

A SUMMARY OF DALL SHEEP MANAGEMENT IN ALASKA DURING 1979--(or how to cope with a Monumental disaster)

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BACKGROUND

Development of the great oil fields in Alaska coupled with increasing instability of foreign oil availability to the United States resulted in construction of the Alaska oil pipeline. Environmentalists and conservation groups generated considerable resistance to the construction of the oil pipeline which bisects Alaska, running south from Prudhoe Bay to Valdez. Before the pipeline could be constructed the unresolved aboriginal claims of Alaskan Natives had to be settled. Once the importance of Alaskan oil to the United States was recognized the Native claims were quickly resolved. Part of this settlement was a compromise with environmental protection interests which involved environmentalist acceptance of the pipeline in exchange for a guarantee that additional Alaskan lands would be included in 4 Federal conservation systems. At least 80 million acres were scheduled for inclusion in the National Park System, the National Refuge System, the National Forest System, and the National Wild and Scenic River System. Heimer (1978) detailed the expansion of this acreage from the mandated minimum and the probable impact of these withdrawals on Dall sheep management.

Under terms of the Alaska Native Claims Settlement Act of 1972 Congress had 5 years to act on inclusion of the additional lands in the National Conservation systems. This meant the deadline for congressional action was the close of the 1978 session. As adjournment drew near the Alaska National Interest Lands Conservation Act passed the House of Representatives and went on to the Senate. When passage by the Senate appeared a remote possibility because of resistance by the Alaskan Senatorial delegation, Secretary of the Interior, Cecil Andrus, attempted to force the Alaskan delegation to abandon its resistance to the bill by threatening administrative withdrawals under the Bureau of Land Management's Organic Act and the National Antiquities Act which would be far more restrictive than the proposed congressional actions. His tactic was not successful, and the Alaska lands bill failed to pass the Senate.

When this occurred the Secretary made good his threat, and in December 1978 President Carter, acting on the advice of the Interior Secretary, administratively created 56 million acres of new National Monuments in Alaska using the Antiquities Act and withdrew 49 million acres under terms of the BLM Organic Act. As of that date hunting became illegal on all National Park Service administered national monuments, and a significant portion of Alaska's Dall sheep were off limits to hunters.

The Problems

It was immediately apparent that this action would have profound impacts on Dall sheep management. The purpose of this paper is to

record the reactions and management responses of the Alaska Department of Fish and Game and the Alaska Board of Game in an attempt to cope with this sudden, unexpected decrease in huntable Dall sheep in Alaska. I shall address specific problems individually.

How many sheep remained available? Aerial surveys, ground counts, and harvest reports have been used by the Alaska Department of Fish and Game to estimate the total number of sheep in Alaska. The best estimate is 50,000. Once the monument boundaries were actually available it was determined that about 21,000 sheep would be unavailable to hunters because they were within monument boundaries administered by the National Park System. The numbers within each national monument where sheep are present, the number of hunters each supported, and the harvest taken from each national monument in the 2 preceding harvest seasons are given in Table 1.

With 21,000 of Alaska's 50,000 huntable Dall sheep declared unavailable for hunting, the number remaining in State management control is 29,000.

What did this mean to hunters? According to sheep hunter reports, the mean number of sheep hunters in Alaska during the 1977 and 1978 hunting seasons was 3,200. The mean harvest of rams for these 2 years was 1,250 rams. Hence, about 30 percent of the total hunter use and 36 percent of the ram harvest for the 1977 and 1978 sheep seasons were within areas now considered monuments. The actual impacts on sheep hunters are probably greater than these figures indicate.

Table 1. Sheep abundance, harvest, and hunter numbers in National Monuments closed to hunting.

National Monument	Sheep Population	Hunters	Harvest
Noatak	1,800	35	25
Gates of the Arctic	7,700	175	65
Yukon-Charley	300	7	3
McKinley Extension	500(?)	10	6
Lake Clark	500(?)	30	15
Wrangell-St. Elias	<u>9,000</u>	<u>700</u>	<u>335</u>
Total	20,800	957	449

It was assumed there would not be a significant decline in sheep hunter use and that an insignificant number of hunters would violate the Federal regulations to hunt on the national monuments (the only reasonable, conservative hypotheses). From these premises it was possible to calculate the impact on sheep availability per hunter.

Before monuments there were 50,000 sheep per 3,200 hunters or about 16 sheep per hunter. Heimer and Smith (1975) suggested a mean legal (3/4 curl) percentage throughout Alaska of 15 percent. This gave $0.15 \times 50,000$ or 7,500 legal rams per 3,200 hunters or about 2.3 legal rams per sheep hunter.

After monuments there were 29,000 sheep per 3,200 hunters or about 9 total sheep per hunter were available. Heimer and Smith (1975) reported a mean legal (3/4 curl) percentage on the nonmonument lands of 8.9 percent. This gave $0.089 \times 29,000$ or 2,600 3/4 curl rams per 3,200 hunters, about 0.8 legal rams per hunter.

This is a reduction of nearly 67 percent in 3/4 curl rams per hunter. This disproportionate (compared with Table 1) decrease occurred because those selecting lands for inclusion in the national park monuments selected the better hunting areas of Alaska, most notably 48 percent of the Brooks Range sheep and 83 percent of the sheep in the Wrangell Mountains. Clearly drastic changes in the availability of Dall sheep to

hunters should result in greatly increased harvest rates stemming from the increased hunting pressure in areas remaining open to hunting.

What about trophy size and harvest? The recruitment of legal, trophy rams in Alaska has been empirically determined by calculating the percentage of total populations harvested in areas where horn size has been driven to the legal minimum for a period of years, and population sizes are known from careful survey and census efforts. Table 2 shows the maximum possible 3/4 curl ram harvest is about 2.4 percent of total population.

If trophy recruitment was 2.4 percent of the population, the pre-monument recruitment of Dall rams was $0.024 \times 50,000$ or about 1,200 annually. The statewide harvest over the last 10 years averaged slightly less than this number. Hence, except for localized areas of heavy harvest, it was theoretically possible that the 1970 age structure of rams in the harvest was maintainable. Harvest was slightly less than input and rams from all age classes above legal age were taken by hunters. When the resource base was reduced to 29,000 sheep without reduction in demand, pressure, or efficiency of hunters it became apparent that any management scheme for trophy cropping in effect would be practiced in its most extreme application. That is, if recruitment is 2.4 percent of 29,000 sheep it equals about 700 rams per year. If the number of legal 3/4 curl rams present on the nonmonument lands was 2,600 (see "What did this mean to hunters?") and harvest was expected to be 1,250 rams with recruitment at 700 rams per year, it is possible to estimate the time when harvest will eliminate the standing crop and be limited to

Table 2. Percent of total populations harvested each year in areas with intense hunter pressure.

Area	Year	Harvest	Total Population	% Take	Horn Size
Delta Management Area	1975	45	1,500	3.0	30.6
	1976	41	1,500	2.7	31.5
	1977	42	1,500	<u>2.8</u>	<u>31.2</u>
	1978 (the area went on permit status)			Mean 2.6	31.4
Chugach State Park (heavily hunted Pioneer Peak-Goat Creek area)	1976	4	300	1.3	30.1
	1977	4	300	1.3	30.5
	1978	9	300	3.0	<u>31.1</u>
			Mean	<u>1.9</u>	30.6
Surprise Mountain, Kenai	1973	2	213	0.9	30.0
	1974	6	189	3.2	32.9
	1975	5	154	3.3	28.8
	1976	4	156	<u>2.6</u>	<u>27.9</u>
	1977 (population reduced by hard winter)			Mean 2.5	29.9
Talkeetna Mountains, Boulder Creek, Chickaloon, Hicks Creek	1976	24	750	3.2	29.7
	1977	18	750	2.4	29.5
	1978	14	750	1.8	<u>30.7</u>
			Mean	<u>2.5</u>	30.0

Overall average take = 2.4 percent

Overall average horn size = 30.0 inches

recruitment. Table 3 shows the effect on ram standing stocks if hunter success and pressure do not decrease from past levels with a resource base of 29,000 sheep.

In the future 700 legal rams may be produced and harvested each year.

Subsistence. Passage of the Alaska Native Claims Settlement Act was a goal which unified Alaska's Native peoples and created an ethnic awareness which has asserted itself in many ways. One manifestation of this awareness and political unity has been an aggressive effort to legislatively recognize subsistence use of wildlife resources. This effort successfully culminated last year when the Alaska legislature, dominated by the powerful "Bush Caucus" passed Alaska's new "subsistence law". This legislation states that the highest priority use of Alaska's fish and wildlife resources is subsistence. The law also establishes a subsistence section within the Alaska Department of Fish and Game to make certain that the high subsistence priority is attained within the scope of biological productivity. Dall sheep hunting, a predominantly recreational activity now, may be eliminated by the subsistence law as local subsistence demand develops.

The Options

Many management options were available. They ranged from doing nothing through a gamut of possible positive alternatives. Options presented by the Department of Fish and Game to the Alaska Board of

Table 3. Projected depletion of ram standing stocks in Alaska's huntable Dall sheep populations.

Year	Increment and legal ram population prior to hunting season	Harvest	Population remaining
1979	700 already included in 2600	1250	1360
1980	700 plus 1350 = 2050	1250	800
1981	700 plus 800 = 1500	1250	250
1982	700 plus 250 = 950 - demand exceeds ability to supply by 300 rams		

Game, the regulatory body in Alaska, before hunting season 1979 included the following. Each option is listed with the justification offered to the Board of Game. Arguments on each option are presented in the subsequent section of this paper.

Option #1. Provide maximum 3/4 curl ram hunting by eliminating all closed, special use, and permit areas in an effort to accommodate increased hunting pressure.

Justification. Creation of national monuments and the displacement of sheep hunters from traditional hunting grounds will result in increased hunter pressure on the available sheep populations. This proposal provides latitude necessary for the State to establish a system which will offer maximum harvest opportunity for rams with 3/4 curl or greater horns.

Option #2. Statewide full (4/4) curl legal limit with no closed, special use, or permit areas.

Justification. The same justification as for option number 1 was used with the addition of a legal horn size definition which would protect the trophy value of Dall sheep by ensuring mature rams to hunt. This option also provided a measure of biological safety not offered in option number 1.

Option #3. Statewide full (4/4) curl with special use and permit area as they now exist.

Justification. This proposal would provide a biologically conservative means of providing maximum hunter opportunity not offered by the present system (3/4 curl minimum horn size), and preserve the areas in which a limited number of permittees are assured the opportunity for a high quality hunting experience.

Option #4. Establish statewide permit areas and procedures to regulate hunter pressure and harvest at levels comparable to or more desirable than the pre-monument status. A variety of options involving permits were offered. They included a statewide permit system in addition to those already in effect, and a system designed to correlate hunter pressure with the ability of the population to sustain hunting managed on a mountain range basis. A special permit hunt was also proposed for the Arctic National Wildlife Range.

Justification. All permit systems were justified on the premise that hunting pressure would greatly increase on the available lands and result in deterioration of the resource and the hunting experience. Under conditions of the permit hunt proposed for the Arctic National Wildlife Range, 400 permits were to be awarded by drawing for 2 hunt periods, August 1 through September 20, and August 21 through September 20. These 400 permits were to be drawn by hunt periods, with 25 percent going to nonresidents and 75 percent to residents with 200 permits for each hunt period. In addition to these hunts, a registration type permit hunt was to be established with an unlimited number of permits being offered at Kaktovik village until a quota of 50 sheep were taken on the north side of the Arctic Wildlife Range. It was also to be a

condition of this hunt that aircraft be excluded for sheep hunting or hunting related transportation throughout the hunt period, September 21 through April 30, 1980.

These conditions would maintain the historic mixture of residents and nonresidents in sheep hunting on the Wildlife Range and provide minimal problems for the registered guides in the area. They also would provide for the maximum use the U. S. Fish and Wildlife Service (managers of the Arctic National Wildlife Range) deemed acceptable. These conditions would also provide for the established hunting pattern of Kaktovik residents in a sport hunting framework and negate the necessity of allowing subsistence classification of Dall sheep in Alaska. Because the U. S. Fish and Wildlife Service perceived a mandate to provide the opportunity to view wildlife in its normal habitat and behavior pattern, the full (4/4) curl designation was offered as a legal minimum for ram harvest in the event that unusual participation by permittees following the national monument designations resulted in heavy harvest.

The Arguments

No change necessary. Some frustrated wildlife managers suggested making no regulatory adjustments and letting the situation deteriorate badly. This, they argued, was certain to draw the attention of nonresident hunters who would, in turn, put pressure on their congressional delegations resulting in a more equitable settlement of the Alaska lands issue with respect to hunting. It was also argued that, given the opportunity to demonstrate its management expertise, the

Federal Government would make its characteristic mistakes and demonstrate the wisdom of a "State's Rights" approach to management of indigenous wildlife. These arguments were swept away by the serious biological consequences, and economic considerations anticipated if no action were taken. Also, most doubted that the anticipated results of doing nothing would eventually be beneficial.

Option #1. It was argued that since 42 percent of Alaska's Dall sheep were to be managed exclusively for nonconsumptive use, under the monument-park designations, all State-managed sheep should be utilized consumptively. The State of Alaska maintains several areas exclusively for viewing, and these sheep could be used to provide hunting opportunity which, to a small extent, might mitigate the problems caused by Federal withdrawals. Others argued that such a change was reactionary and narrow in perspective, and held that the traditional attempt to provide for all human uses should be continued in spite of Federal actions. It was also argued that such a move would be harmful to the fight in Congress by appearing to be excessively exploitive, thus playing into the hands of the super-conservatives.

Option #2. There was concern on the part of some managers that the anticipated practice of 3/4 curl management in this extreme as predicted in "Problems" would be biologically harmful.

No clear-cut data which show intense harvest of rams (taking all 3/4 curl rams each year before the rut) has a depressive effect on initial lamb production the following spring are available. However, Nichols

(1978) published data which showed the most heavily exploited population (Surprise Mountain) he studied on the Kenai Peninsula had the greatest spread in lambing dates. This population also showed the lowest relative lamb production of the 3 populations he studied (a 6-year mean of 25 lambs/100 ewes compared with 34 and 36 lambs/100 ewes for the other 2 populations). We must note, however, that Nichols considered other environmental differences more likely to be causative than the heavy harvest of rams (Nichols 1978).

Nichols (1971) and Geist (1971) both observed that behavior of young rams during rut is significantly different than that of mature rams. Both observed that immature rams often court anestrus ewes, and Nichols (1971) noted young Dall rams tend to engage less in guarding and more in checking and chasing behavior. He also reported when old rams were absent the very young rams participated in rutting activities. When old rams were present these very young rams made no reproductive display patterns. Geist (1971) argued that mortality in mountain sheep rams is a function of dominance status (the age at which they become dominant in the population and assume active roles in the rut) and rut-associated stress. Since immature rams are inefficient in their rutting behavior, metabolically disadvantaged because of their smaller size, and "normally" precluded from rut by the presence of mature rams, it can be argued that maintaining mature rams in the population will enhance survival of young rams by limiting their participation in rut. This should save them the energy costs and prolong their life expectancy. If this is so, a greater yield of legal rams should follow increasing the minimum age at legal harvest even though the mechanism may not involve

increases in initial lamb productivity. This hypothesis can be partially tested using harvest data available from trophy management areas where full curl regulations exist.

Table 2 showed maximum 3/4 curl ram harvest was equal to 2.4 percent of total population. Differences between the percent take on these areas and areas managed for full curl should reveal the extent of mortality between the ages of 3/4 curl and full curl. One such area exists in Alaska, the Tok Management Area. This area was managed for 3/4 curl sheep and maximum hunting opportunity until 1974. At that time management direction changed, and the area was managed for high quality trophy hunting experiences. Accompanying this change was a change in legal horn size definition from 3/4 to full curl for rams.

After the permit system was established, 2 years were required to adjust the number of permits and achieve the desired submaximal harvest. These years of low harvest allowed the population to reach equilibrium under the full-curl regulation. The following data were then gathered.

<u>Year</u>	<u>Harvest</u>	<u>Total Population</u>	<u>% Take</u>	<u>Horn Size (in)</u>
1976	37	1800	2.1	36.3
1977	44	1800	2.4	35.5
1978	51	1800	2.8	36.7
1979	35	1600	<u>2.2</u>	<u>36.0</u>
			Mean	2.4
				36.1

These figures indicate the nonmaximal level of harvest since establishment of the full-curl regulation and equilibrium of the standing stocks of rams has been exactly equal (2.4%) to that for 13 data years of total 3/4 curl cropping in 4 different mountain ranges of Alaska. This can be rationalized in several ways.

1. There is no significant natural mortality between the age at 3/4 curl and full curl when essentially undisturbed age structures are established in Dall ram society. This probably results from exclusion of young rams which are not physiologically and behaviorally adapted to rutting from intense participation in this stressful activity (Geist 1971). Also, rams at this prime age are less likely to die than younger or older ones.

2. Inaccuracies in survey and estimation of total populations may have biased the data in favor of high percent takes in the Tok Management Area and low percent takes in the heavily hunted 3/4 curl managed areas. This is unlikely. Numbers given for total populations in the Tok Management Area are population estimates expanded from numbers of sheep actually seen. The other data are actual sheep counted on population census efforts. This would make any errors involved in percent take listed lower for the Tok Management Area than other areas. Also, the Tok Management area full-curl harvest is slightly less than estimated total recruitment to the trophy class.

3. Harvest reporting could have biased the data in favor of high percentage takes on the full curl areas and low percent takes on the 3/4

curl areas. Harvest reporting is mandatory on the Tok Management Area and voluntary in the open areas (though hunters are required to submit hunter reports by regulation).

Option #3. The arguments for increasing minimum curl size were unchanged and the arguments for maintaining viewing and special use areas were also those discussed under Options #1 and #2.

Option #4. Permits in general. It was argued by some that permit hunting is eventually going to be necessary in all Dall sheep management situations in Alaska, and that now was an opportune time to enact it. Others argued for continuance of the traditional opportunity for residents to hunt sheep, even in crowded conditions with few large rams available. Many supportive of total regulation by permit hunting saw little reason to maintain legal horn size requirements since the magnitude of the harvest would be fixed within presumably safe biological limits. Most favored issuing permits on the basis of sheep population density.

Option #4. Permits in Arctic National Wildlife Range. For several years the United States Fish and Wildlife Service urged the Department of Fish and Game to establish a restrictive permit system on the Arctic National Wildlife Range. This pressure was the result of a nationwide swing toward nonconsumptive wildlife use during the 1970's and the U. S. Fish and Wildlife Service attempt to respond to the preferences of a national constituency. In short, many users of the Arctic National Wildlife Range were "wilderness recreationists," backpackers, river floaters, photographers, etc., who viewed the Wildlife Range as a sort

of park. The Fish and Wildlife Service attempted to appease these users by limiting hunting. On the other hand, the Alaska Department of Fish and Game maintained there was no need for restriction on hunter use because of its low level resulting from the cost and logistic problems which attend hunting on the north side of the Brooks Range. Horn size of sheep taken from the Arctic National Wildlife Range was high and stable; there was a notable lack of public complaint from hunters regarding crowding in the area.

However, the spectre of a doubled hunting pressure statewide which came with creation of the new national monuments as well as the threat by Fish and Wildlife Service personnel that they would establish a permit system by Federal regulation without State participation resulted in establishment of a permit system for sheep hunting in the Arctic National Wildlife Range. There were many within the Department of Fish and Game who argued that since the Fish and Wildlife Service is under the jurisdiction of the Department of the Interior which was responsible for the problems (resulting from monument withdrawals) in the first place they should share the problems of increased hunting pressure. These considerations were overridden by Department of Fish and Game concern for the quality of the hunting experience.

In designing the permit system the important factors were hunter distribution and participation, and provision for the guiding industry. The maximum number of hunters which could be tolerated in the Wildlife Range at any given time was dictated by the Fish and Wildlife Service. Alaskan (State) wildlife managers then proposed time zoning and permit

numbers so this maximum could be sustained during the entire hunting season to minimize the loss of hunting opportunity. This involved opening the season earlier, on August 1. Guides were allotted 25 percent of the total permits, approximately the same percentage of nonresidents as had traditionally participated in the past.

The Decisions

The Alaska Board of Game decided the potential negative effects were too great to allow Dall sheep hunting to continue without adjustments to this major change in the resource base. In so doing, they committed themselves to maintaining Dall sheep hunting opportunity and the quality of the hunting experience at maximum possible levels.

Hunting opportunity. The Alaska Game Board decided it was in the best interests of the public and the resource to continue managing those viewing areas under State jurisdiction for nonconsumptive use. They also maintained all special use and permit areas, reasoning that a balanced approach to management was a better alternative than attempting to provide maximum hunting opportunity.

Legal horn size. The Alaska Game Board concluded that the bleak outlook for sheep hunting if the 3/4 curl regulation were applied to its extreme necessitated increasing the legal horn size. The Board was reluctant to adopt full-curl regulations because many old rams with broomed horns are fine trophies, but not full curls. Also, there was concern that some Dall rams may never grow full-curl horns, but should

be available for harvest at maturity. The Game Board compromised by establishing a legal definition of 7/8 curl or 315 degrees for Dall rams.

Permits and permit areas. The Alaska Board of Game decided that while permit areas are useful in order to guarantee the possibility of high quality hunting experiences to those fortunate enough to draw permits, it was premature at this time to put the entire State on a permit system for sheep. They adopted the regulations necessary to establish a permit hunt for 7/8 curl or greater rams in the Arctic National Wildlife Range. In this hunt the hunting season was divided into 2 time periods with 200 permits offered for each hunt period.

The Alaska Board of Game also adopted regulations establishing a registration hunt with a quota of 50 sheep for the north side of the Arctic National Wildlife Range. The season opened on October 20 and extended through April 30; the bag limit was 3 sheep. Permits were available on demand in Kaktovik, Alaska and use of aircraft for hunting or transporting hunters or sheep was strictly forbidden. This hunt was provided in a sporting framework, that is, anyone wishing to hunt under these conditions could obtain a permit in Kaktovik and hunt for 3 sheep, but could not use aircraft in any way to transport himself, his gear, or his sheep in the hunt area. Once the quota of 50 sheep was reached the season would be closed. These constraints effectively precluded all but local use creating a de facto subsistence hunt for Dall sheep. However, the sport hunting context avoided the problems and precedents of making "subsistence regulations" for sheep, a species almost universally regarded as a trophy animal.

The Results

Hunter participation. In the 1979 hunting season 2,341 hunters returned the required hunter reports to the Department of Fish and Game stating they had hunted sheep. This figure was lower than the anticipated number of hunters based on the mean of the past 2 years (3,200 hunters) by about 27 percent. Whether this lower figure represents a trend, a transient low participation, or is even comparable with previous data is unknown. During 1979 the sheep hunting public seemed unusually uninformed on what was expected of them. Reporting may have been lower than usual.

Harvest. The 1979 ram harvest was reported at 924 rams. This is a decrease from the mean of the last 2 years of 26 percent, almost exactly the same decrease as in the number of reporting hunters. Hunter success was 35 percent in 1979. It averaged 38 percent from 1973-1978. In addition to the 924 rams reported, 29 ewes were taken in the Alaska Range and another 16 sheep were reported from the Kaktovik hunt by U.S. Fish and Wildlife Service personnel. This comes to a total of nearly 1,000 Dall sheep harvested.

The fact that hunter success did not decrease despite an increase in the definition of legal horn size is testimony to the thoroughness of Dall sheep hunters. The total harvest was not confined to nonmonument lands. Many Alaskans hunted on the monument lands in open defiance of the Federal regulations.

Hunting on monument lands. Of the 2,341 reporting sheep hunters, 259 reported specific locations which were within the boundaries of the National Monuments where hunting was prohibited by Federal regulation. These hunters reported taking a total of 118 sheep. Their reported success rate was 46 percent. Since successful hunters traditionally report at a higher level than unsuccessful hunters, it is reasonable to conclude that even more Alaskans hunted in violation of the monument regulations and did not report their activities. This seems reasonable when it is understood that their activities were considered "illegal" by the Federal Government. The figures for participation and harvest are understood to be minimal at best.

Horn size. The mean horn size among rams harvested in Alaska for the period 1974 through 1978 was 33.2 inches (84.4 cm). The mean reported horn size for the 1979 season (with an increased legal horn size for rams) was 34.9 inches (88.6 cm). The increase, 1.7 inches (4.3 cm), resulted from a reduction in the number of very small sheep taken. The mean percentage of rams with horns less than 30 inches (77.2 cm) in the harvest from 1974 through 1978 averaged 28 percent. For the 1979 harvest this dropped to 12 percent.

Current Status

At this time 21,000 of Alaska's traditionally huntable Dall sheep are technically off limits to hunters. Of the 29,000 sheep which can be legally hunted under the existing monument regulations, approximately 9,500 are available only to persons fortunate enough to obtain a permit

in the permit drawings. An additional 2,000 are available in areas where access is restricted to walking, or special seasons are in effect, and about 1,000 are protected for viewing only. This leaves a resource base of about 15 to 16,000 sheep which sustain the hunting available during the general open season. The National Monuments have resulted in a 65 percent reduction in sheep hunting availability (without a special permit) during the general open season.

Alaska Department of Fish and Game draft management plans called for 3 differing management approaches for Dall sheep in Alaska. Where the State of Alaska currently has management authority these plans are followed in about these proportions: about 6 percent are managed for trophy hunting (called, "Opportunity to be selective," in planning jargon), about 30 percent are managed for aesthetic hunting experiences, about 4 percent are managed for nonconsumptive use, and the remaining 60 percent are managed for maximum hunting opportunity. Those sheep (21,000) remaining in the national monuments are managed exclusively for nonconsumptive uses.

The Future

If Congress arrives at a legislative solution to the Alaska lands problem, the number of sheep available to hunters will increase somewhat. Current options before Congress would leave about one-fourth of Alaska's Dall sheep within national parks where hunting is not allowed. The relief would come in the form of national park preserves. These preserves are managed exactly like national parks, except that hunting is permitted unless some reason can be found by the Park Service to prevent it.

Only when a legislative solution is reached will it be possible to know the actual Dall sheep resource base available to the State of Alaska. Until then further administrative withdrawals are a distinct possibility, and Dall sheep management will continue in a state of flux. In any case, the intense interest in preservation of Dall sheep habitat is encouraging. Hopefully, Congress will not deal hastily with the Alaska lands issue and necessary Dall sheep habitat protection can be accomplished in a more enlightened manner than that prevailing in the current legislation.

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QUESTIONS - RESPONSES

Bill Wishart: Do you have another status that would protect those areas and still allow hunting?

Wayne Heimer: Yes, we do. There is a classification called "Park Preserve" which is exactly like a park except that it would allow hunting; sport hunting. Now in the park itself, as someone mentioned, there is a provision for subsistence hunting by local residents at the discretion of the Interior, over the course of a generation or however it is that they always do that. We don't like that because we see it as a clear challenge to the States' right to manage game because it's all set up through the Secretary of Interior.

Jim Peek: So you lose control there?

Wayne Heimer: Yes. Park Preserves would be at the mercy of the Park Service, which I don't like, but we would be able to hunt.

Bill Wishart: Are you for hunting or are you for being in control?

Wayne Heimer: I think if we could be in control we would have hunting.

Bill Wishart: We do have hunting in Alberta in some parks. True enough Parks has the big hand, but we are responsible for the wildlife.

Wayne Heimer: I would like National Park Preserves. I'm a little bit nervous about the State of Alaska; you know trusting them with the land. Because, you know, people have got to make a living and they got to eat and when they do that their going to do what they've done every place else, to get calories and trading material. The country up there is, you know it's nice. What I really liked is when we had the land freeze and the BLM was in charge of everything, but didn't bother anyone. That was perfect, but it's going to change. I think, there is no doubt that we are going to have National Parks, we'll have at least 80 million acres. I don't think we need quite 140 to 156 million acres which is kind of where we are now.