

Submitted by the Alaska Department of Fish and Game at the request of Chair Spraker
 January 15, 2019

Options for amounts reasonably necessary for subsistence (ANS), Unit 3 brown bear.

Available harvest information is from a registration hunt that has occurred since 2005 (RB075). Regulations for this hunt specify one bear every four regulatory years, residents only, season March 15-May 31.

Option 1: Average of the harvest from all available years (2005-2017) = 1 bear

Harvest of 5 legal bears during 2005-2017 = 0.4 bears/year average; round up to one bear. In years when harvest occurred, one to two bears were legally harvested. ANS is one bear in GMU 3; no change to Unit 1B.



(Source of figure: ADF&G presentation on Proposal 48, 1/15/19 Southeast BOG meeting)

Option 2: Add Unit 3 brown bear to the customary and traditional use (C&T) finding for Unit 1B brown bear, ANS remains the same (1 bear)

ADF&G suspects some population interchange occurs between bears in Unit 3 and those on nearby Unit 1B mainland. ANS is one bear in Units 1B and 3 combined.

As a reference point of past Board actions, in 2014, the Board considered the Teshekpuk and Western Arctic caribou herds amounts reasonably necessary for subsistence and found the ANS for the Teshekpuk herd was considered part of the Western Arctic herd (see Board Finding 2014-204-BOG).

Option 3: Add Unit 3 brown bear to the C&T finding for Unit 1B brown bear, ANS increases to a range of 1-2 bears

To account for the relatively low additional harvest in Unit 3, ANS changes to a range of 1-2 bears in Units 1B and 3 combined.

Option 4: Take no action at this meeting

With action taken at this Board meeting on Proposal 48 to open a fall season, more harvest information will likely be available for discussion of ANS options at a future board meeting.

**EIGHT CRITERIA WORKSHEET:
BROWN BEARS**

Prepared for the Alaska Board of Game by the Division of Subsistence, Alaska Department of Fish and Game, November 2000

SPECIES Brown Bear

GMU/ SUBUNIT: 1A, 1B, 1C, 1D, 3

COMMUNITIES SHOWING A HISTORY OF USE OF THE POPULATION

GMU1A Anchorage, Berryton, Coffman Cove, Craig, Fairbanks, Haines, Klukwan, Hyder, Juneau, Ketchikan, Saxman, Klawock, Metlakatla, Meyers Chuck, Petersburg, Yes Bay.

GMU1B Anchorage, Bradfield, Craig, Juneau, Ketchikan, Saxman, Klawock, Meyers Chuck, Petersburg, Sitka, Thorne Bay, Wrangell.

GMU1C Anchorage, Delta Junction, Eagle River, Haines, Klukwan, Juneau, Ketchikan/Saxman, Seward, Skagway, Tok.

GMU1D Anchorage, Dutch Harbor, Fairbanks, Haines, Klukwan, Juneau, Ketchikan/Saxman, Seward, Skagway.

GMU 3 Wrangell, Petersburg.

1. LENGTH AND CONSISTENCY OF USE (a long-term, consistent pattern of noncommercial taking, use and reliance on the game population that has been established over a reasonable period of time of not less than one generation, excluding interruptions by circumstances beyond the user's control, such as unavailability of the game caused by migratory patterns)

HISTORIC USE PATTERN

Brown bear have been harvested by the Tlingit, Haida, and Tsimshian of Southeast Alaska since before historic contact and continuing to the present (Niblack 1970 [1890], de Laguna 1972, Oberg 1973, Thornton 1992). The brown bear was feared and respected for its ferocity. Respect for the brown bear evolved from the belief that the bear was closely related to man. Native beliefs emphasize the close kinship between human and bears, including intermarriage between the species. Brown bears were believed to possess the ability to transform themselves into humans and could understand human language (Thornton 1992).

Historically, brown bear have been harvested for the meat and hides, other parts of the bear were used to make tools, regalia, and ceremonial objects. Brown bear fat was more highly prized than the meat itself. Brown bear hides were used for regalia, clothing and bedding. Bear teeth, ears and claws were used for ceremonial regalia. Teeth, bones, and sinews were employed in manufacture (de Laguna 1972; Thornton 1992). Other parts of the bear, including the mandible, tongue, and certain bones were believed to possess special powers and were sometimes sought by

shamans. It was also customary for a member of a Tlingit clan to slay brown bears that had injured or killed members of their clan (Thornton 1992).

Among the Tlingit and Haida, numerous beliefs and customs were associated with brown bear hunting. Traditionally, special precautions were taken in preparation for the hunt and extraordinary care had to be given to the carcass after the bear was slain. Rituals were performed to appease the slain bear's spirit, its head and hide were removed and ceremonially treated with eagle down while special prayers were recited (Thornton 1992).

CONTEMPORARY USE PATTERN

Ethnographic, harvest, and interview data suggest that the harvest of brown bear by the Tlingit has declined from early historic levels. The decrease in harvest seems to be the result of a constellation of factors, including the low desirability of brown bear meat in comparison with other game species; the availability of alternative and more economically viable resources; the labor-intensive methods required for preservation; increased regulation of the harvest; and the erosion of the cultural complex of beliefs and practices surrounding bear hunting (Thornton 1992). In the commercial fur market, brown bears never commanded high price relative to furbearers such as otter, marten, and mink.

During recent decades, brown bears have been harvested more occasionally by the Tlingit in the Southeast region. The largest use of brown bear is by non-Native hunters under general hunting regulations. Among non-Native hunters, brown bear have been hunted almost exclusively for trophy values, with the meat or fat usually not used for food.

Brown bear harvest data compiled by ADF&G for the years 1961-1998 are attached as Figure 1. This information illustrates a consistent harvest by Alaska resident hunters and an equally consistent, but smaller, amount of harvest by non-resident hunters. This information is compiled from bear sealing records and does not identify the uses made of the bear, such as for subsistence or trophy values. Brown bear bag limits were one bear per year from 1959-1968. Since then, limits have been one bear every four years.

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

Historically, brown bear were taken primarily in the spring and fall. Spring bears were preferred for their meat and hides, while fall bears were prized for their fat. Spring bears were pursued in the alpine and lowland areas where they came to feed on grasses and roots. Fall bears often were taken along streams where they concentrated to feast on salmon. Occasionally brown bears were pursued in their dens during the winter months, or taken incidentally during the summer fishing season.

In recent decades, brown bears are hunted according to the seasons provided in state and federal regulations. Current seasons are Sept. 15-Dec. 31 and Mar. 15-May 31, with a limit of one bear every four regulatory years by registration permit only. Federal regulations recognize the subsistence use of brown bear in GMUs 1A, 1B, 1C, 1D, 4, and 5.

3. MEANS AND METHODS OF HARVEST (a pattern of taking or use consisting of methods and means that are characterized by efficiency and economy of effort and cost)

Historically brown bears were taken by a variety of means including spears, bow and arrow, snares, pits, and deadfalls. Bear dens were located and marked in the autumn and winter so that in March when the bears began to emerge they could be hunted before they became too strong. Specially trained hunting dogs were used to track bears or to rouse them from their dens where men armed with spears waited (Oberg 1973). Brown bears were also trapped in neck snares and pits or caught with deadfalls made of logs weighted with stones (Niblack 1970 [1890], Oberg 1973, Emmons 1991, Thornton 1992). Snares were favored on the mainland (GMUs 1 and 5), while deadfalls were preferred on the islands (GMUs 2, 3, 4) (Emmons 1991).

In more recent years, brown bears are taken mainly with rifles. Hunting areas are typically accessed with the use of a boat or on foot. More recently, all-terrain vehicles and aircraft have been employed to access bear-hunting areas.

4. GEOGRAPHIC AREA (the area in which the noncommercial, long-term, and consistent pattern of taking, use, and reliance upon the game population has been established)

Brown bears are distributed throughout GMUs 1, 4, and 5. The information the Department has on (GMU 3) Wrangell, Etolin, and Deer islands' brown bear population suggests very few bears are present. From late spring to early fall they may be reliably found along salmon streams, in grassy meadows at river mouths and along beaches. Hunters may also track bears to their upland dens and feeding grounds.

GMU 1A Historically, the area encompassed by GMU 1A was hunted and fished by clan groups from the Tongass Tlingit (now principally located in Ketchikan), and the Cape Fox Tlingit (now principally in Saxman). These groups hunted brown bear in the major drainages along Behm Canal, Revillagigedo Island, and Boca de Quadra (Goldschmidt and Haas 1946).

GMU 1B was traditionally hunted by the Kakes (Kake/Petersburg), Sumdum (now principally in Kake and Juneau-Douglas), and the Stikine Tlingit (Wrangell area). Most of the brown bears in GMU 1B were taken in the Stikine River drainage vicinity by the Stikine Tlingit (Goldschmidt and Haas 1946 and Olson 1967).

GMU 1C was hunted by the Taku (Juneau and Douglas), Sumdum (now principally in Kake and Juneau-Douglas), the Kakes (Kake/Petersburg), and the Aukes (Juneau). Brown bear hunting areas identified in testimony to Goldschmidt and Haas (1946) include Berners Bay and Taku River drainages. Some communities in GMU 4 have harvested brown bear in GMU 1C. For example, Hoonah groups harvested bears in Glacier Bay, Dundas bay, Taylor Bay and in the drainages along western Lynn Canal.

GMU 1D was hunted by the Chilkat and Chilkoot, now located in Klukwan and Haines. Brown Bear were harvested along the Chilkat and Chilkoot river drainages, including the lakes and tributaries (Goldschmidt and Haas 1946).

GMU 3 Historically, the area encompassed by GMU 3 was hunted and fished by several Tlingit tribes: the Kake tribe hunted and fished the northwest half of Unit 3 and the southeast half was hunted and fished by the Stikine (Wrangell) tribe (Goldschmidt and Haas 1946).

5. MEANS OF HANDLING, PREPARING, PRESERVING, AND STORING (a means of handling, preparing, preserving, and storing of game that has been traditionally used by past generations, but not excluding recent technological advances where appropriate)

Traditionally, brown bear meat was boiled and eaten fresh, or dried, or smoked and preserved either in its own oil or in seal oil. Besides meat, other parts of the bear were used; bones and sinew were made into tools, cord and thread, fat was highly prized for food and occasionally rendered into oil, or used to preserve other foods such as berries or shellfish (Jones 1914, Thornton 1992), hides were made into rugs, bedding and ceremonial robes. These robes are still used at ceremonial events in the Tlingit and Haida villages of the region.

More recent methods of preparation include canning, jarring in seal oil, drying and smoking and freezing. The fat of a brown bear is still desired by some Tlingits (Thornton 1992).

6. INTERGENERATIONAL TRANSMISSION (a pattern of taking or use that includes the handing down of knowledge of hunting skills, values, and lore from generation to generation)

For Tlingits and Haidas, successful hunting traditionally involved not only the use of weapons but also the employment of a complex system of knowledge about the relationships between bears and humans. Bear hunters bathed, fasted and took other special precautions in preparation for the hunt. After killing a brown bear, hunters had to perform rituals of respect in order to appease the animal's spirit and avoid retribution. Many of these and other traditional beliefs and customs regarding the nature of bears are reflected in narratives and stories describing relations between Natives and brown bears dating back to ancient times. Tlingit beliefs and stories concerning brown bears impressed many early European observers (Thornton 1992).

The brown bear is an important Tlingit crest. Crests, usually representations of fish or animals, are considered the property of particular clans, and the symbols embody aspects of a group's identity and history. The Teikwedi, Kaagwaantaan, and Naanyaa.ayi have the brown bear as a crest. Visual art made from and/or symbolizing the brown bear continues to be produced by the Tlingit and displayed on ceremonial occasions. These items include headgear, regalia, and other ceremonial objects, including crests, poles, screens, boxes, and blankets.

7. DISTRIBUTION AND EXCHANGE (a pattern of taking, use, and reliance where the harvest effort or products of that harvest are distributed or shared, including customary trade, barter, and gift-giving)

When available, brown bear meat and fat are distributed within and between households, particularly for elders who desire a taste of these traditional items. Brown bear meat or fat may be served at potlatches and exchanged between communities when residents of several towns assemble. Ceremonial objects using fur and claw may be made by one clan and presented as a gift to another clan, as part of potlatch occasions.

8. DIVERSITY AND ECONOMIC, CULTURAL; SOCIAL, AND NUTRITIONAL ELEMENTS (a pattern that includes taking, use, and reliance for subsistence purposes upon a wide diversity of fish and game resources and that provides a substantial economic, social, and nutritional elements of the subsistence way of life)

GMU 1 is part of a region where a wide diversity of resources are available for harvest. These include marine and intertidal resources as well as upland game species including goats, deer, and moose. Moose have expanded their range in GMU 1 in historic times.

GMU 3 is part of a region where a wide diversity of resources are available for harvest. These include marine and intertidal resources as well as upland game species including deer, and moose. Moose have expanded their range in GMU 3 in historic times. The information the Department has on (GMU 3) Wrangell, Etolin, and Deer islands' brown bear population suggests very few bears are present.

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