ALASKA DEPARTMENT OF FISH AND GAME SUBPORT BUILDING JUNEAU, ALASKA

INFORMATION FOR PERSONS INTERESTED IN THE COMMERCIAL HARVESTING OF SEA LIONS IN ALASKA

Fur industry representatives have advised the Department of Fish and Game that the skins or pelts of sea lion pups appear to have commercial value that would make their harvest and sale profitable. With this new prospect that the sea lion will become a valuable harvestable resource, there is a need for implementing a program to both promote a new industry and properly manage the resource. This report is intended to acquaint interested people with the opportunities, as they appear at this time, and to provide an understanding of the Department's necessary managerial role.

Resource Value

While the flesh of sea lions may prove to be of sufficient value to warrant harvesting as animal food, the immediate outlook in this direction suffers from competition for equipment and manpower with economically proven commercial fishing activities. In addition, the market for such meat is outside of Alaska, and cold storage and shipping considerations impose high investment and overhead costs. Additionally the harvesting and processing operations represent difficult work which is greatly complicated by weather and sea conditions in the area of the rookeries. The presently known value of sea lion flesh makes its harvest a marginal business proposition, except for those who may already possess the necessary equipment and are familiar with harvesting and processing procedures.

While the hides of sea lions older than pups have no value of which we are aware, experiments by European furriers may reveal uses for such skins.

The skins of sea lion pups taken within a few weeks after the animals are born possess soft, dark down hair. Skins from South American sea lion pups, valued in the European fur trade as "rock seal", seem to be very similar to the skins of our northern sea lion pups. We do not have information relative to the prices offered for skins by Alaskan fur buyers, though we expect that they will initially reflect the risk involved in trying to establish a new product in a competitive marketing field. However, the ease of harvesting and the volume of skins that could be handled suggest that a satisfactory profit could be made at prices below ten (10) dollars per skin.

Sea Lion Abundance and Distribution

The sea lion population in Alaskan waters certainly exceeds 150,000 animals and may approach 200,000. In distribution, the population is widely dispersed, though animals concentrate on large rookeries, particularly during the breeding season when harvesting operations would take place. In the table below, major rookeries are listed with estimates of the numbers of animals found at each location. Specific information that would be of importance to persons approaching these islands can be found in the U. S. Coast Pilot series Nos. 8 and 9.

<u>Southeast Alaska</u>

	Southeast Alaska	
Name	Location	Sea Lions (breeding populations)
ivume	Liocation	(breeding populations)
*Forrester Island	(54 ⁰ 48'N,133 ⁰ 31'W)	3,500
*Hazy Islands	$(56^{\circ}09'N, 134^{\circ}44'W)$	1,500
White Sisters	(57°40'N, 136°15'M)	1,000
white bisters	(0, 10 11,100 10 1)	1,000
	Southcentral Alaska	
Lewis Island	(59052'N,147 ⁰ 24''M)	2,500
(Wooded island group)		
Chiswell Island	(59 ⁰ 36'N,149 ⁰ 38'W)	2,000
Outer Pye Island	(59°20'N, 150°23'M)	1,500
Sugarloaf Island	(58 ⁰ 55'N,152 ⁰ 00'\//)	15,000 /
(Barren island group)		
Marmot Island	(58 ⁰ 12'N, 151 ⁰ 50'W)	2,500
Two headed Island	(56°33'N,153°40'W)	4,000
Puale Bay	(57°40'N, 155°25' ¹ /)	4,000
	Shumigan Islands	
Atkins Island	(55 ⁰ 03'N,159 ⁰ 17'W)	3,000
Chernabura Island	$(54^{\circ}15'N, 159^{\circ}17'W)$	1,800
Chernabara Island	(54 -0 11,100 01)	2,000
	Lower Alaska Peninsula	
Jude Islands	(55°15'N,161°08'W)	3,000
Pinnacle Rocks	(54 [°] 45'N, 161 [°] 45'M)	4,000
(very hazardous for mariners)		the product of the
Clubbing Rocks	(54°52'N, 162°57'\)	6,000
Sanak Island	(54°28'N, 162°19'W)	3,500
Amak Island	(55°28'N, 163°11'W)	6,000
	Aleutian Islands	
Ugamak Island	(54 [°] 25'N,164 [°] 23'W)	18,000
(National Wildlife Refuge)	<u> </u>	
Akun		2,000
Akutan		15,000

* National Wildlife Refuges

There are numerous other sea lion rookeries in the Aleutian Islands which contain a total of some 65,000 additional animals. However, as with Ugamak Island mentioned above, nearly all of these rookeries are within the Aleutian Islands National Wildlife Refuge and sea lions there are protected by federal regulations. The State is now requesting that permission be granted for initiation of a carefully regulated sea lion management and harvesting program.

Harvesting

The timing of harvesting operations must coincide with the breeding season for two reasons: first, breeding animals develop a strong attachment for the rookery which permits easy and selective killing, and, second, this is the period when pups are born and their skins of optimal value. Probably, the month from June 10 to July 10 would be the best average time for harvesting on the majority of rookeries.

Working on the crowded rookeries involves an element of danger that becomes significant only if reasonable caution is not exercised. Both adult bulls and cows sometimes refuse to move at the approach of men, and will even make short charges. These charges are mostly bluff and are easily avoided. In most instances, a little patience and stone throwing will move the animals away. An occasional bull may, however, refuse to move and have to be killed in order to allow men to pass through its territory. The hazards of surf in getting on and off the rookeries far exceed those posed by the animals themselves.

Techniques for harvesting adult sea lions and the processing of the carcasses are described in a bulletin entitled "Experimental Harvest of the Steller Sea Lion in Alaskan Waters" published as Special Scientific Report -- Fisheries No. 371 by the U. S. Fish and Wildlife Service. These reports are available on request from the Department of Fish and Game, Subport Building, Juneau.

Essentially, the procedure involves shooting selected animals on rookeries (bulls offer greatest yield of meat); attaching lines to the carcasses so that a vessel standing off shore can haul the animals off and hoist them aboard for butchering, grinding, and freezing. Past commercial harvest have been limited by the large amount of work entailed in butchering and processing the carcasses.

Harvesting of new born pups is a relatively simple procedure, given sea conditions that permit landing on the rookeries. The animals may be approached closely and dispatched by shooting in the head with a 22 caliber pistol or rifle. They are light enough (40 to 80 pounds) to allow dragging or carrying to a central point for skinning or loading aboard a shore boat. The need to skin the animals quickly and the labor involved in doing so will limit the number of animals that can be handled by a crew of hunters and skinners. Pups are skinned by cutting around each front flipper, around the tail and both hind flippers (one circular cut) and splitting the skin along the under side from lower lip to anus. The skin is then peeled off. Fat should be removed and skin well salted. Individual fur buyers can provide handling instructions that suit them, and which may differ slightly from the above handling practice.

Management

Legal Requirements

The Board of Fish and Game in exercising its regulatory responsibilities to manage Alaska's game resources must conform to constitutional and statutory provisions which preclude the granting of special harvesting privileges to individuals and denial of privileges to similarly situated persons. In other words, all persons must be given $6 q^{-1}$ if opportunity to utilize the resources, even though these be quite limited in quantity. It is apparent that overharvesting of sea lion pups could easily occur on certain rookeries if harvesting limitations were not imposed. It therefore seems necessary that quotas, based on estimated production of harvestable animals on each rookery, be established and that the total of animals taken by all people be kept within these established limits.

Permits to harvest sea lions will be issued by the Commissioner with the qualifying stipulation that all pertinent information relating to harvests be provided to the Department of Fish and Game as an essential aid to management. For the reasons set forth above, the Commissioner cannot assign quotas to individuals but must do it on the basis of rookeries where the potential for overharvesting is recognized. The control of the take must be handled by emergency regulations. Where several operators are taking animals from a single rookery, a Department representative may have to be present unless daily reports by radio can be furnished to the responsible management biologists.

In order to be in a position to properly administer the sea lion resource once exploitation is initiated, a knowledge of who will be operating in all areas becomes vital. Therefore, prior to issuing permits for harvest of sea lions, a written expression of intention to operate, detailing the time, place and magnitude of operation, must be provided to the Commissioner. For those persons having permits, arrangements will be worked out whereby they will keep the Department promptly and currently informed concerning the progress of sea lion harvesting.

The above procedures may have to be modified during the course of time and as the industry develops. They seem appropriate at this time, however, and should assist in promoting an orderly and proper utilization of the sea lion resource. Persons desiring further information or assistance are advised to contact the Commissioner of the Department of Fish and Game.