radical decreases or increases in output in recent years. Figure 8 depicts harvest trends in subsistence salmon caught along the lower Yukon River, for which there is fairly uniform information for about 20 years. It demonstrates that king harvests fluctuate from year to year primarily due to run strength and catch conditions, and that five-year averages seem to be increasing slightly. Five-year averages of chum harvests seem to show a decline over time, attributable in part to the decreased use dog teams in the area.

Domestic Mode of Production

A fourth important characteristic of subsistence-based systems is that fishing and hunting activities primarily occur within kinship units. Figure 9 illustrates a fishing group at Alakanuk, composed of two households

allied for the purpose of taking sa' · n. The triangles are men, the circles women, and the vertical lines are birth and descent relationships. In this work group, the father and son-in-law fished and the mother and married daughter processed the catch by air-drying and smoking, a relatively labor-intensive processing method. The production group pooled labor and capital, and the proceeds were commonly held by the two households in a food cache at the parental household. Figure 10 shows that kinship based production groups can be considerably more complex. This group is composed of six households from two villages, using five tents and three smokehouses.

In subsistence-based economies, the major economic firms are these domestic groups. Production capital, labor, and community use-areas are controlled or accessed by these kinship groups. Production levels are determined by the needs of the family group, which are typically at levels below production capacity. This contrasts markedly with the social organization of production in industrial-capital economies where production primarily occurs in firms separate from the family, and production is directed toward market sale and accumulated profit.

Distribution and Exchange Networks

A fifth characteristic of subsistence-based socioeconomic systems is the presence of extensive non-commercial distribution and exchange networks. Fish and game are shared, distributed, and exchanged in non-commercial transactions in large quantities. Figures 11 and 12 illustrate the distribution of a moose taken by hunters in Chuathbaluk on the middle Kuskokwim River and Tyonek, respectively. The Chuathbaluk hunter's moose was divided among five households; the Tyonek hunter's moose was used by eight households. Consequently, even though a household may not directly

participate in the harvesting and processing of a resource, the household may use the resources taken by someone else.

Traditional Systems of Land Use and Occupancy

A sixth characteristic of a subsistence-based socioeconomic system is the presence of traditional systems of land use and occupancy. The locations of fishing and hunting activities by residents of a community are influenced by systems of non-codified customary laws defining rights of access. Trap lines, fish camps, set net sites, big game areas, and other areas are recognized as the use areas of particular kinship groups and communities. The Division of Subsistence is beginning to map some of these use areas, and to document some of the customary laws regulating use. Figure 13 depicts the locations fishcamps along the lower Yukon River. It illustrates that camps tend to cluster according to the resident's village of origin. Figure 14 depicts the areas used for fishing and hunting by the community of Tyonek. The systems of land use represent a sociopolitical organization of fishing and hunting whereby access to resources is defined and control exerted.

Mixed Economy

A final characteristic of subsistence-based economies is that food production for subsistence use is mixed with commercial and wage employment in the community. The economy is "mixed" because the communities have subsistence and commercial sectors. In the Yukon Delta area, money is gained through the commercial sale of fish and furs, wage employment, and cottage crafts. Incomes are relatively low, as commercial harvests are finite and wage-paying jobs are few, highly seasonal, low-paying, and part-time.

Figures 14 and 15 depict monetary incomes for three Lower Yukon communities and for Tyonek. Typically, communities with subsistence-based economies cannot function solely on monetary earnings. Consequently, money is invested in the equipment for fishing and hunting for subsistence uses, the most reliable sector of the economy.

There are complex interrelationships between type of commercial or wage employment and resource use. In many communities, the commercial sector and subsistence sector are mutually supportive. Money gained through the commercial sale of fish, wage employment, trapping, and crafts is invested in a way which supports success in the subsistence sector. Research in the Division of Subsistence continues to explore the interaction of monetary and subsistence activities in these mixed economies.

Summary

To summarize, a "subsistence-based socioeconomic system" seems to be a type of socioeconomic system in the State. It is a food extractive economic system and has several identifying characteristics of resource use. Subsistence-based socioeconomic systems are characterized by a complex seasonal round, high participation rates, high production outputs, a domestic mode of production, extensive non-market distribution and exchange networks, traditional systems of land use and occupancy, and mutually supportive subsistence and commercial-wage sectors.

Clearly, in certain communities, fishing and hunting for local use are important components of the social life and economy. In these communities, the community's economy and society are organized around fishing and hunting for subsistence uses. Understanding the form and functioning of this type of Alaskan socioeconomic system is one of the major directives of the Division of Subsistence.

CASE COMMUNITY LOCATIONS

Figure 1

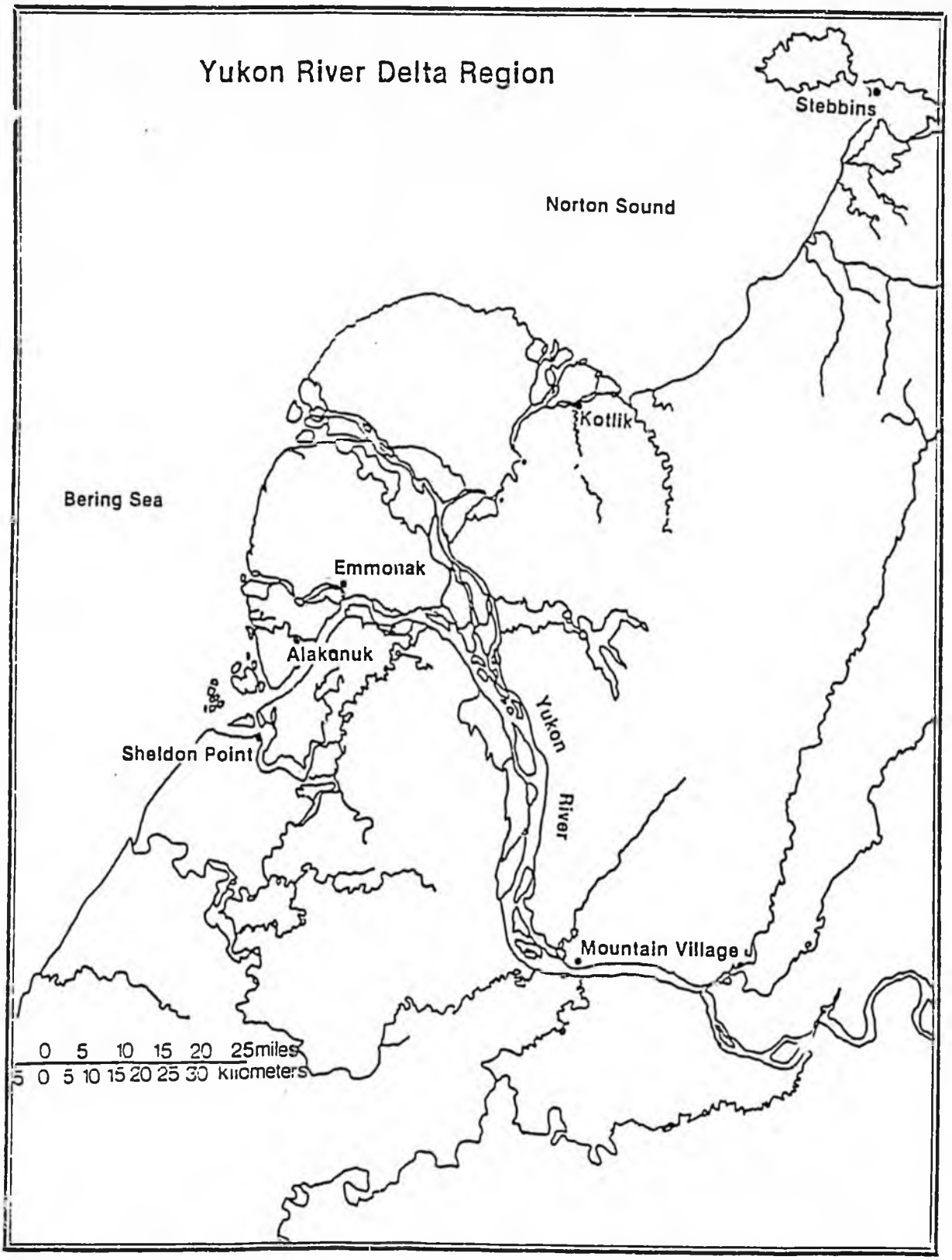

Yukon River Delta Region
Stebbins
Norton Sound
Kotlik
Bering Sea
Emmonak
Alakanuk
Yukon
River
Sheldon Point
Mountain Village
0 5 10 15 20 25miles
5 0 5 10 15 20 25 30 kilometers

Figure 2

From Robert J. Wolfe (1984) Commercial Fishing in the Hunting-Gathering Economy of a Yukon River Yup'ik Society. Etudes/Inuit/Studies.

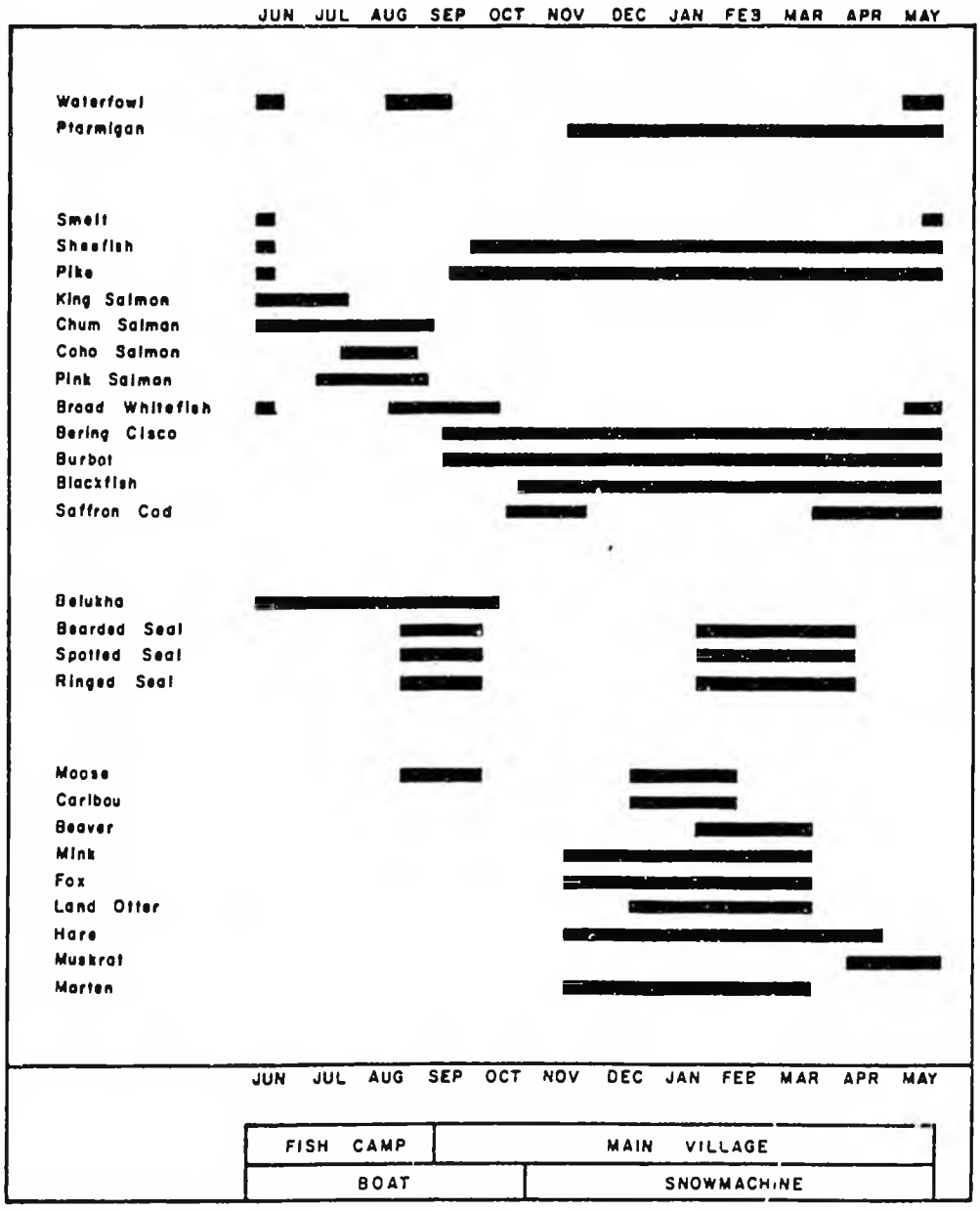
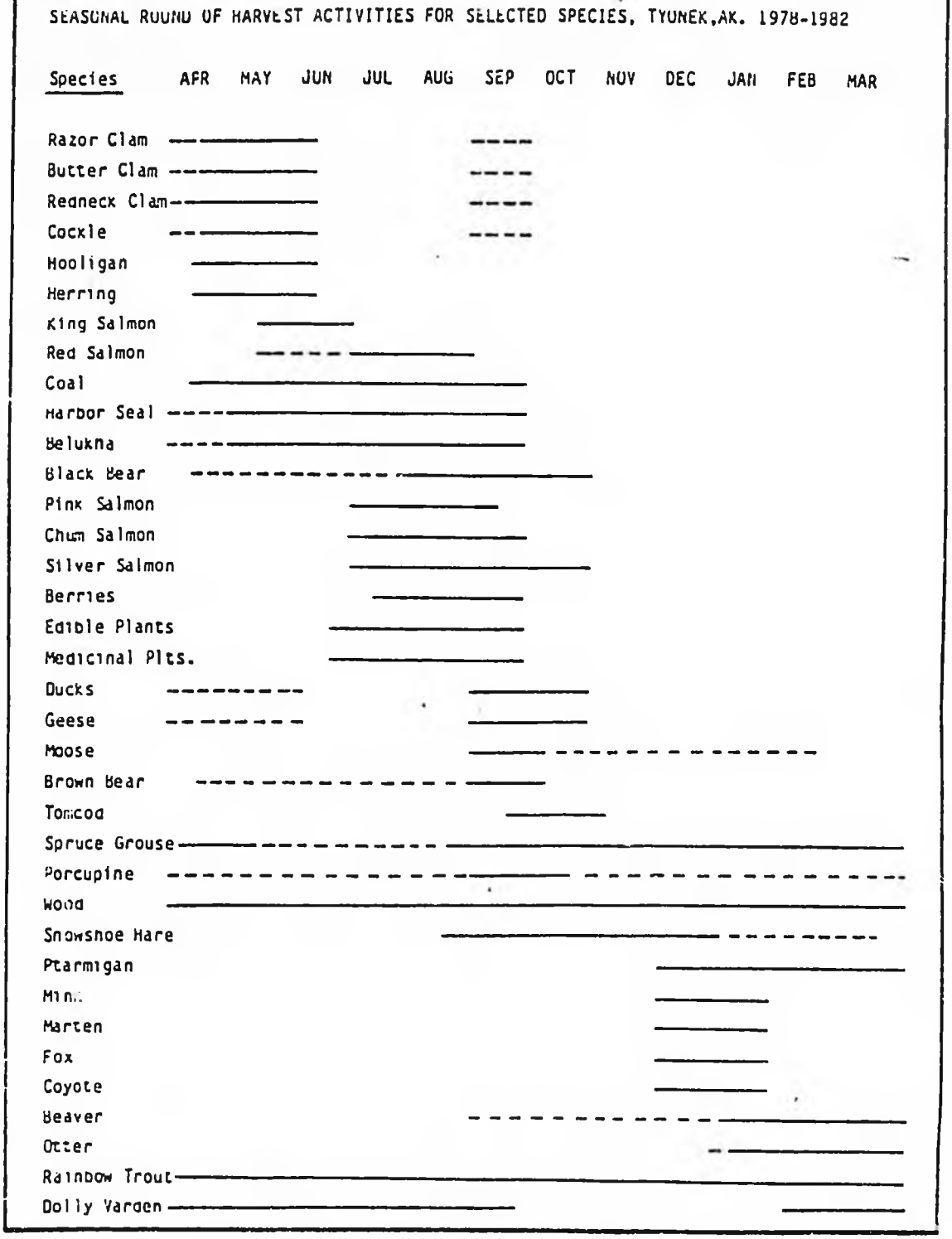


Fig. 4. Seasonal Round of Subsistence Harvests, Lower Yukon River, 1981

FIGURE 3

From James A. Fall, Daniel J. Foster, and Ronald T. Stanek (1983) The Use of Moose and Other Wild Resources in the Tyonek and Upper Yentna Areas: A Background Report. Technical Paper No.74, Division of Subsistence, A.D.F.G., Anchorage, Alaska

SEASONAL ROUND OF HARVEST ACTIVITIES FOR SELECTED SPECIES, TYONEK,AK. 1978-1982



Key: _____ Usual period of harvest effort; ------ Occasional period of harvest effort.

Figure 3. Seasonal round of harvest activities by Tyonek residents (Foster 1982b:34)

Figure 4

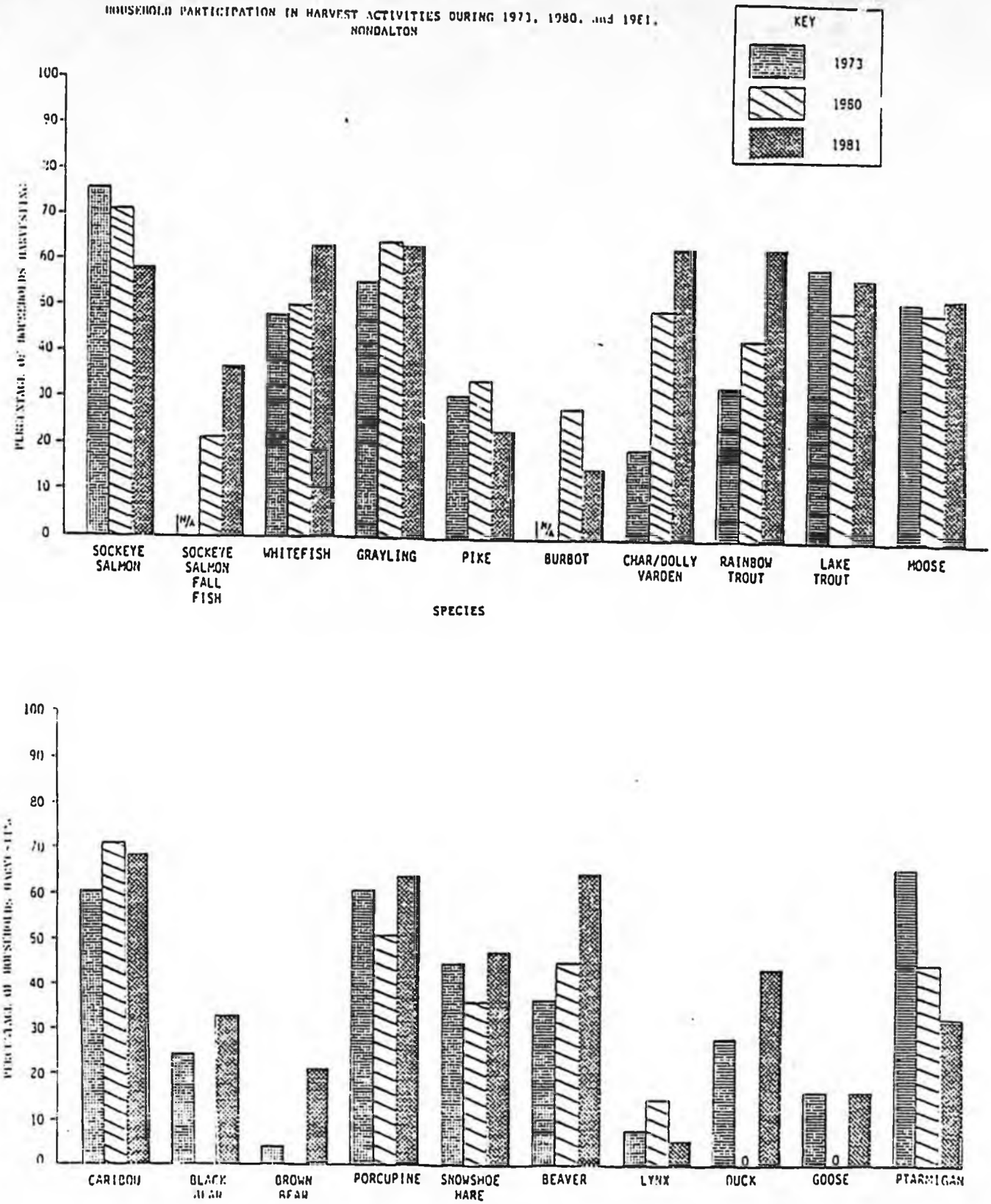


Figure 12. Household Participation in Harvest Activities During 1973, 1980, and 1981, Nondalton

From Steven R. Behnke (1982) Wildlife Utilization and the Economy of Nondalton. Technical Report No.47, Division of Subsistence, A.D.F.G., Dillingham, Alaska..

Figure 5

From James A. Fall, Danieal J. Foster, Ronald T. Stanek (1983) The Use of Moose and Other Wild Resources in the Tyonek and Upper Yentna Areas: a Background Report. Technical Paper 74, Division of Subsistence, A.D.F.G. Anchorage, Alaska.

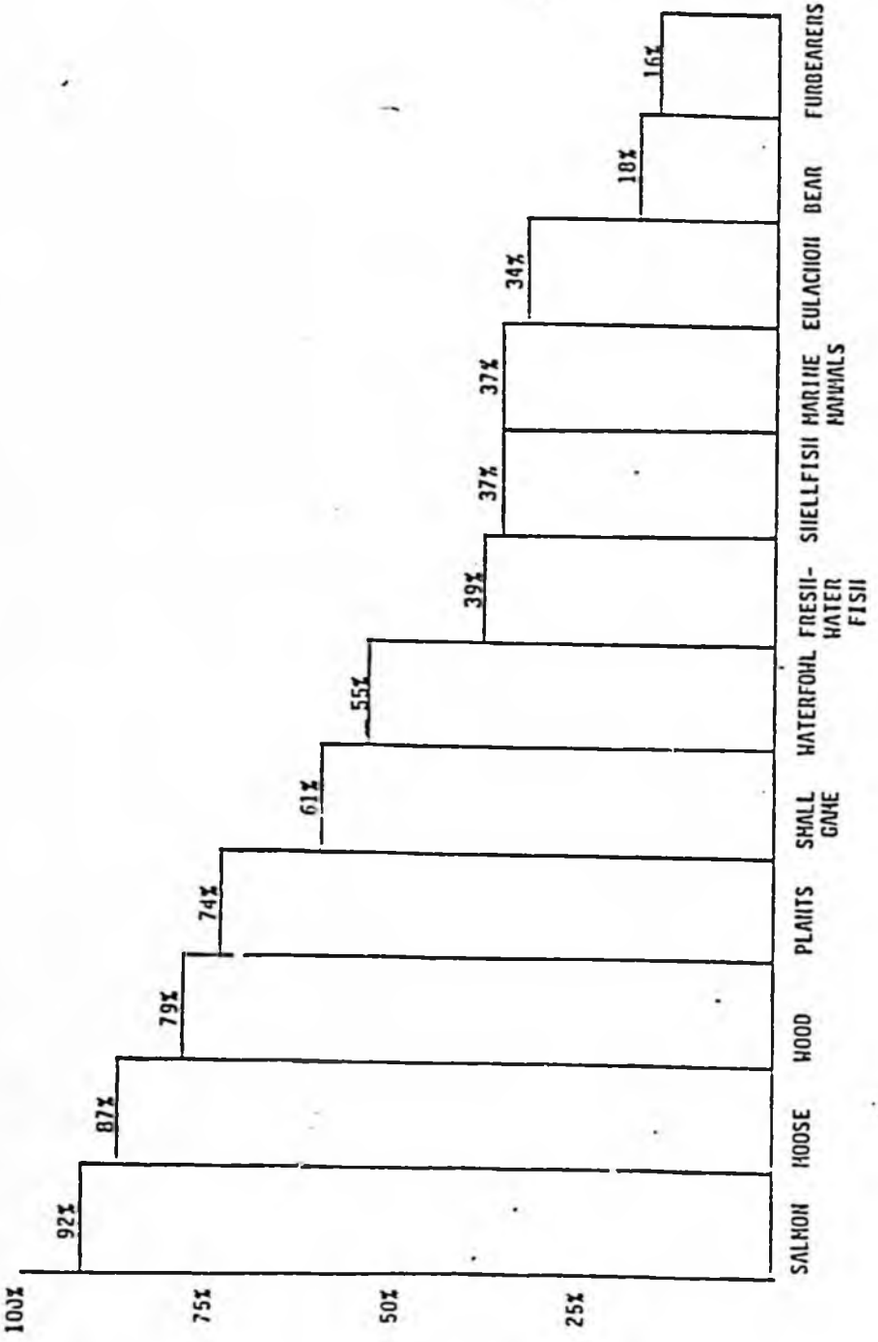


Figure 38. Tyonek Household Participation in the Harvest of Wild Resources, 1978-1982. N=38.

Figure 6

From Robert J. Wolfe (1983)
Resource Diversification and Coastal-Riverine Habitats: The Economy of the Yukon Delta Eskimo. Draft report, Etudes/Inuit/Studies, November 1984

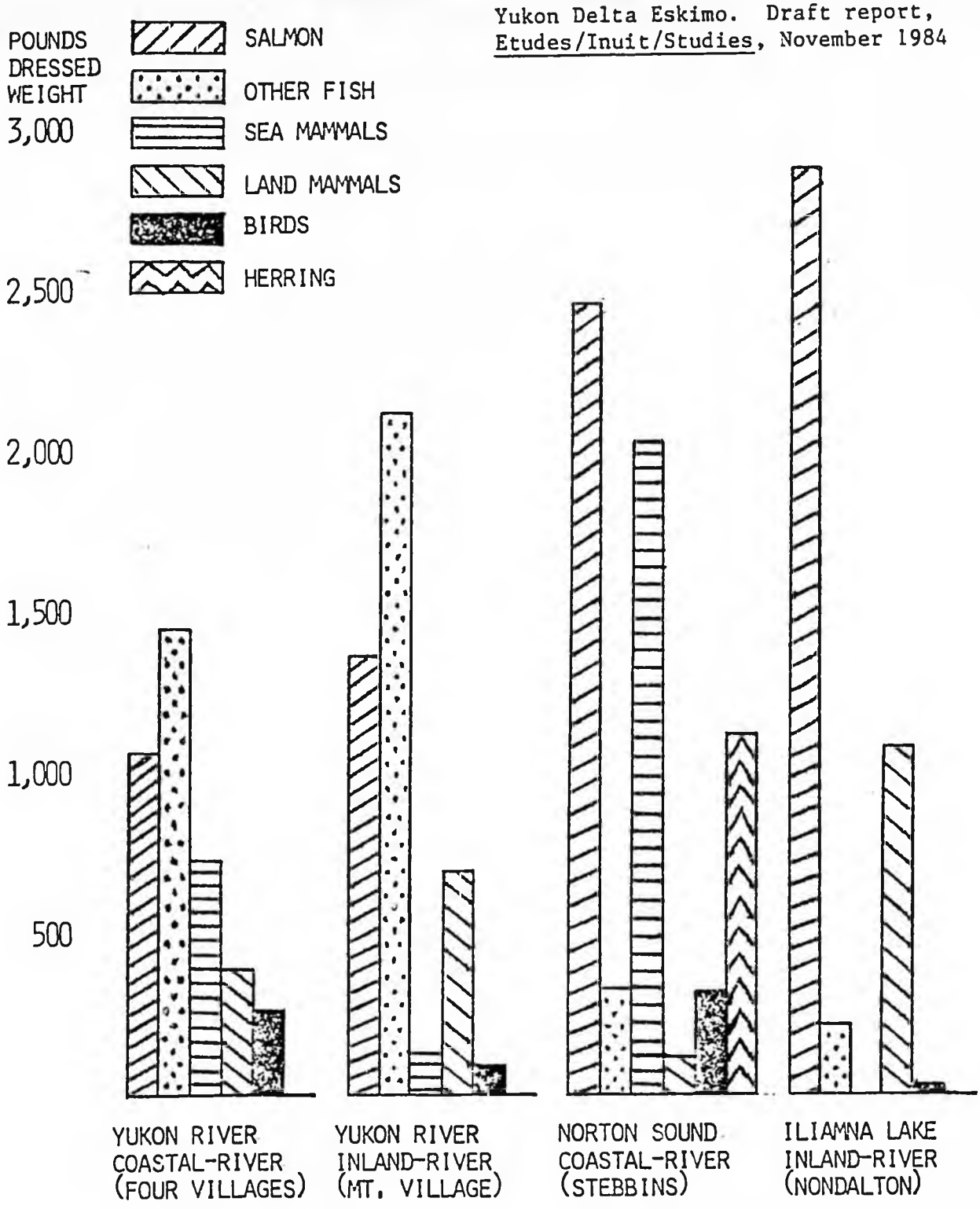


FIGURE 4. MEAN HOUSEHOLD HARVESTS IN POUNDS DRESSED WEIGHT DURING 1980, BY COMMUNITY

Figure 7

From Robert J. Wolfe (1984) Commercial Fishing in the Hunting-Gathering Economy of a Yukon River Yup'ik Society. Etudes/Inuit/Studies

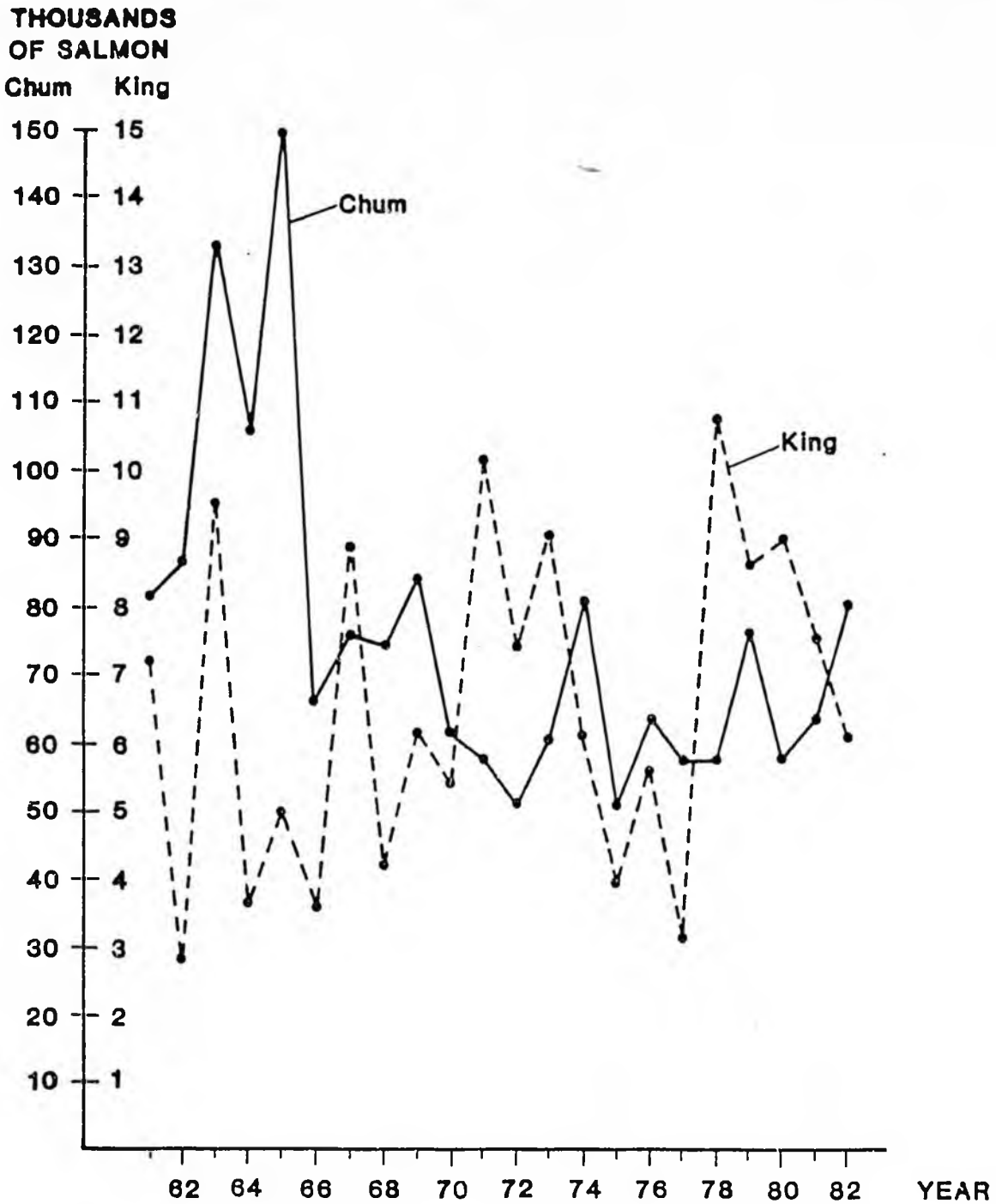


Fig. 6. Subsistence Salmon Catches, Lower Yukon River, 1961-1982

FIGURE 8

From Robert J. Wolfe (1981) Norton Sound/Y kon Delta Sociocultural Systems Baseline Analysis. Technical Paper No. 59, Division of Subsistence, A.D.F.G., Juneau, Alaska.

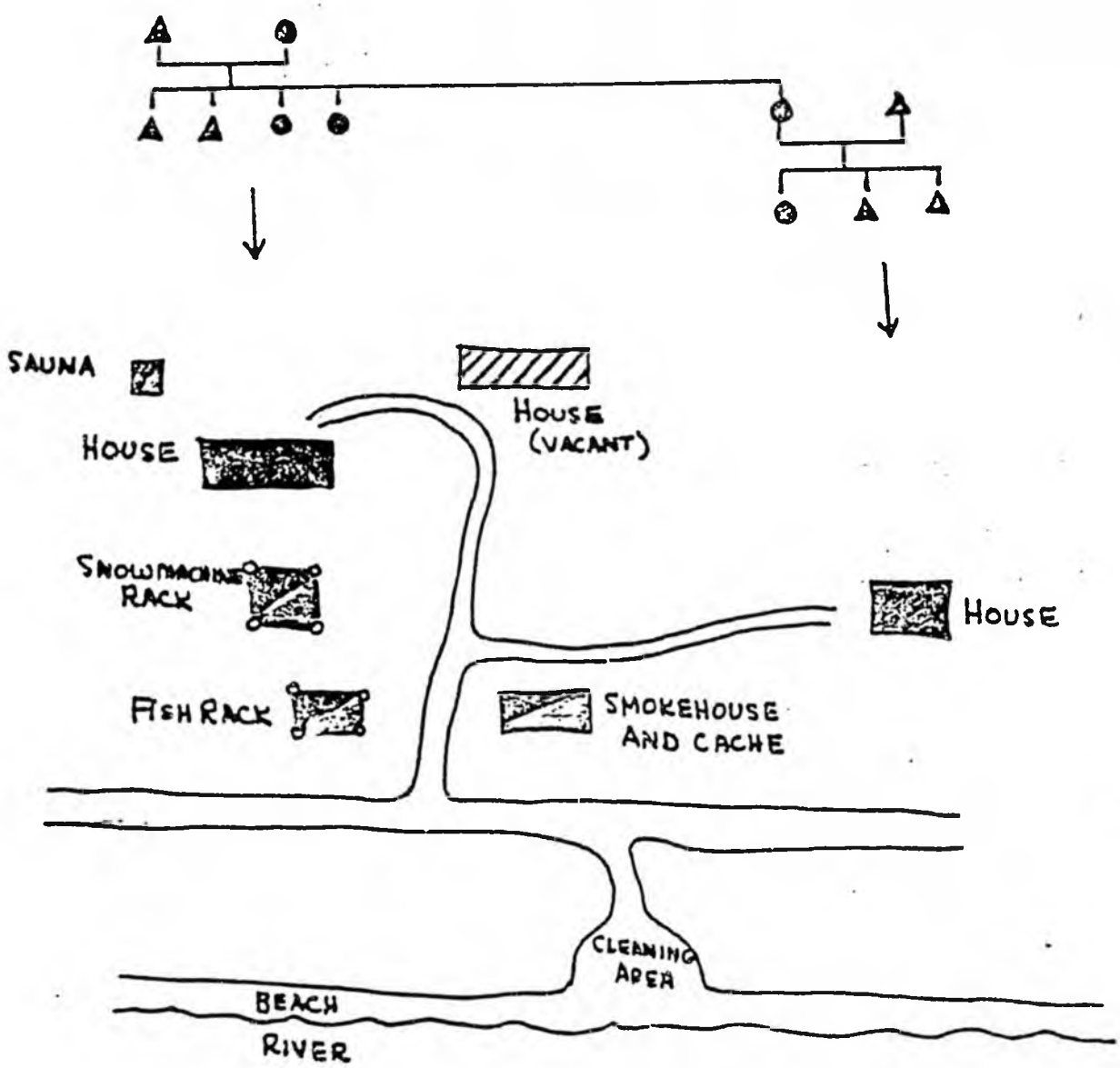


FIGURE 3. EXTENDED FAMILY COOPERATIVE GROUP AT A WINTER VILLAGE

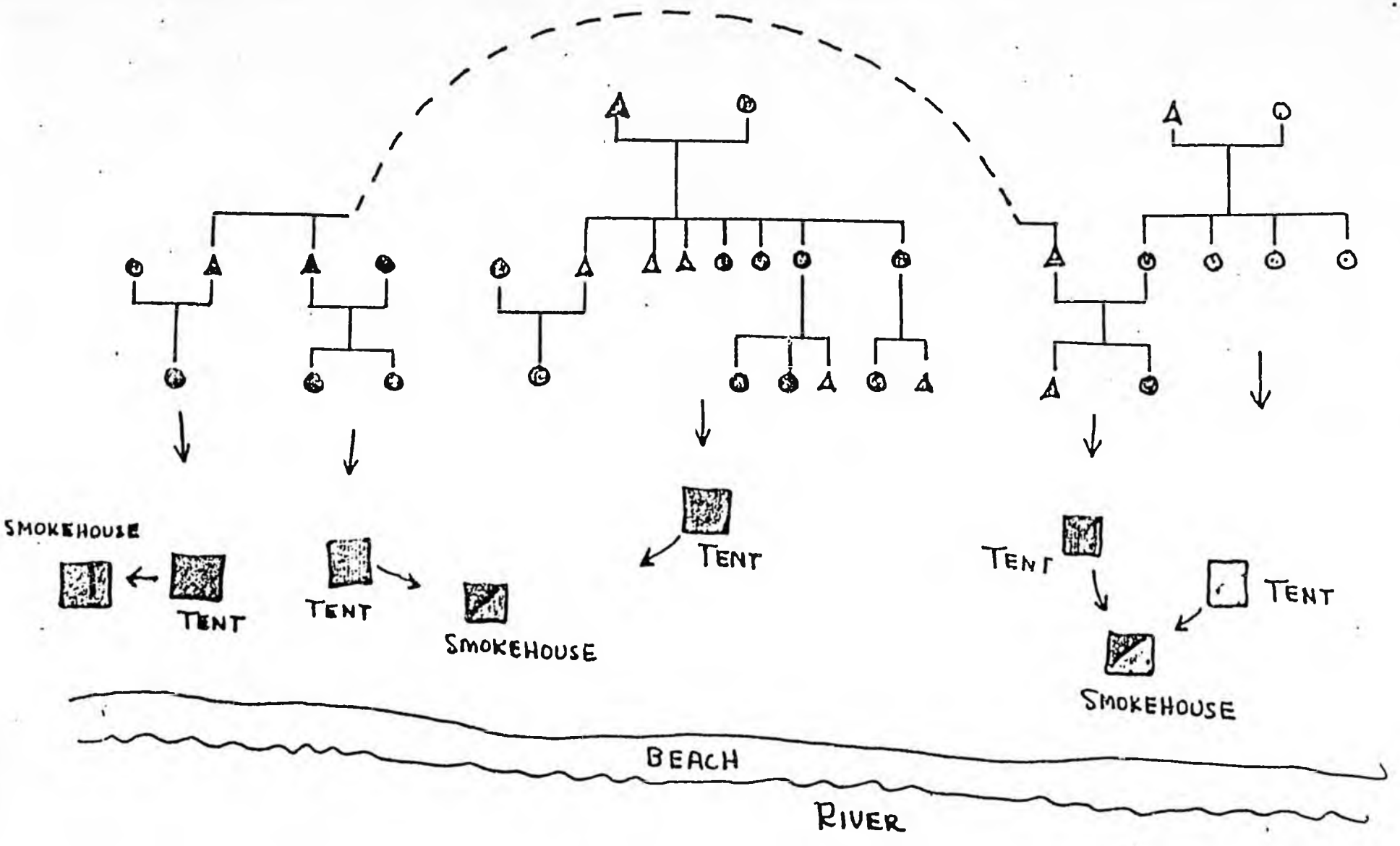


Figure 10

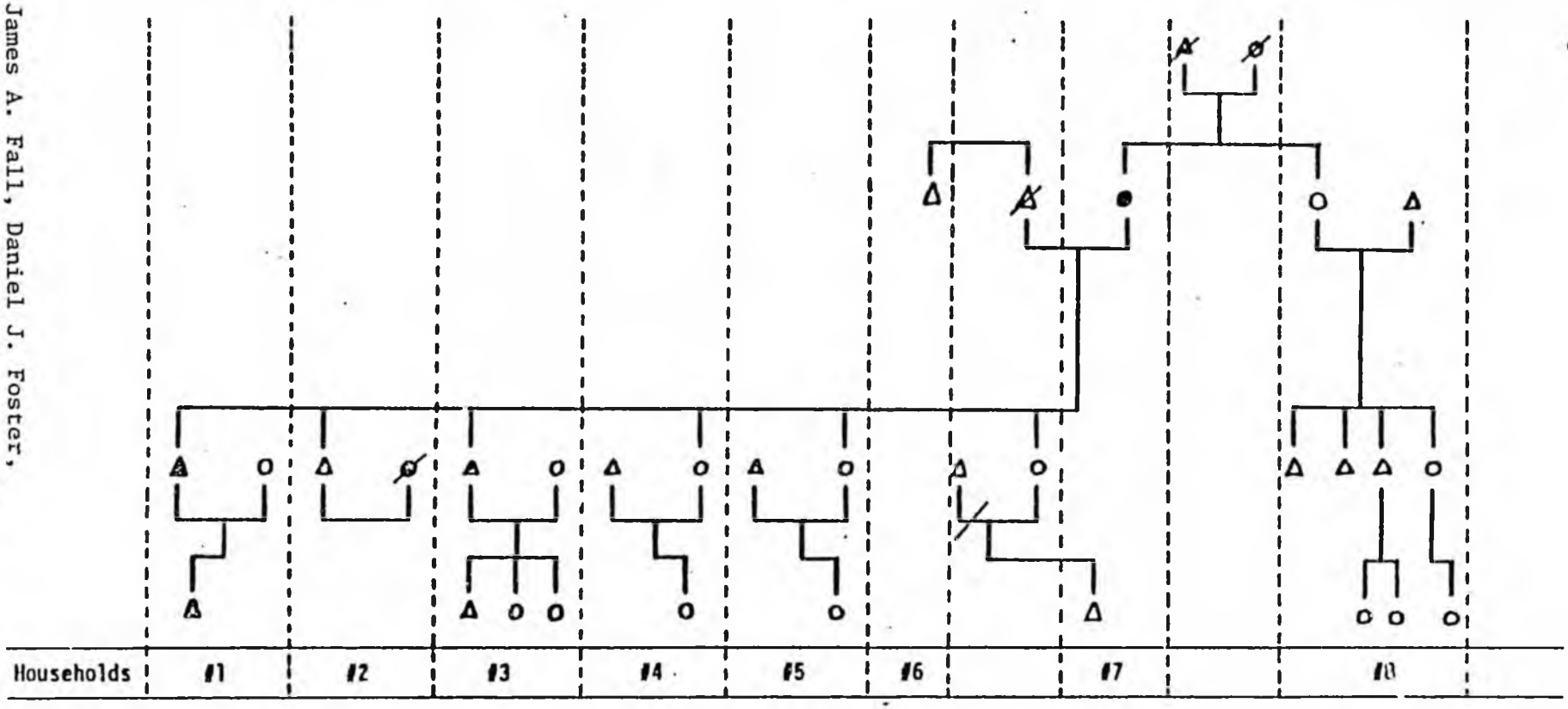
FIGURE 4. COOPERATIVE GROUP AT A FISHCAMP BASED ON KINSHIP AND PRINCIPLES OF ALLIANCE

From Robert J. Wolfe (1981) Norton Sound/Yukon Delta Sociocultural Systems Baseline Analysis. Technical Paper No.59, Division of Subsistence, A.D.F.G., Juneau, Alaska

From Susan Charnley (1983) Moose Hunting in Two Central Kuskokwim Communities: Chuathbaluk and Sleetmute. Technical Paper No. 76, Division of Subsistence, A.D.F.G., Bethel, Alaska

Fig. 9. Distribution of moose meat by a Chuathbaluk hunter.

Figure 11



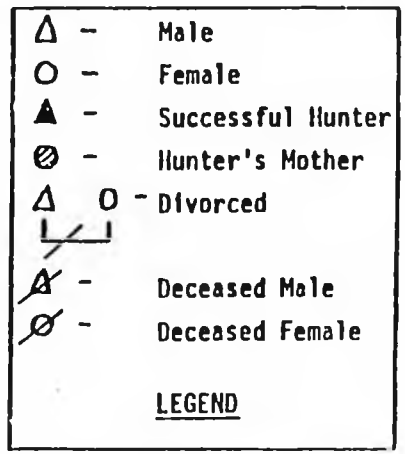
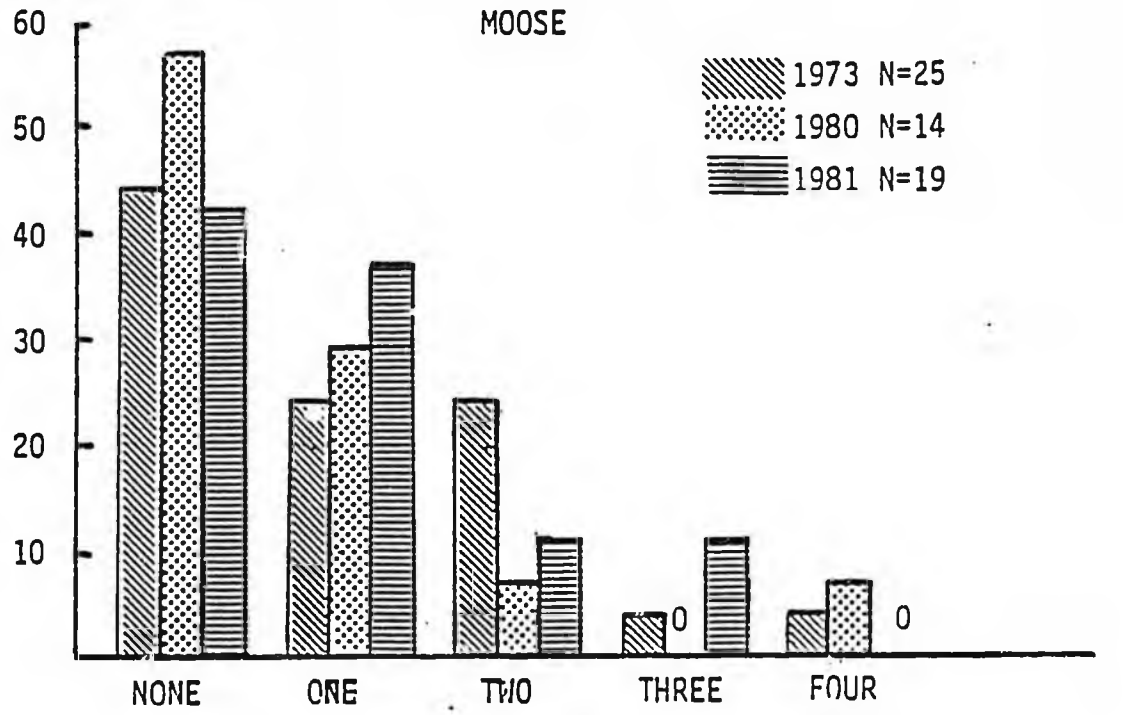


Figure 5. The distribution chart of moose meat in Case #2. Distribution to 8 households consisting of 27 dependents, only those households numbered received meat.

From James A. Fall, Daniel J. Foster, and Ronald T. Stanek (1983) The Use of Moose and Other Wild Resources in the Tyonek and Upper Yentna Areas. Technical Paper No.74, Division of Subsistence, A.D.F.G., Anchorage.

Figure 12

From Steve Behnke (1982) Wildlife Utilization and the Economy of Nondalton. Subsistence Division, Alaska Department of Fish and Game, Anchorage.



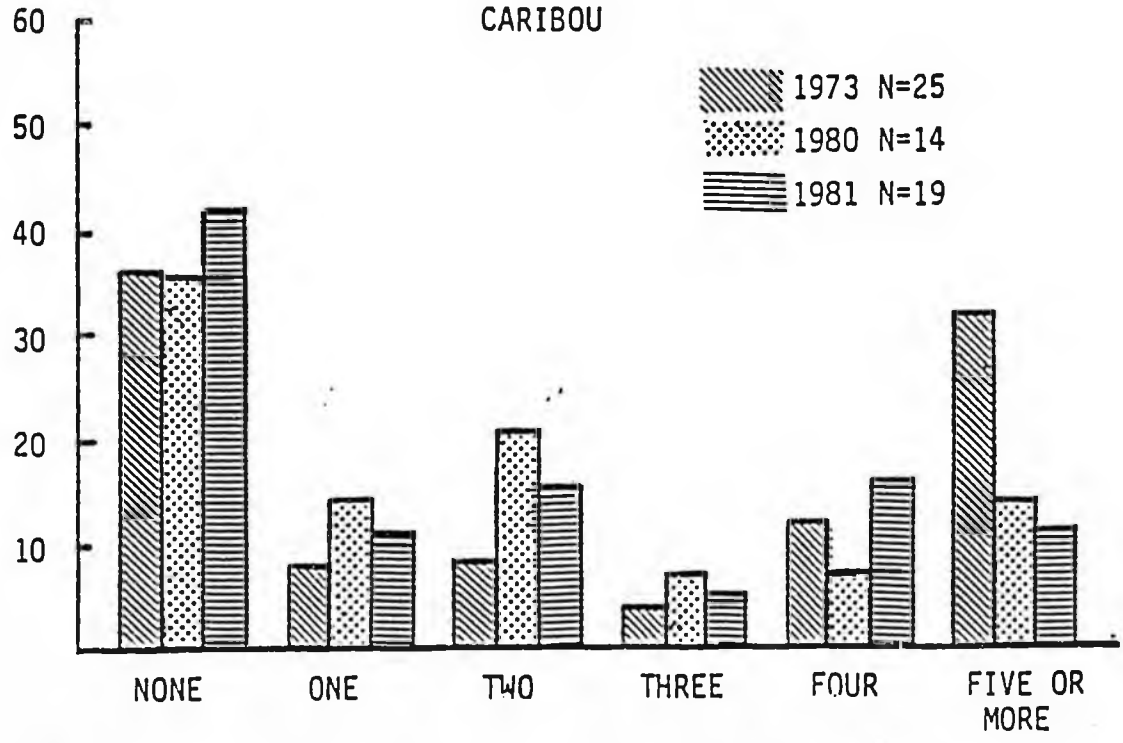


Figure 44. Percentage of Nondalton Households Harvesting Moose and Caribou

Figure 12 A

From Robert J. Wolfe (1981) Norton Sound/ Yukon Delta Sociocultural Systems Baseline Analysis. Technical Paper 59, Division of Subsistence, Juneau.

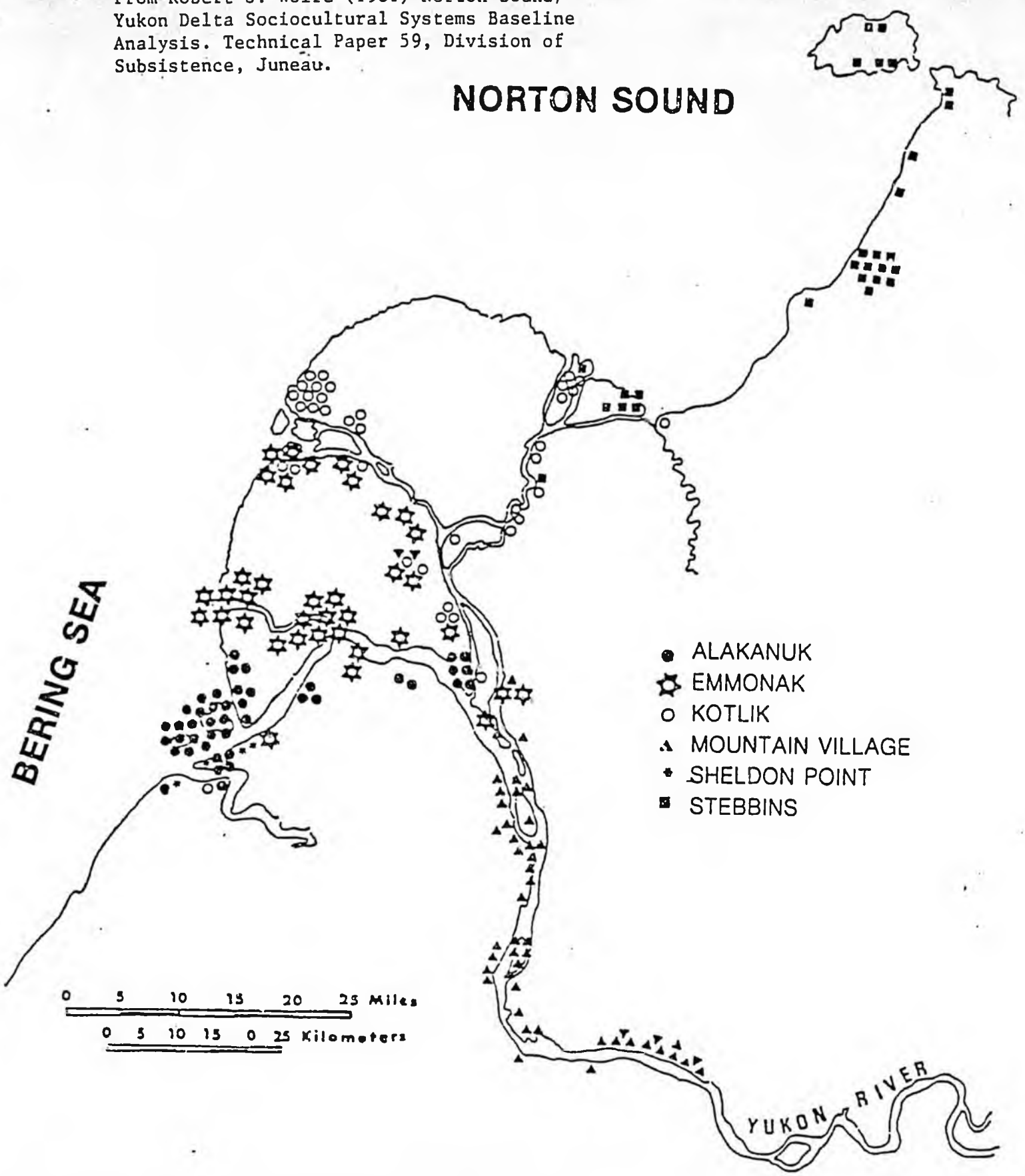


Figure 4: Approximate locations of summer fishcamps of households from Alakanuk, Emmonak, Kotlik, Mountain Village, Sheldon Point, and Stebbins during 1981

From James T. Fall, Daniel J. Foster, and Ronald T. Stanek (1983) The Use of Moose and Other Wild Resources in the Tyonek and Upper Yentna Areas: A Background Report. Technical Paper NO. 74, Division of Subsistence, A.D.F.G., Anchorage, Alaska

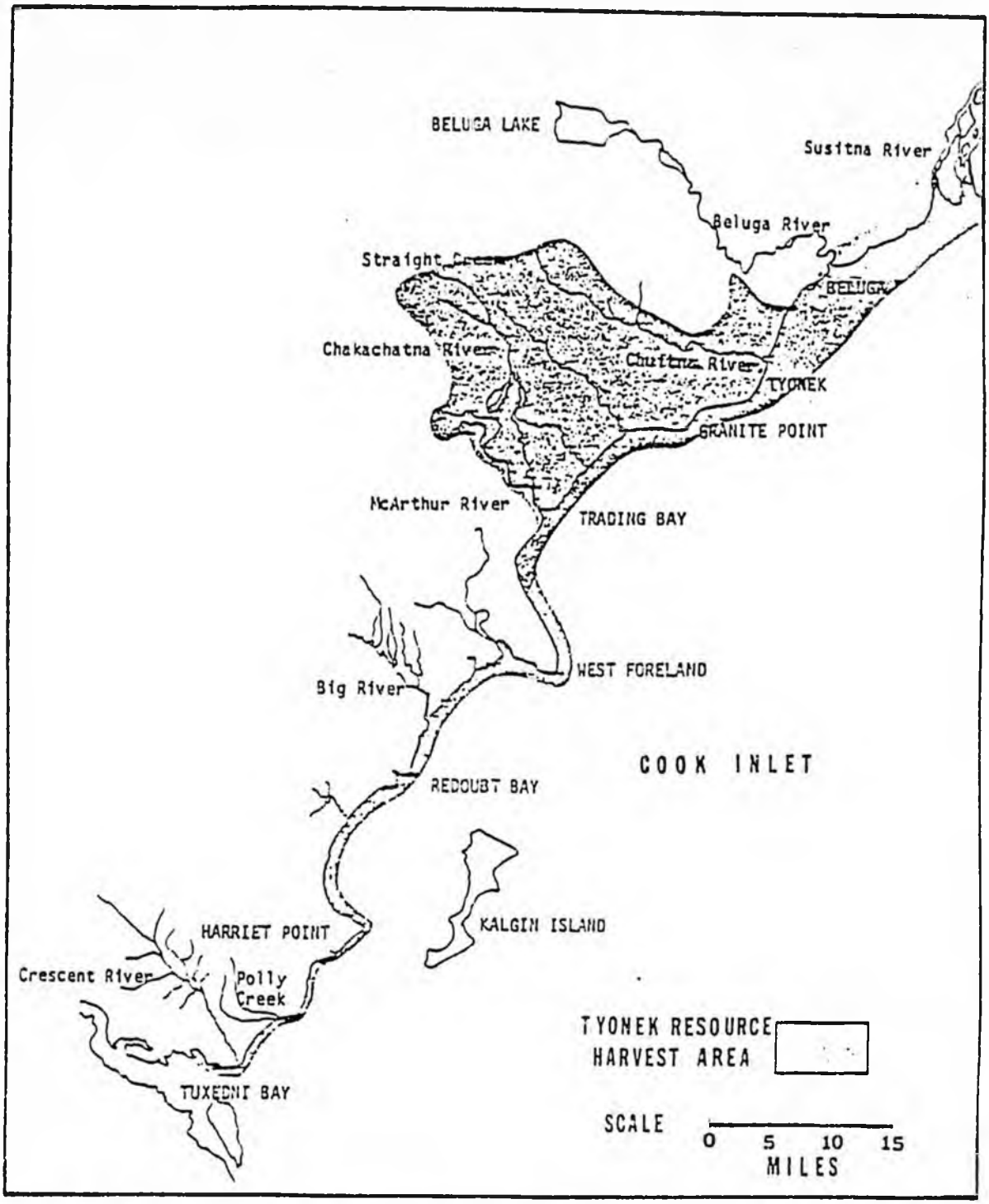


Figure 2. Geographic area of resource harvest used by Tyonek residents 1978 to 1982

Figure 14

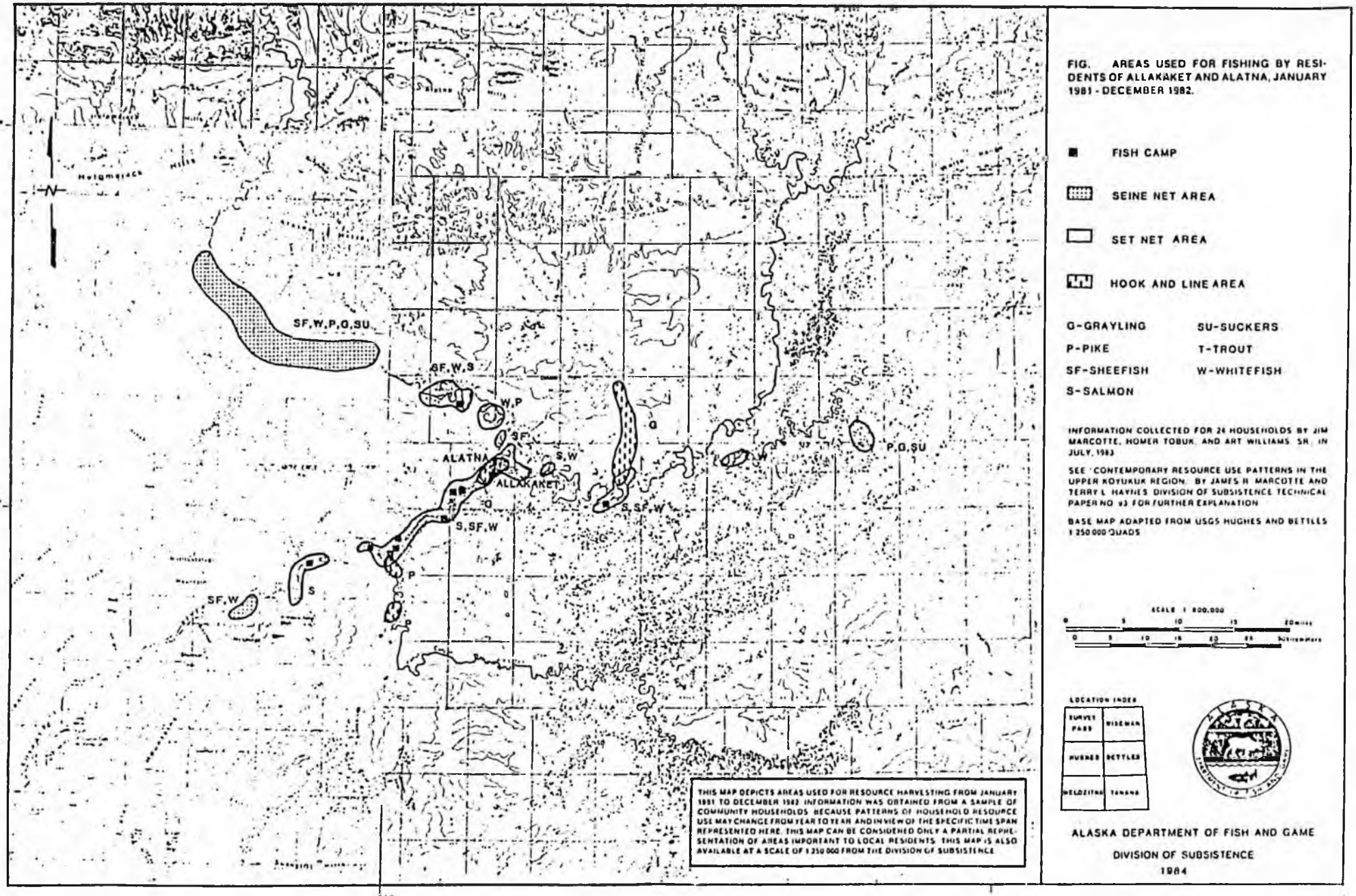


FIG. AREAS USED FOR FISHING BY RESIDENTS OF ALLAKAKET AND ALATNA, JANUARY 1981 - DECEMBER 1982.

■ FISH CAMP

SEINE NET AREA

SET NET AREA

HOOK AND LINE AREA

G-GRAYLING
P-PIKE
SF-SHEEFISH
S-SALMON
SU-SUCKERS
T-TROUT
W-WHITEFISH

INFORMATION COLLECTED FOR 24 HOUSEHOLDS BY JIM MARCOTTE, HOMER TOBUK, AND ART WILLIAMS SR. IN JULY, 1983

SEE 'CONTEMPORARY RESOURCE USE PATTERNS IN THE UPPER KOYUKUK REGION, BY JAMES R. MARCOTTE AND TERRY L. HAYNES. DIVISION OF SUBSISTENCE TECHNICAL PAPER NO. 93 FOR FURTHER EXPLANATION

BASE MAP ADAPTED FROM USGS HUGHES AND BETTLES 1:250,000 QUADS

SCALE 1:500,000

LOCATION INDEX

SURVEY PASS	WISEMAN
HUGHES	BETTLES
MELOZITNA	TANANA

ALASKA DEPARTMENT OF FISH AND GAME

DIVISION OF SUBSISTENCE

1984

FIUGRE 14A

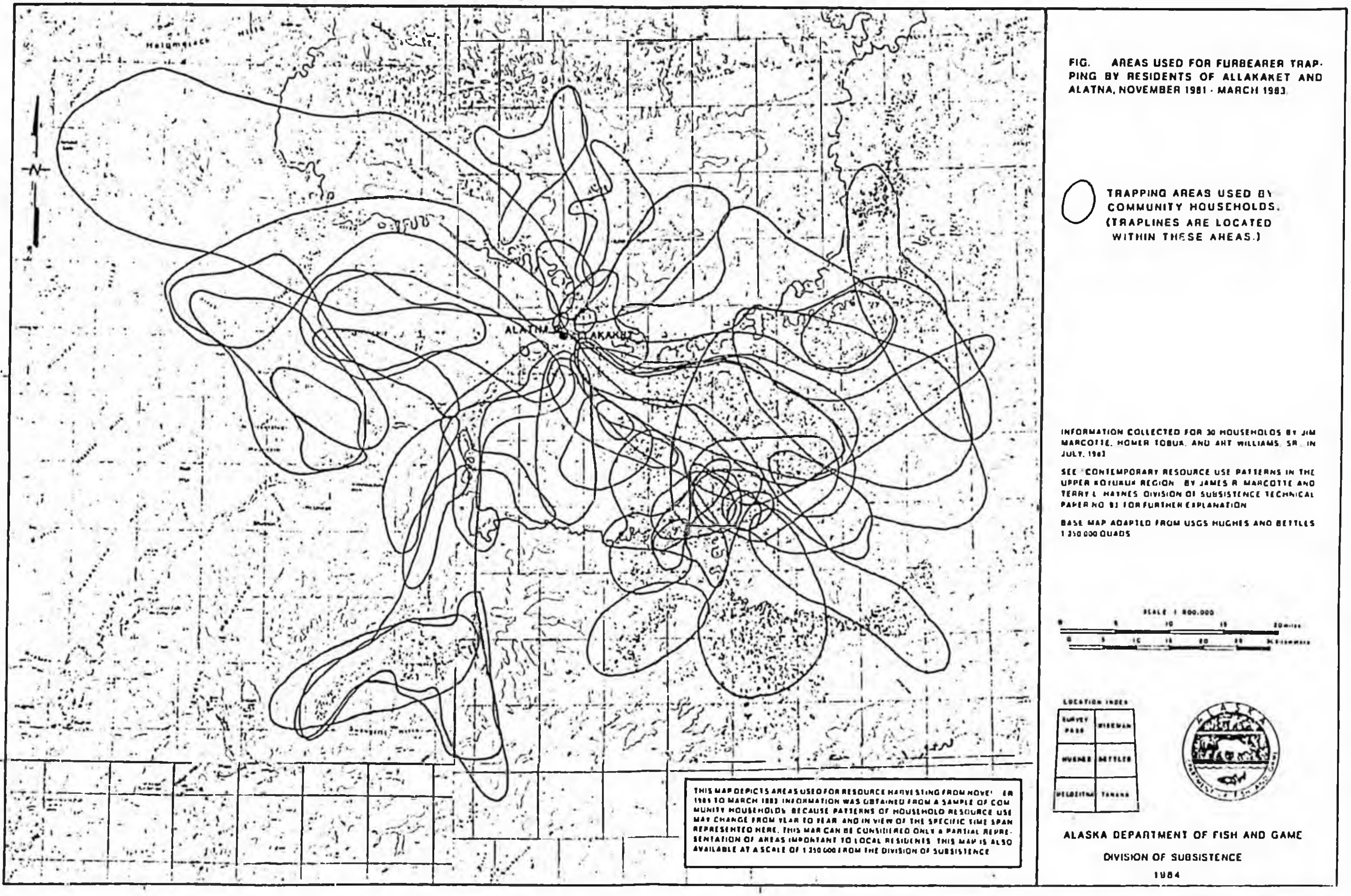

ALATNA
AKAKET
FIG. AREAS USED FOR FURBEARER TRAPPING BY RESIDENTS OF ALLAKAKET AND ALATNA, NOVEMBER 1981 - MARCH 1983.
TRAPPING AREAS USED BY COMMUNITY HOUSEHOLDS. (TRAPLINES ARE LOCATED WITHIN THESE AREAS.)
INFORMATION COLLECTED FOR 30 HOUSEHOLDS BY JIM MARCOTTE, HOMER TOBUK, AND ART WILLIAMS, SR., IN JULY, 1983
SEE "CONTEMPORARY RESOURCE USE PATTERNS IN THE UPPER KOYUKUK REGION" BY JAMES R. MARCOTTE AND TERRY L. HAYNES DIVISION OF SUBSISTENCE TECHNICAL PAPER NO. 93 FOR FURTHER EXPLANATION
BASE MAP ADAPTED FROM USGS HUGHES AND BETTLES 1:250,000 QUADS
SCALE 1:500,000
LOCATION INDEX
SURVEY PASS
WISEMAN
HUGHES
BETTLES
MELOZITNA
TANANA
THIS MAP DEPICTS AREAS USED FOR RESOURCE HARVESTING FROM NOVEMBER 1981 TO MARCH 1983. INFORMATION WAS OBTAINED FROM A SAMPLE OF COMMUNITY HOUSEHOLDS. BECAUSE PATTERNS OF HOUSEHOLD RESOURCE USE MAY CHANGE FROM YEAR TO YEAR AND IN VIEW OF THE SPECIFIC TIME SPAN REPRESENTED HERE, THIS MAP CAN BE CONSIDERED ONLY A PARTIAL REPRESENTATION OF AREAS IMPORTANT TO LOCAL RESIDENTS. THIS MAP IS ALSO AVAILABLE AT A SCALE OF 1:250,000 FROM THE DIVISION OF SUBSISTENCE.
ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF SUBSISTENCE
1984

FIGURE 14B

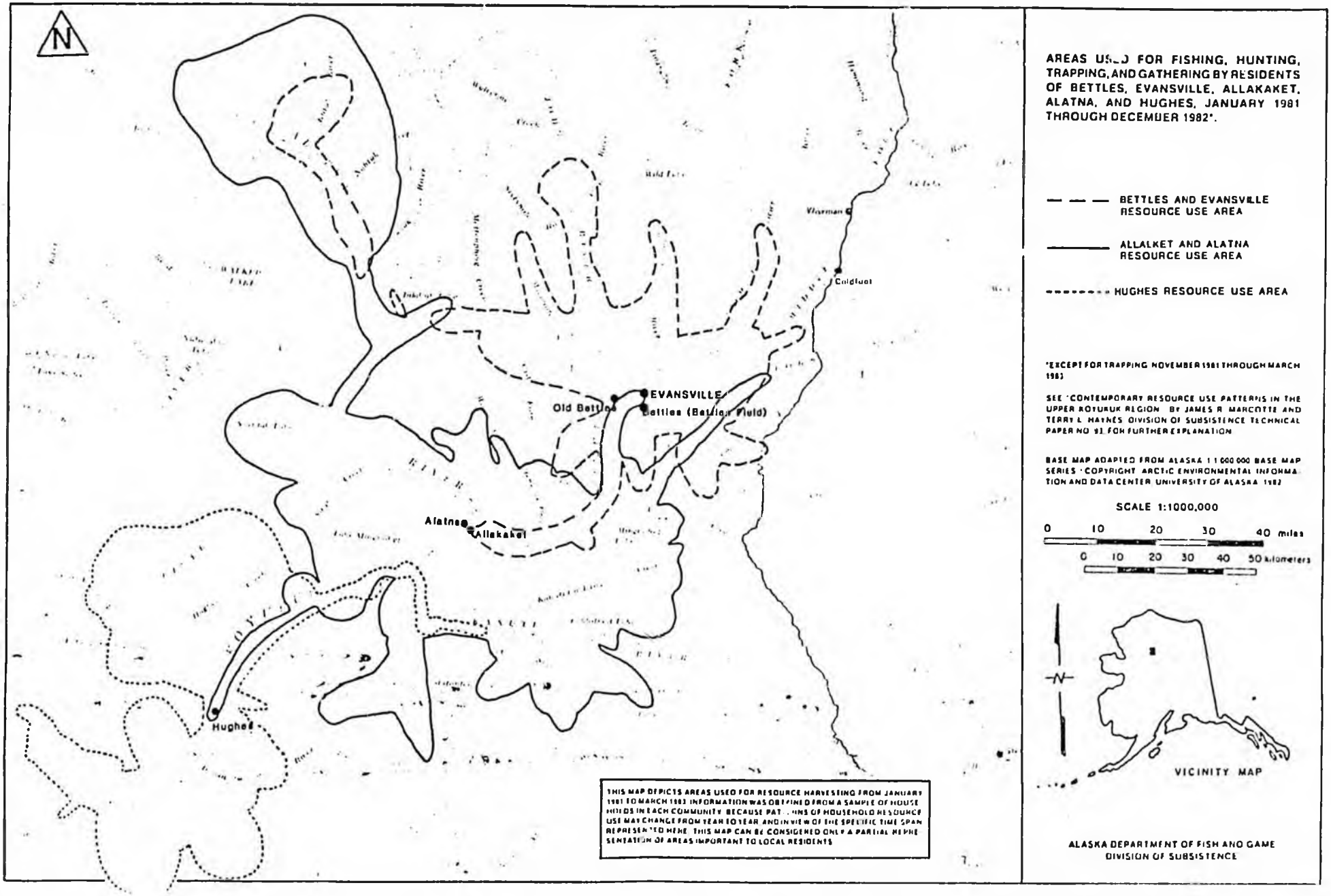

N
Wiseman
Coldfoot
EVANSVILLE
Old Bettles
Bettles (Bettles Field)
Alatna
Allakaket
Hughes
THIS MAP DEPICTS AREAS USED FOR RESOURCE HARVESTING FROM JANUARY 1981 TO MARCH 1983. INFORMATION WAS OBTAINED FROM A SAMPLE OF HOUSEHOLDS IN EACH COMMUNITY. BECAUSE PATTERNS OF HOUSEHOLD RESOURCE USE MAY CHANGE FROM YEAR TO YEAR AND IN VIEW OF THE SPECIFIC TIME SPAN REPRESENTED HERE, THIS MAP CAN BE CONSIDERED ONLY A PARTIAL REPRESENTATION OF AREAS IMPORTANT TO LOCAL RESIDENTS.
AREAS USED FOR FISHING, HUNTING, TRAPPING, AND GATHERING BY RESIDENTS OF BETTLES, EVANSVILLE, ALLAKAKET, ALATNA, AND HUGHES, JANUARY 1981 THROUGH DECEMBER 1982*.
BETTLES AND EVANSVILLE RESOURCE USE AREA
ALLAKET AND ALATNA RESOURCE USE AREA
HUGHES RESOURCE USE AREA
*EXCEPT FOR TRAPPING NOVEMBER 1981 THROUGH MARCH 1983
SEE "CONTEMPORARY RESOURCE USE PATTERNS IN THE UPPER KOYUKUK REGION" BY JAMES R. MARCOTTE AND TERRY L. HAYNES, DIVISION OF SUBSISTENCE TECHNICAL PAPER NO. 93 FOR FURTHER EXPLANATION
BASE MAP ADAPTED FROM ALASKA 1:1,000,000 BASE MAP SERIES "COPYRIGHT ARCTIC ENVIRONMENTAL INFORMATION AND DATA CENTER, UNIVERSITY OF ALASKA 1982
SCALE 1:1000,000
0 10 20 30 40 miles
0 10 20 30 40 50 kilometers
N
VICINITY MAP
ALASKA DEPARTMENT OF FISH AND GAME
DIVISION OF SUBSISTENCE

FIGURE 14C

TABLE 5. MEAN SUBSISTENCE HARVESTS BY MAJOR INCOME SOURCE*

Household's Major Income Sources	Mean Household Size	Mean Household Income	Mean Subsistence Harvest per Household	Mean Subsistence Harvest per Household Member
Wage Employment and Commercial Fishing (n=49)	6.1	$23,362	5,274 lbs.	870 lbs.
Wage Employment Only (n=10)	4.4	19,025	4,608	1,047
Commercial Fishing Only (n=18)	6.3	16,926	3,920	624
Transfer Payments (n=11)	6.3	6,468	2,741	435

*From a sample of 88 households for the period June 1980 through May 1981

(Data from the communities of Alakanuk, Emmonak, Kotlik, Sheldon Point, Mountain Village, and Stebbins in the Yukon River Delta vicinity.)

From Robert J. Wolfe (1984) Commercial Fishing in the Hunting-Gathering Economy of a Yukon River Yup'ik Society. Draft submitted to Etudes/Inuit/Studies.

FIGURE 14D

From Robert J. Wolfe (1983) The Lower Yukon River Delta: Resource Uses in Six Small Communities of Western Alaska. In R.J. Wolfe and L.J. Ellanna (comp) Resource Use and Socioeconomic Systems: Case Studies of Fishing and Hunting in Alaskan Communities. Technical Paper No. 61, Division of Subsistence, A.D.F.G., Juneau.

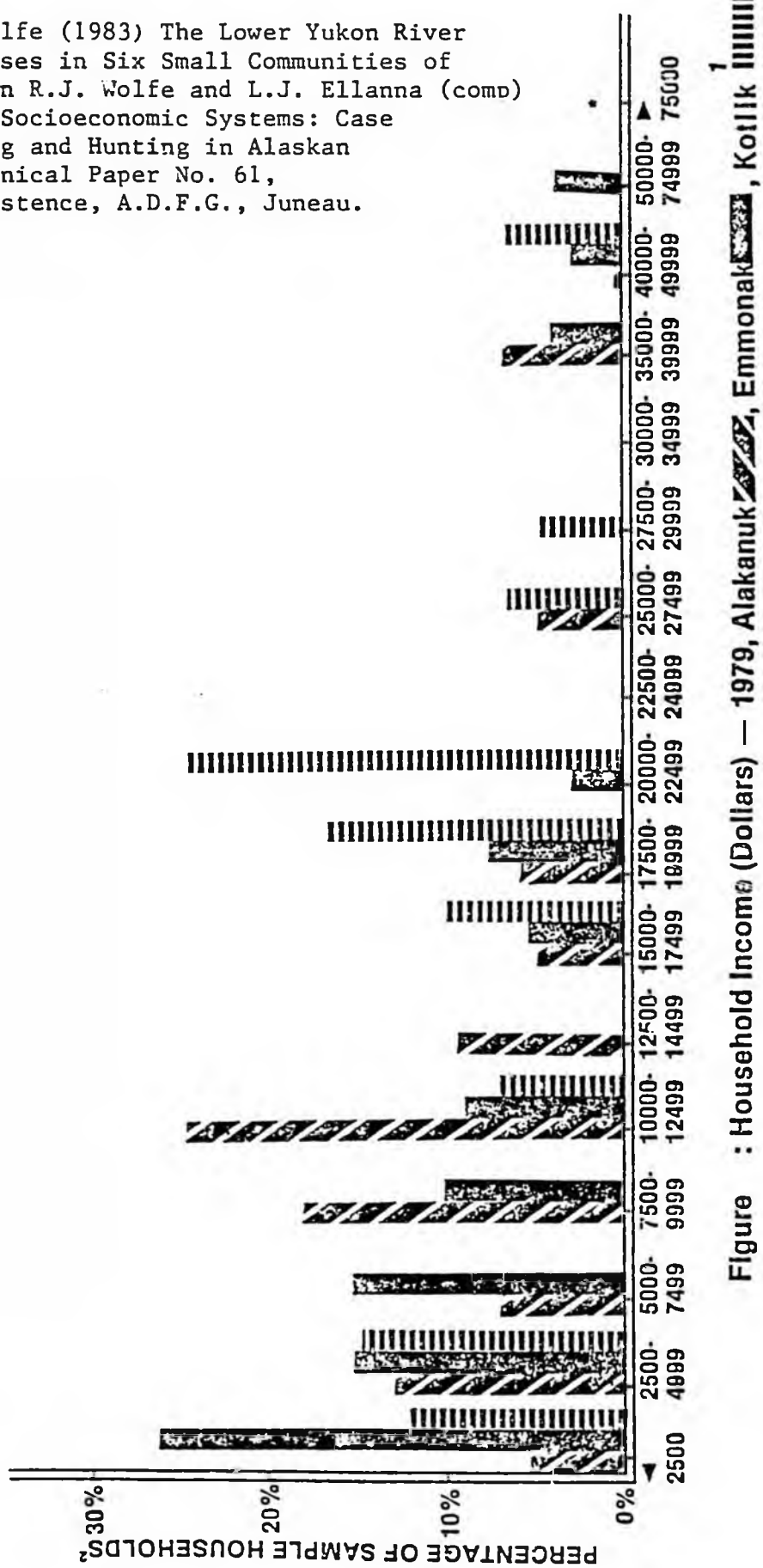


Figure : Household Income (Dollars) — 1979, Alakanuk, Emmonak, Kotlik[1]

1 U.S. Bureau of the Census, 1980 Census of Population and Housing, Summary Tape File 3
²Alakanuk N = 105; Emmonak N = 132; Kotlik N = 62
* no data available

Figure 15

From James A. Fall (1983) Tyonek. Resource Uses in a Small Non-Road Connected Community of the Kenai Peninsula Borough. In R.J. Wolfe and L.J. Ellanna (comp) Resource Use and Socioeconomic Systems: Case Studies of Fishing and Hunting in Alaskan Communities. Technical Report No.61, Division of Subsistence, A.D.F.G., Juneau.

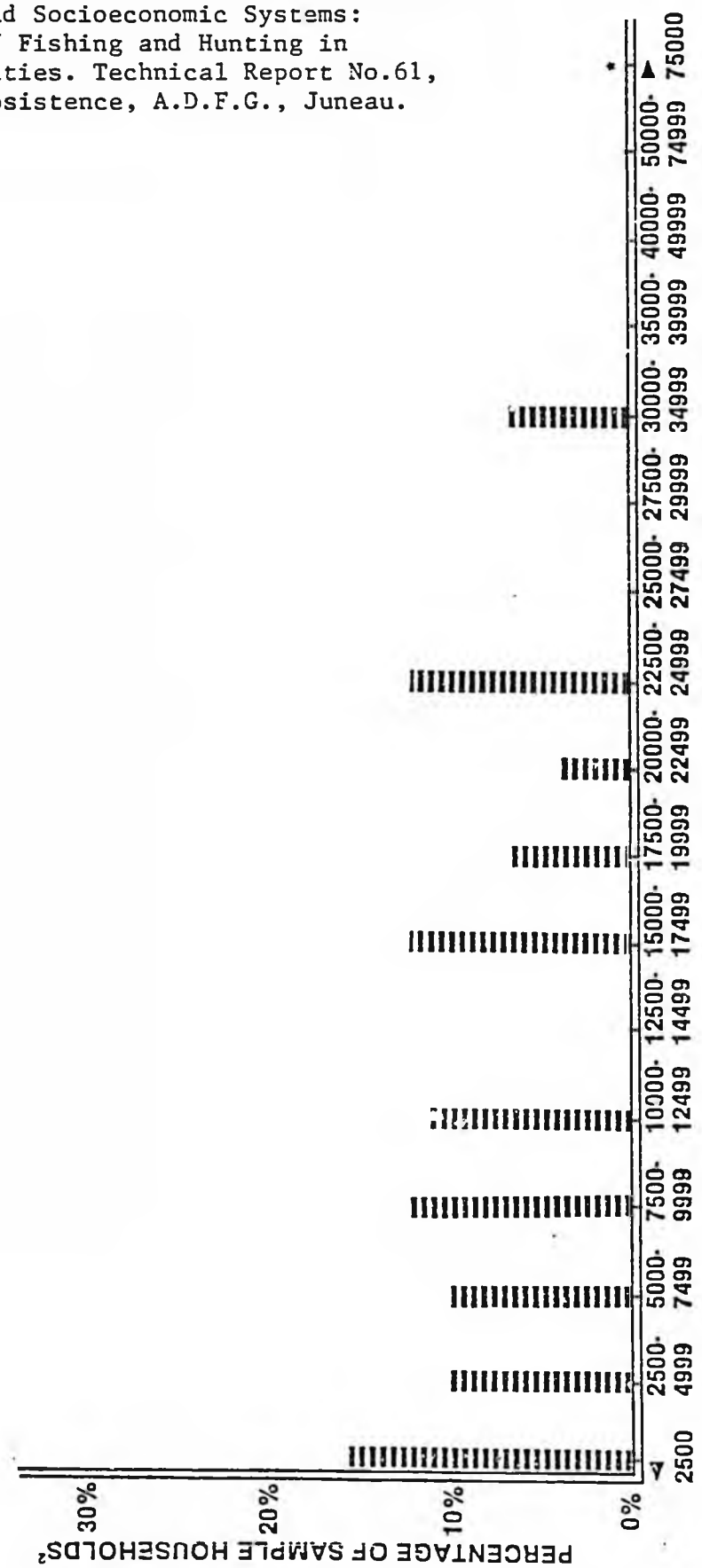


Figure : Household Income (Dollars) — 1979, Tyonek[1]

1 U.S. Bureau of the Census, 1980 Census of Population and Housing, Summary Tape File 3
²N = 90
* no data available

Figure 16

A Summary of Federal Acts from 1870 - 1925 allowing taking of Alaska animals for food or clothing.

1870: An Act.
Unlawful to kill fur seals on St. Paul and St. George Islands except from June to October.
EXCEPTION: Natives may kill "such young seals as may be necessary for their own food or clothing" during other months.

1902: An Act.
Prohibits "wanton destruction" of wild game.
Allows killing of game animals by native Indians or Eskimo, miners, explorers, travelers "when in need of food".

1908: An Act.
Amends 1902 Act. Prohibits "wanton destruction" of non-game wild animals and birds (except of eagles, ravens and cormorants).
Allows killing of any game animal or bird for food or clothing at any time by Natives, miners, explorers "when in need of food".

1910: An Act.
Allows Natives of Pribilof Islands to kill young seals "as may be necessary for their own food and clothing" and old seals "as may be required for their own clothing and for the manufacture of boats for their own use".

1925: An Act.
Allows an Indian or Eskimo, prospector or traveler to take animals or birds during the closed season "when he is in absolute need of food and other food is not available".

A PERFORMANCE REPORT ON THE DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT GUIDE LICENSING AND CONTROL BOARD

November 21, 1985

Audit Control Number

08-1253-86-R

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Deputy Commissioners, Department of Commerce and Economic Development	Terry Elder Greg Baker

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THE LEGISLATURE

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AUDIT DIVISION
POUCH W
JUNEAU, ALASKA 99811

November 22, 1985

Members of the Legislative Budget
and Audit Committee:

In accordance with the provisions of Titles 24 and 44 of the Alaska Statutes (sunset legislation), the attached report is submitted for your review.

A PERFORMANCE REPORT ON THE
DEPARTMENT OF COMMERCE AND ECONOMIC DEVELOPMENT
GUIDE LICENSING AND CONTROL BOARD

November 21, 1985

Audit Control Number

08-1253-86-R

Gerald L. Wilkerson

Gerald L. Wilkerson, CPA
Legislative Auditor
Division of Legislative Audit

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PURPOSE AND SCOPE OF THE REPORT

Purpose

In accordance with the intent of Titles 24 and 44 of the Alaska Statutes (sunset legislation), we have reviewed the activities of the Guide Licensing and Control Board for the past four fiscal years. Our examination was conducted to determine if the Board has been operating in an efficient and effective manner.

Legislative intent requires consideration of this report during legislative oversight hearings to determine whether the Guide Licensing and Control Board should be reestablished. The law now specifies that the Board will terminate June 30, 1986 and will have one year from that date to conclude its affairs.

Scope

The major areas of our examination were the licensing, examination, administration, complaint, and affirmative action functions of the Board. We reviewed and evaluated the following:

1. Applicable statutes and regulations.

2. Interviews with the license examiners.

3. Tests of files and documents of licensees.

4. Complaints filed with the Division of Occupational Licensing, Human Rights Commission, Equal Employment Opportunity Office, Attorney General's Office, and the Ombudsman Office.

5. Discussions with Board members.

6. Minutes of Board meetings and Division correspondence files.

7. Attorney General Opinions applicable to professional boards.

ORGANIZATION AND FUNCTION

The Guide Licensing and Control Board was established by the 1973 Legislature and succeeded the Board of Fish and Game, Department of Fish and Game, which previously had regulated the guiding industry. The seven member Board is appointed by the Governor with confirmation by the Legislature and is restricted to having no more than three members as licensed guides. Board members serve staggered terms of three years or until their successors are appointed.

The Board is organized under the Department of Commerce and Economic Development, Division of Occupational Licensing. The Division assists the Board in the performance of their duties by providing administrative, licensure, and investigative support.

By law, a nonresident may not hunt, pursue, or take brown bear, grizzly bear, polar bear, or sheep in Alaska unless personally accompanied by a licensed master, registered, or assistant guide. Nonresidents hunting with an Alaskan relative are exempt from this requirement. The Guide Licensing and Control Board was appointed in part to protect these nonresident hunters from incompetent individuals holding themselves out to be qualified Alaskan guides.

The function of the Board is primarily regulatory, mandated by AS 08.54.010. Accordingly, the Board has the capacity to administer examinations, determine qualifications of guides, establish performance standards and regulate activities, maintain guide registers, prohibit harmful guiding activities, conduct hearings regarding licensure, and establish quotas of guides for specified geographical areas (exclusive guiding areas). The Board, through the assignment of exclusive guiding areas, limits hunting pressure by guides within a specific geographical area.

In addition, the Board licenses "transporters"; a licensed "transporter" is a person who transports hunters for hire.

CORRECTION

THIS DOCUMENT
HAS BEEN REPHOTOGRAPHED
TO ASSURE LEGIBILITY

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