

Customary and Traditional Use of Deer in GMUs 1-5, Southeast Alaska

Submitted by the Alaska Department of Fish and Game



DEER

CUSTOMARY AND TRADITIONAL FINDINGS: WORKSHEET FOR THE MEETING OF THE ALASKA BOARD OF GAME, NOVEMBER, 1992

GMU's 1A, 1B, 1C, 1D, 2, 3, 4, 5

SPECIES Deer

COMMUNITIES USING THE POPULATION (1984-91)

Residents of the following communities have reported hunting deer in each GMU indicated, from 1984-1991:

GMU 1A: Coffman Cove, Craig, Hoonah, Juneau-Douglas, Ketchikan, Klawock, Loring, Margarita Bay, Metlakatla, Meyers Chuck, Neets Bay, Petersburg, Point Baker, Revill/406/510, Saxman, Shoal Cove, Sitka, Thorne Bay, Wrangell, Yes Bay

GMU 1B: Hobart Bay, Kake, Ketchikan, Meyers Chuck, Petersburg, Point Baker, Rowen Bay, Tenakee Springs, Thorne Bay, Wrangell

GMU 1C: Cube Cove, Elfin Cove, Excursion Inlet, Gustavus, Haines, Hobart Bay, Juneau-Douglas, Ketchikan, Sitka, Skagway, Tenakee Springs

GMU 1D: Juneau, Haines, Skagway

GMU 2: Cape Pole, Cholmondeley, Coffman Cove, Craig, Cube Cove, Dolomi, Edna Bay, Haines, Hobart Bay, Hollis, Hydaburg, Hyder, Juneau-Douglas, Kasaan, Ketchikan, Klawock, Labouchere Bay, Long Island, Metlakatla, Meyers Chuck, Naukati, Natzuhini, Petersburg, Point Baker, Port Alice, Port Protection, POW/1211, Saxman, Sitka, Skagway, Skowl Arm/Polk, Tenakee Springs, Thorne Bay, Token/ORR/SOS, Tuxekan, Waterfall, Whale Pass, Whitestone, Winter Harbor, Wrangell, Yakutat

GMU 3: Coffman Cove, Dolomi, Edna Bay, Juneau-Douglas, Kake, Ketchikan, Labouchere Bay, Petersburg, Point Baker, Port Protection, Shoal Cove, Sitka, Skagway, Tenakee Springs, Thorne Bay, Wrangell, Zarembo Camp

GMU 4: Angoon, Baranof Warm Springs, Chatham Cannery, Corner Bay, Craig, Cube Cove, Edna Bay, Eight Fathom Bight, Elfin Cove, Excursion Inlet, Freshwater Bay, Funter Bay, Game Creek, Gustavus, Haines, Hawk Inlet, Hidden Falls, Hobart Bay, Hollis, Hoonah, Hydaburg, Juneau-Douglas, Kake, Ketchikan, Klawock, Little Port Walter, Long Island Camp, Meyers Chuck, Pelican, Petersburg, Point Baker, Port Alexander, Port Armstrong, Rowan Bay, Sitka,

Skagway, Tenakee Springs, Thorne Bay, Whitestone, Whale Pass, Wrangell, Yakutat, Other Alaska, Outside Alaska

GMU 5: No open deer hunting season from 1980-90. Yakutat in 1991 5A

1. LENGTH AND CONSISTENCY OF USE (long term, consistent, excluding interruptions by circumstances beyond the user's control)

Historic Use Pattern

Deer are indigenous to southeast Alaska on the islands and mainland areas south of Berners Bay (GMU 1C) (Doerr and Sigman 1986). Deer were transplanted to Yakutat (GMU 5) in 1934, to Sullivan Island in Lynn Canal (GMU 1C) from 1951-54, and to the Taiya Valley near Skagway (GMU 1D) from 1951-56. Of transplanted populations, only Sullivan Island has remained at consistently harvestable levels through the 1980s (Burriss and McNight 1973; Doerr and Sigman 1986). Krause (1970 [1885]) reported that in the 1880s deer were generally present on islands in Southeast and absent on the mainland.

Historic and ethnographic sources indicate harvest and use of deer (*giwakaan* or *kiwakaan*) by Tlingit and Haida residents of southeast Alaska (de Laguna 1960; Goldschmidt and Haas 1946; Jacobs and Jacobs 1982; Kamenskii 1985 [1906]; Krause 1970 [1885]; Moss 1989; Niblack 1970 [1890]; Oberg 1973; Swanton 1908). Archaeological sites on Admiralty Island dating to 1600 years ago include butchered deer bones in their assemblages (de Laguna 1960; Moss 1989). Historically, deer was harvested for meat, grease, hide, and bone, hoof, or antler tools and implements. Deer constituted one of many sources of rendered oil used in the diet. Deer was reportedly highly prized, very abundant and relatively easy to harvest, and comprised a large part of the traditional food supply. Tlingit knowledge about deer includes observations that deer populations have always fluctuated, and that wolf predation is heavy. Where deer was not available, venison was obtained through trade networks (Jacobs and Jacobs 1982; Niblack 1970 [1890]; Oberg 1973).

Deer was also incorporated into Tlingit culture through mythology, dance, and ritual. For example, a complex ceremony was undertaken for certain peace-making occasions between clans or moieties in which the "harmless" or "innocent" character attributed to deer was personified by the peace-offering clan (de Laguna 1972; Swanton 1908). Peace-making songs and dances included the central role of a deer persona. Tlingit mythology includes a story about a bear-deer encounter in which the deer would not agree to fight (de Laguna 1972; Swanton 1908).

Contemporary Use Patterns

Division of Subsistence baseline harvest studies documented harvest and use of deer by residents of 9 study communities (Angoon-1984, Haines-1983, Hoonah-1985, Kake-1985,

Klawock-1984, Klukwan-1983, Petersburg-1987, Tenakee Springs-1984, Yakutat-1984) (Table 1).

In addition, resource harvest surveys for the year 1987 in 30 communities in Southeast indicate harvest or use of deer by residents of all but one community (Kruse and Frazier 1988) (Table 2).

ADFG harvest data (1960-84) illustrate that residents of Southeast communities generally hunted deer relatively close to their community (30 miles) (Doerr and Sigman 1986). Hunters in some communities, especially where deer populations were low, traveled to other GMUs to hunt (ibid.). Deer were generally absent from GMU 1D, although historically occasional deer were taken when encountered. Residents of GMU 1D (Haines, Klukwan, and Skagway) have traveled to other areas to hunt deer.

ADFG data show that deer populations were abundant from Dixon Entrance to the Admiralty-Baranof-Chichigof islands from 1960-68. A region-wide population crash occurred from the late 1960s to early 1970s (Doerr and Sigman 1986). Harvests, number of hunters, and hunter-days decreased during that time period, but increased again from 1980-84. Data for 1980-91 show that the greatest portion of the deer harvest in Southeast was taken in GMU 4 (Table 3, Figures 1-9). In general, the other southeast GMUs with open seasons during that time (1A, 1B, 1C, 2, and 3) indicate continuous harvest and slightly increased harvest levels. Deer has been harvested by Yakutat residents during open seasons since the 1940s (Mills and Firman 1986).

Seasons and Bag Limits

GMUs 1-4 SEASONS: Seasons for deer changed over the 1925-68 time period in GMUs 1-4. The shortest season in this time period was the September 15-November 15 openings in 1942-43. Season length increased to 5 months, from August through December in the years 1963-67. Season length has continued to show some variability. August hunting has been closed in GMU 1A in 1973; GMU 1B in 1973-79; GMU 2 in 1973; and GMU 3 in 1973-4. There was no open season in GMU 3 in 1975-79; deer hunting has been closed in GMU 1D since 1985. In recent years GMUs 1A-C, 2, and 4 have been open for December hunting. From 1983 through 1991 there have been January openings in GMU 4 for registration, subsistence, or general hunting. In the 1992 season January hunting was closed on lands under State of Alaska jurisdiction; the January hunt remained open for all of GMU 4 on federal lands except for the Sitka/Peril Straits area.

The federal government assumed management of subsistence hunting on federal land following the December 1989 State of Alaska Supreme Court McDowell decision. Federal Management Regulations were the same as the State of Alaska regulations for deer through the 1991 hunting season. In 1992 the Federal Subsistence Board adopted subsistence and sport hunting regulations for GMU 4 for the 1992 season that continue earlier seasons and bag limits in most of GMU 4 for subsistence, reduce the bag limit to 4

deer and eliminate the January hunt in the Sitka/Peril Straits area, and significantly reduce or eliminate sport hunting seasons and bag limits in this GMU.

GMU 5 SEASONS: Yakutat or GMU 5A-B deer seasons have been variable. A season existed from 1925 through 1929 (even though this was before the transplant in 1934), and from 1942-1979, and varied from a short October 1-10 opening in 1950 to a full 5-month season in 1963-67 and 1969-79. There has been no open season in GMU 5A-B in the 1980-91 time period. A short season was opened in 5A for 1991.

GMU 1-4 BAG LIMITS 1925-1969: In general bag limits for deer have increased in GMUs 1-4 over the 1925-90 time period. A three buck limit was in force 1925-41 in GMU 1-4; this limit dropped to 2 bucks 1942-53, and was back at 3 bucks in 1954. The first doe season appears in regulation in 1955 when limits in GMUs 1-5 were set at 2 bucks and 1 doe. Bag limits were 4 deer in all units 1959-69 with does allowed to be hunted either as a portion of the bag or after a certain date. The following list tracks GMU bag limits for the 1970-90 time period:

1970-92:

GMU 1A: Limit was 4 deer in 1970, 3 deer 1970-87, and back to 4 deer in 1988-90. Antlerless deer were allowed to be hunted in Oct-Dec in 1970, in the month of October in 1971, and in November in 1972-77. Bag limit has been antlered deer only 1978-92.

GMU 1B: Limit was 4 deer in 1970, reduced to 3 deer in 1971, 1 deer 1973-80, and back to 2 deer 1981-92. Antlerless deer could be hunted Oct-Dec in 1970 and in October in 1971. Bag limit has been antlered deer only in 1972-92.

GMU 1C: Limit has been 4 deer over the 1970-92 time period in most of this GMU subunit. Antlerless deer have generally been allowed after September 15 to the close of the season. For 1991-1992, the 4 deer limit with antlerless allowed applied to Douglas, Lincoln, Shelter, and Sullivan islands; bag limit was set at 2 antlered deer for the rest of GMU 1C. In some years the antlerless deer season has been shorter: after Oct. 1 in 1970; Oct. 1-Nov. 30 in 1973; and Sept. 15-Nov. 30 in 1974-79.

GMU 1D: A limit of 4 deer was set for 1970-71, including a doe season. This GMU has been closed 1972-92.

GMU 2: Limit was 4 deer 1970-71, decreasing to 3 deer 1972-87, and increasing back to 4 deer 1988-92. Antlerless deer hunting, with date restrictions, was provided 1970-77. Antlered deer only have been allowed 1978-92 except for a controversial provision for harvest of 1 antlerless deer in 1987 during the October 10-31 time period.

GMU 3: Limit was 2 antlered deer for Mitkof Island in 1970-71. Limit was 4 deer, with a November antlerless hunt elsewhere in GMU 3 in 1970; this dropped to 3 deer with an October antlerless season in 1971. Limit dropped to 2 antlered deer in 1972 and 1 antlered deer in 1973. There was no open season 1975-79. A limit of 1 antlered deer was set for a portion of GMU 3 for 1980-87; this was raised to 2 antlered deer for 1988-92. Mitkof and adjacent islands remained closed 1980-90. S. Mitkof, Woewodski and Butterworth islands were open for harvest of 1 antlered deer 1991-92.

GMU 4: Bag limit was generally 4 deer 1970-86 in this unit. A limit of 3 deer applied to a portion of Admiralty Island in 1980-81. A January registration permit hunt allowed an additional 2 deer, for a total of 6 deer, to be taken in the 1983-86 regulatory years. Limit went to 6 deer for all hunters 1987-91 in most of GMU 4. In northeast Chichagof Island, the subsistence bag limit was 6 deer and the resident limit 3 deer in 1987-89. Both the subsistence and resident limit was set at 3 deer for the 1990-92 regulatory years for northeast Chichagof. The bag was lowered to 4 deer elsewhere in GMU 4 for 1992. The January season was eliminated in 1992. Hunting of antlerless deer in this GMU has been allowed later in the season; various dates applied in portions of the GMU in the 1970-83 time period. Antlerless deer have been allowed after September 15 in 1984-91.

GMU 5 BAG LIMITS 1925-92: Bag limits for GMU 5A-B have been variable: 3 bucks were allowed 1925-29; the season was closed 1930-41. Two bucks were allowed 1942-48 with the limit dropping to 1 buck 1949-51. The limit was raised to 2 bucks 1952-53 and 3 bucks 1954-58. Limit was 4 deer with antlerless deer after various dates from 1959-79. Season was been closed 1980-90. GMU 5A was opened to a November, 1 buck season for 1991-92; GMU 5B remained closed 1991-1992.

2. SEASONALITY (recurring in specific seasons of each year)

Primary deer hunting seasons reported in historic sources indicate harvests from August through February, with some harvest also occurring in April, May, and June (Niblack 1970 [1890]; Oberg 1973). It was noted that seasonality of deer harvest reflects seasonal habitat of deer and the intended preparation method: for example, large bucks were hunted in alpine areas in August and the relatively fat meat was smoked; deer was also hunted for fresh meat at salmon camps in September (Jacobs and Jacobs 1982; Oberg 1973).

Contemporary sources report that the seasonality of deer hunting continues to reflect seasonal changes in habitat and requires a variety of harvest methods (Ellana and Sherrod 1984; George and Bosworth 1988; George and Kookesh 1983; Gmelch and Gmelch 1985; Jacobs and Jacobs 1982; Schroeder and Kookesh 1990). In August and early September, deer is hunted in alpine areas where large bucks are taken. Deer is harvested throughout the rutting season in October and November, in forests, muskeg meadows, and clearcuts, primarily by calling techniques. Deer is hunted along beaches and old growth forest

during the heavy snows of winter (December and January). Hunts in April, May, or June are also undertaken when need for meat arises. Deer harvest for funerals or 40-day parties also takes place if the need arises.

3. MEANS AND METHODS OF HARVEST (efficient, economic, conditioned by local circumstances)

Aboriginally, Tlingits hunted with bows and arrows made locally or obtained in trade (Niblack 1970 [1890]). Flint locks and other guns replaced the bow and arrow soon after European contact. Hunting canoes were light, portable dugouts, designed for 1-3 people. Deer were lured with calls, taken while swimming, or driven by dogs or men. de Laguna (1960) reports that snares were used in deer harvest, as were clubs, spears, and an elaborate dart thrower called a whip sling. It was used to throw a shafted dart with a detachable point at deer and bear.

As reported in several Division of Subsistence technical papers (cited above), contemporary hunters access hunting areas by boat, on foot, or by road vehicle. Transportation on the ferry system is used by hunters from the larger communities. Major hunting methods include alpine hunts, muskeg, forest, and clearcut hunts, beach hunts, and road hunts. Alpine hunts often require overnight camping and considerable hiking. Hunting below timberline involves tracking, and luring deer to clearings, including edges of clearcuts, with various locally or commercially manufactured calls. Beach hunting is often undertaken in early morning or dusk, or during a minus tide when deer feed on beach vegetation. Hunting on beaches involves "beach combing" by boat (when a deer is spotted, the hunter disembarks to shoot the deer), or hiking under cover of the fringe forest. In addition, opportunistic harvest is undertaken while traveling by boat along the coastline.

Doerr and Sigman (1986) suggest that smaller communities tend to pursue different hunting methods than larger communities (Juneau, Sitka, Wrangell, Petersburg, Ketchikan), as a larger proportion of beach hunts occurred in Angoon (43 percent in 1982) than in larger communities (9 percent in 1960; 7 percent in 1961). In addition, Johnson and Wood (1979) characterize beach hunting as "primarily a meat hunt" and alpine hunting as a "high quality" hunt (cited in Doerr and Sigman 1986).

4. GEOGRAPHIC AREAS (near or reasonably accessible from the user's residence)

Historically, Tlingit and Haida people were organized into geographic groups called *kwaans*, comprised of associated clans. Resource harvest, including deer hunting, took place within *kwaan* territory (Goldschmidt and Haas 1946). Within each *kwaan* area, deer harvest locations were defined according to presence of deer populations and physical access to productive areas. The *kwaan* territories remained relatively constant throughout the 19th and 20th centuries, continuing to generally define community use areas in the 1980s. Historic deer hunting areas of Tlingit and Haida *kwaans* are encompassed by each GMU as follows (Goldschmidt and Haas 1946):

GMU A: Cape Fox (Saxman) and Tongass (Ketchikan) Tlingit, Metlakatla Tsimshian

GMU 1B: Stikine (Wrangell) Tlingit

GMU 1C: Auk (Juneau), Kake, Huna, and Taku (Douglas) Tlingit

GMU 2: Klawock, Stikine (Wrangell), Tongass (Ketchikan) Tlingit, and Hydaburg and Kasaan Haida

GMU 3: Kake, Kuiu (Kake and Klawock), Stikine (Wrangell)

GMU 4 Angoon, Auk, Huna, Kake, Sitka Tlingit

Community deer harvest areas may extend beyond traditional *kwaan* and contemporary community use area for various reasons, such as availability of faster, larger boats, or in response to lack of deer or local closures by ADFG management (Cohen 1989; Firman and Bosworth 1990, Smythe 1988). Doerr and Sigman (1986) report that, for the larger Southeast communities (Juneau, Sitka, Wrangell, Petersburg, Ketchikan), most of the community deer harvest occurred within approximately 30 miles of the community when deer populations and density were high around the community. When local deer populations declined, fewer residents engaged in hunting, while distance traveled by hunters increased.

5. MEANS OF HANDLING, PREPARING, PRESERVING AND STORING (traditionally used by past generations, but not excluding recent technological advances)

Historic methods of preparing venison included broiling on a stick, roasting on hot stones, or boiling in wooden dishes or water-tight baskets with hot stones, and later in kettles. Grease was rendered by boiling and skimming. Deer heads were fermented by wrapping in large burdock leaves and burying in ground exposed to sunlight. Preservation of meat was undertaken by women; the meat was usually dried and/or smoked. Deer was commonly not skinned until most of the meat was eaten; the skin was left on to protect and preserve the meat. Until the early 20th century, deer tallow was used as fuel for lamps. Inedible parts (antler, hooves, bones) were used for tools and utensils; blankets were made from hide retaining the hair. Women cleaned hides to be used for clothing with stone or ornamented bone scrapers (de Laguna 1960; Jacobs and Jacobs 1982; Kamenskii 1985 [1906]; Niblack 1970 [1890]).

Contemporary users prepare venison by boiling, barbecue, or drying and smoking. Smoked meat may be eaten boiled, then cooled and soaked in seal oil, or boiled with dry fish. Backbone and other bones are often boiled; ribs, shoulder, or hindquarters are preferred barbecued; the meaty diaphragm is wrapped around a twig and roasted; tripe, heart, and liver are considered delicacies (Jacobs and Jacobs 1982).

Preservation generally includes freezing or jarring. Venison is also dried and smoked; smoked meat may be cut in pieces and stored in seal grease. Venison is also commonly ground or made into sausage. Hides continue to be tanned by some, using seal skin stretchers (George and Kookesh 1983; Gmelch and Gmelch 1985).

6. INTERGENERATIONAL TRANSMISSION OF KNOWLEDGE, SKILLS, VALUES AND LORE (handed down between generations)

Deer have been harvested and used in southeast Alaska prehistorically and throughout recorded history. Hunting knowledge and skills were learned through traditional Tlingit and Haida instruction of youth by maternal uncles. Boys tended to gravitate towards uncles with particular skills they wished to develop, such as hunting skills (Oberg 1973; Oswalt 1988). Commonly, older men decided when hunting would begin, and directed a hunting drive, while young men undertook the heavy work of driving deer from timber to shoreline. Traditional dance and songs served to communicate folklore and values about the resource and its harvest, use, or role in the culture. Contemporary hunters learn skills mostly from relatives, through practice and observation (George and Kookesh 1983). Parable-like stories are often used to teach values and skills.

7. DISTRIBUTION AND EXCHANGE (customary trade, barter, sharing, and gift giving within a definable community of persons)

Historically, deer meat and skins were shared, given, bartered, and sold. Venison was shared freely within a house group by the harvesting family. Tanned skins were given by women who specialized in their manufacture to others, who would reimburse them with another product.

Tlingit and Haida trade networks served, in part, to distribute a variety of food and materials among areas lacking the resource. Deer meat and skins were among the items traded between communities. Mainland groups reportedly traded moose, caribou, rabbit, and marmot skins for venison from islanders (Oberg 1973). Deer skins from Southeast were imported by Yakutat residents (de Laguna 1972). In the late 19th century, deer skins were sold by Angoon Tlingit to the local herring processing company (de Laguna 1960).

Deer meat continues to be shared among community households. In Angoon, for example, relatively few hunters supply several households with meat. Meat is commonly distributed to a hunter's mother's and father's families, as well as to his mother-in-law's house.

Percent of households giving and receiving deer for each of 9 community baseline harvest studies and for each of 30 communities surveyed in 1987 is shown in tables 1 and 2.

8. DIVERSITY OF RESOURCES IN AN AREA: ECONOMIC, CULTURAL, SOCIAL AND NUTRITIONAL ELEMENTS (wide diversity, substantial elements in a subsistence user's life).

Of 30 southeast communities surveyed in 1987, deer comprised a regional average of 21 percent of a household's resource harvest. While fish were taken in the largest quantities by nearly all communities, deer comprised the largest proportion of mammal harvests.

Table 1.

Southeast Deer Harvest Data from Community Studies									
Community	Study	Total Number	Total Pounds	Pounds Per	Mean Lbs.	Percent of Households			
	Year	Harvested	Harvested	Capita	per HH	Harvesting	Utilizing	Giving	Receiving
Angoon	84	454	36327	58.4	250.5	60.5	89.5	50	44.7
Haines	83	108.0	8620.0	4.5	13.1	6.1	18.4	3.4	12.9
Hoonah	85	494.0	39532.0	52.2	166.8			38.0	53.5
Kake	85	208.0	16611.0	26.6	97.1	38.6	68.6	21.4	38.6
Klawock	84	204.0	16302.0	34.5	124.4	55.6	80.6	36.1	38.9
Klukwan	83	2.0	199.0	1.3	4.8	3.0	12.1	0.0	9.1
Petersburg	87	2053	164250	43.9	146.3	39.4		29.6	40
Tenakee Springs	84	76	6110	65	130	50	83.3	41.7	58.3
Yakutat	84	18	1448	2.67	8	6	20	8	16

Table 2.

COMMUNITY	TOTAL	TOTAL	MEAN (HH)	POUNDS	PERCENT OF HOUSEHOLDS (HH)			
	POUNDS HARVESTED	NUMBER HARVESTED	POUNDS HARVESTED	PER CAPITA	HARVESTING	USING	GIVING	RECEIVING
Angoon	37925.60	474.07	271.95	73.79	75.20	100.00	39.80	46.30
Coffman Cove	11084.80	138.56	167.24	59.92	56.70	73.10	21.60	27.20
Craig	48017.60	600.22	131.60	41.11	51.50	80.10	25.40	41.60
Edna Bay	7644.00	95.55	364.00	110.78	85.00	95.00	45.00	60.00
Elfin Cove	4321.60	54.02	227.69	73.25	69.20	92.30	46.20	69.20
Gustavus	9764.00	122.05	151.38	62.59	47.80	70.00	26.90	31.80
Haines	25042.40	313.03	41.17	15.84	14.50	43.30	13.50	34.00
Hollis	3008.00	37.60	93.74	37.60	40.40	66.60	16.10	32.30
Hoonah	62840.00	785.50	286.86	92.55	65.00	94.40	45.90	48.10
Hydaburg	16225.60	202.82	147.49	42.14	37.20	77.60	26.80	55.20
Hyder	0.00	0.00	0.00	0.00	0.00	12.10	0.00	12.10
Kake	24801.60	310.02	128.80	38.94	41.90	77.80	21.60	57.30
Kasaan	1600.00	20.00	114.29	39.02	42.90	85.70	21.40	64.30
Klawock	35587.20	444.84	158.76	45.39	51.80	73.60	21.30	37.60
Klukwan	1709.60	21.37	43.53	12.85	12.20	47.70	12.20	38.10
Metlakatla	16545.60	206.82	39.56	10.70	16.20	69.00	11.90	60.20
Meyers Chuck	640.00	8.00	64.00	21.33	50.00	80.00	0.00	60.00
Pelican	25250.40	315.63	306.62	106.09	63.20	90.50	44.50	59.10
Petersburg	173852.80	2173.16	144.89	43.90	39.00	69.50	29.50	40.00
Point Baker/ Port Protection	5452.80	68.16	118.54	59.27	47.20	88.40	24.60	59.30
Port Alexander	11492.00	143.65	311.77	107.40	65.70	94.00	59.60	64.20
Saxman	4284.80	53.56	56.29	16.61	23.00	57.50	11.30	42.00
Sitka	302640.00	3783.00	105.41	37.65	38.20	0.00	0.00	0.00
Skagway	1904.80	23.81	9.34	3.22	5.70	29.10	3.10	25.50
Tenakee Springs	12826.40	160.33	288.23	139.42	54.80	87.10	38.60	45.20
Thorne Bay	17576.00	219.70	112.29	36.09	58.30	75.00	27.90	36.60
Whale Pass	2560.00	32.00	142.22	51.20	66.70	77.80	5.60	27.80
Wrangell	59116.80	738.96	57.91	20.68	27.70	63.20	12.70	46.30
Yakutat	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 3.

Southeast Alaska Deer Harvest Data												
GMU	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
GMU 1A												395
GMU 1B												
GMU 1C												245
GMU 1D												
GMU 2												615
GMU 3												
GMU 4	1756	4040	3040	2500	7000	7118	4247	1475	2945	2045	950	4500
TOTAL												
GMU	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1982-91
GMU 1A	na	340	440	626	780	857	612	687	593	723	350	6008
GMU 1B		5	21	6	47	69	65	101	73	148	50	585
GMU 1C	na	290	390	394	527	434	532	442	489	499	417	4414
GMU 1D		0	0	0	0	0	0	0	10	0	0	10
GMU 2	na	1185	1740	1878	3151	2805	3888	2850	2805	3093	2471	25866
GMU 3		83	83	127	174	202	135	240	236	250	411	1941
GMU 4	4310	5830	8360	8971	10388	10257	14331	11930	10754	12511	5636	98968
ALL GMUs		7733	11034	12002	15067	14624	19563	16250	14960	17224	9335	137792
Data 1969 through 1983 are from Div. of Wildlife Conservation survey and inventory reports.												
Data 1984-1989 are from Div. of Wildlife Conservation annual survey of harvest ticket survey holders.												

FIGURE 1.

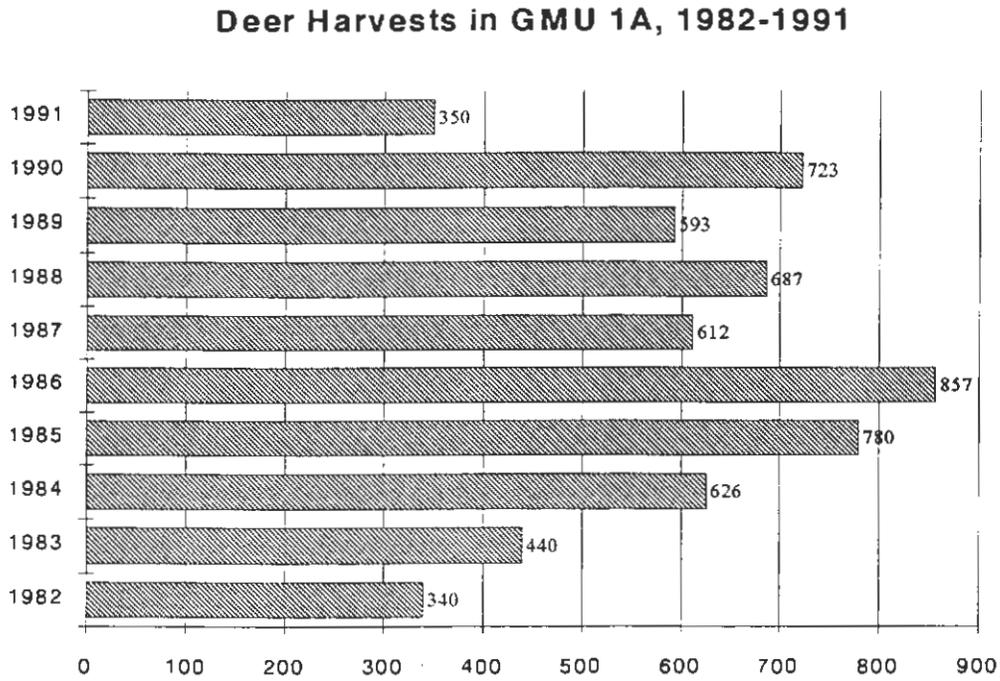


Figure 2.

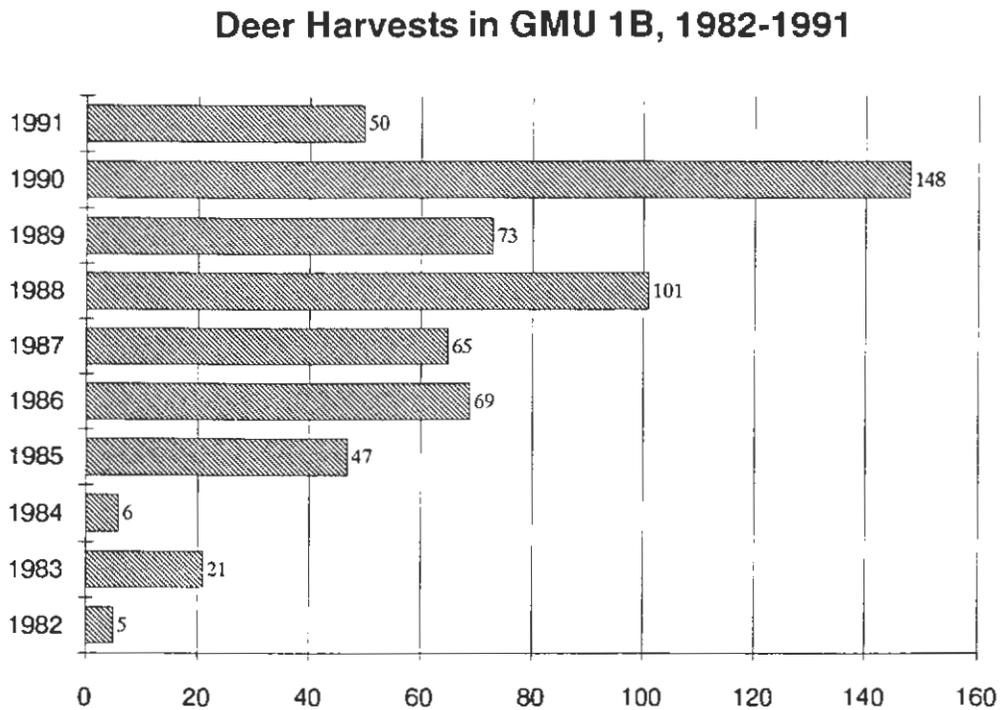


Figure 3.

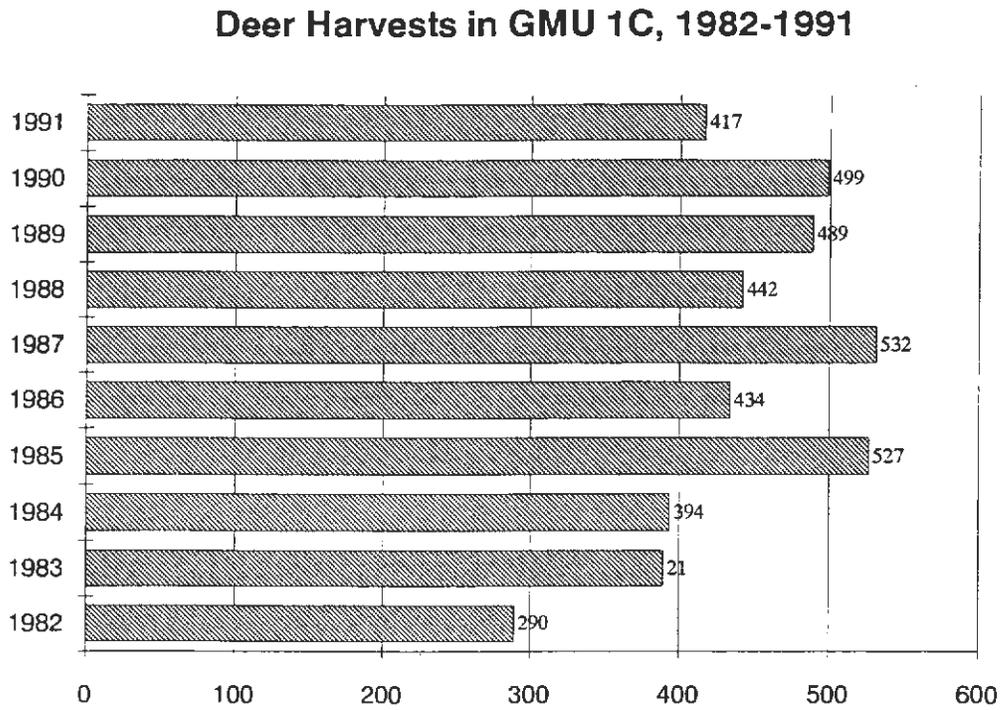


Figure 4.

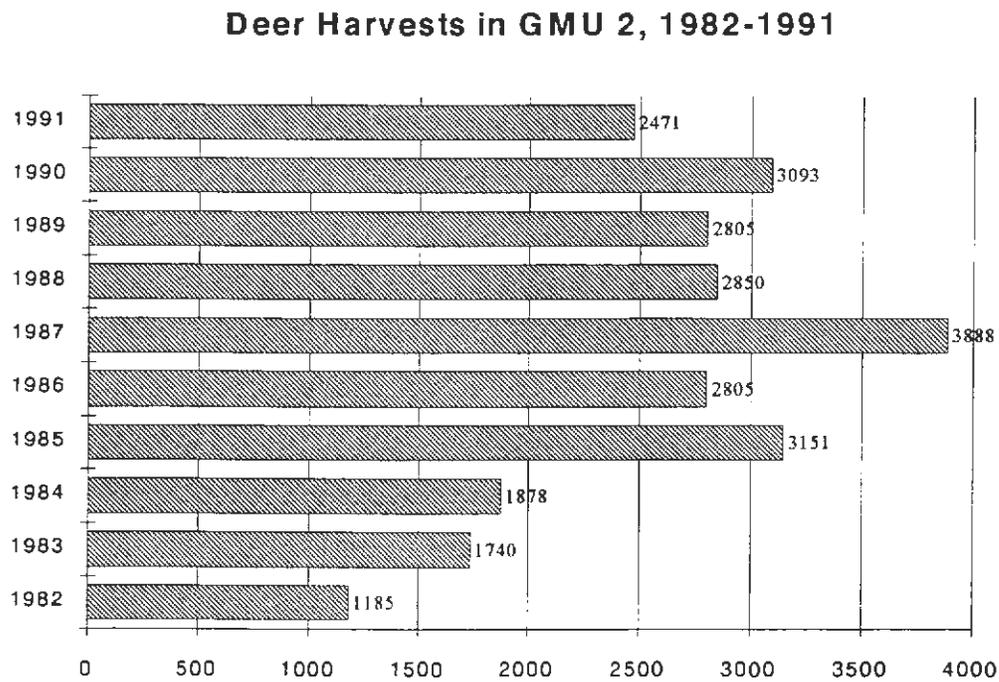


Figure 5.

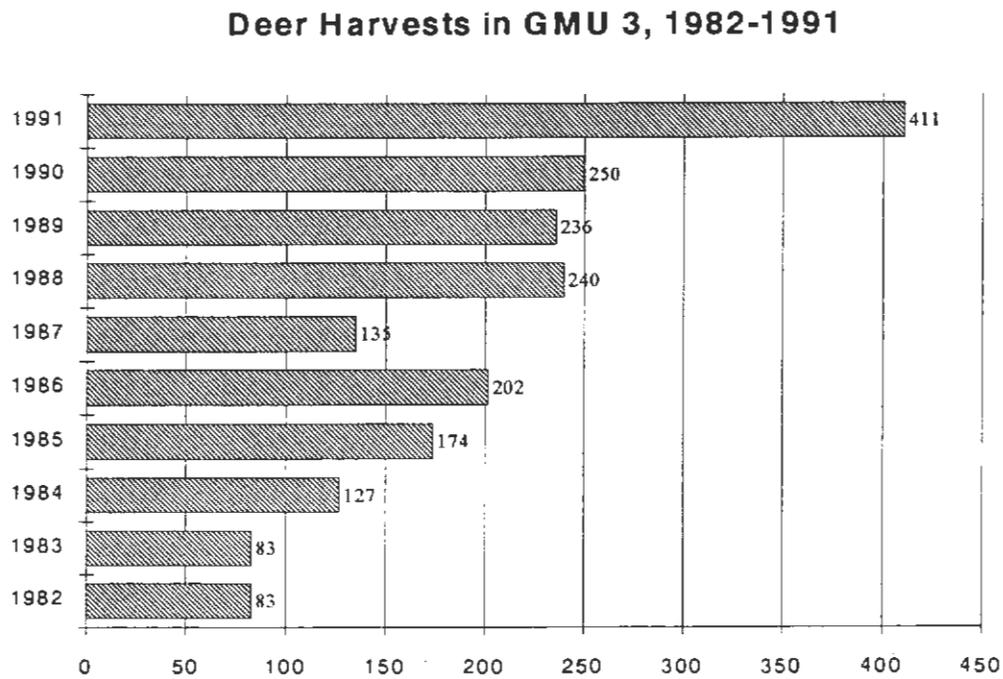


Figure 6.

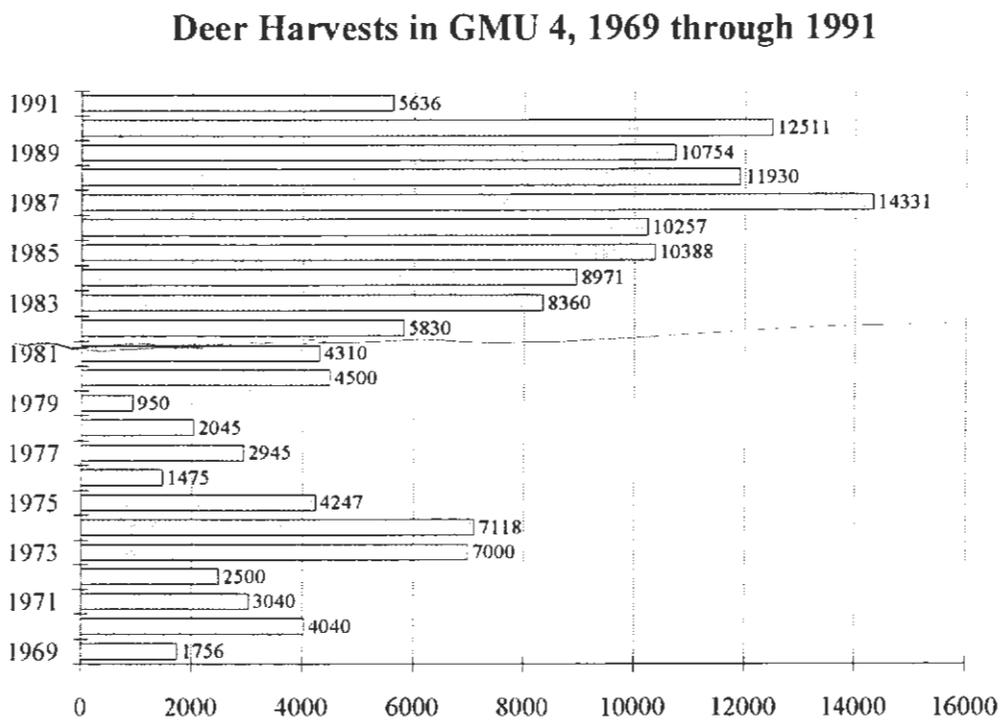


Figure 7.

Deer Harvests in GMU 1A, 1B, 1C, 2, and 3,
1982-1991

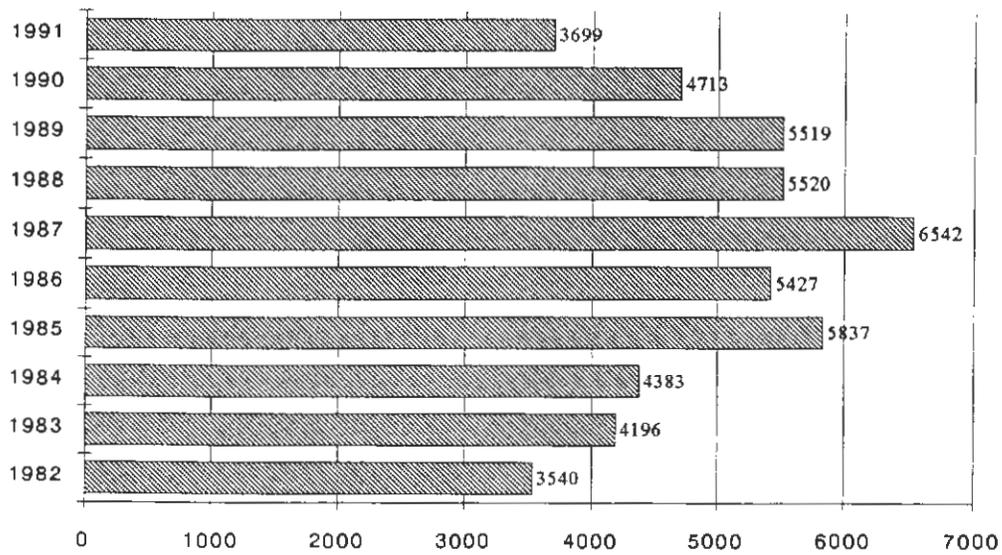


Figure 8.

Deer Harvests in GMU 1 through 4, 1982-1991

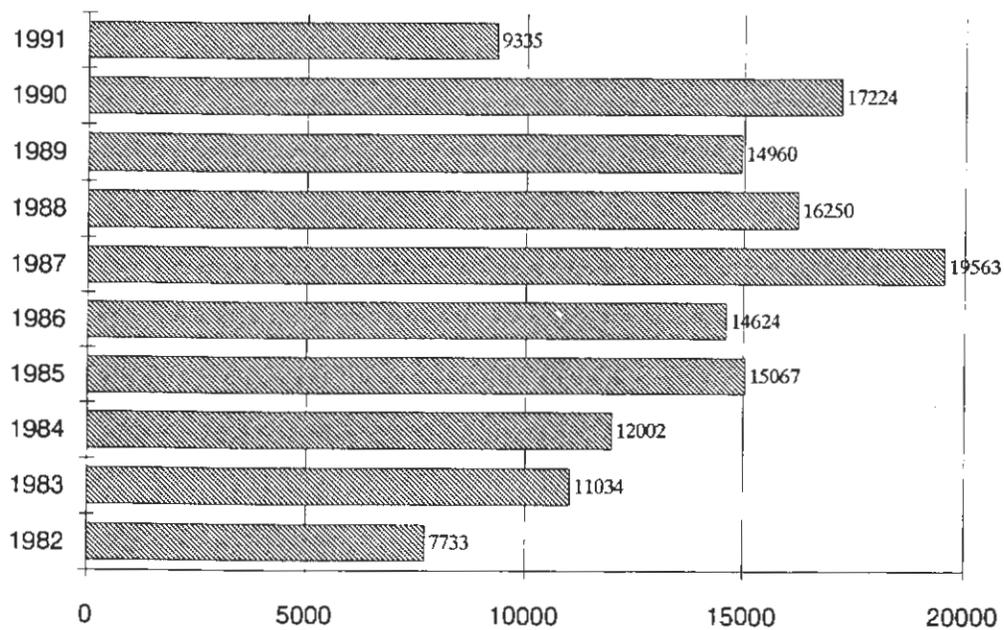


Figure 9.

Deer Harvests in GMU 1 through 4, 1982-1991

