SOCIETY FOR THE CONSERVATION OF BIGHORN SHEEP

The Sheepherder

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SEPTEMBER -OCTOBER 1976

SHEEP SOCIETY DINNER IN LOS ANGELES AREA SET FOR OCTOBER SECOND

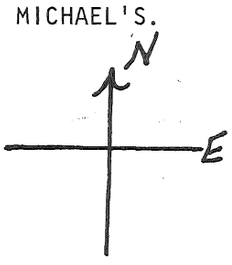
Society Director Bud Wiedeman has sent in the particulars concerning the annual southern California dinner of the Society. The scene is the PARISIAN ROOM of Michael's Restuarant located at 4500 Los Feliz Blvd. in Los Angeles, California. The No-Host Waterhole Count is scheduled for 6:30 p.m. Dinner is to be served at 7:30 p.m. The dinner tab of $8.50 includes taxes and gratuity. Michael's will serve Filet Mignon; baked potato; with sour cream and chives; mixed green salad (choice of dressing); vegetable; choice of tea, coffee or milk; dessert will be chocolate parfait.

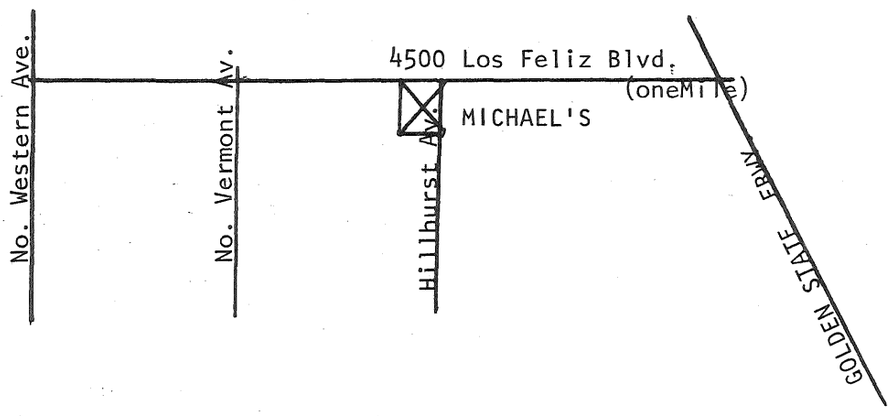
Members will please find a postal card enclsoed for your reply. Please send it in to Doctor Lutz right away so that he and Bud may know how many to expect for dinner. Also please remember to come to the dinner. We have to pay for every dinner that we order (for even the NO-SHOWS).

The afterdinner speaker will be Dr. Jack C. Turner, Ph.D., of the Department of Zoology and Physiology of the University of Wyoming at Laramie. Many of the Society know Jack personally and others will remember him for the studies that he has conducted at the Desert Research Center in Riverside County while studying for his Doctorate and since that time.
The Society has funded further studies by Jack during the present summer. He and Dick WEaver of the California Department of Fish and Game have worked closely together on these research projects.

In the photo Dr. Turner is to the left, and Dick Weaver to the right.

THE SKETCH AT THE RIGHT MAY HELP YOU TO FIND MICHAEL'S.





ARE YOU MOVING SOON?

Please let us know if you are moving. Are you aware that the Post Office Department charges the Society for the Conservation of Bighorn Sheep twenty-five cents to give us your change of address---if they know it. Sometimes even then the Post Office fails to forward your newsletter to your new address Please help us to get your newsletter to you, on time. Send us a post card with your old address, your new address and your current membership number.

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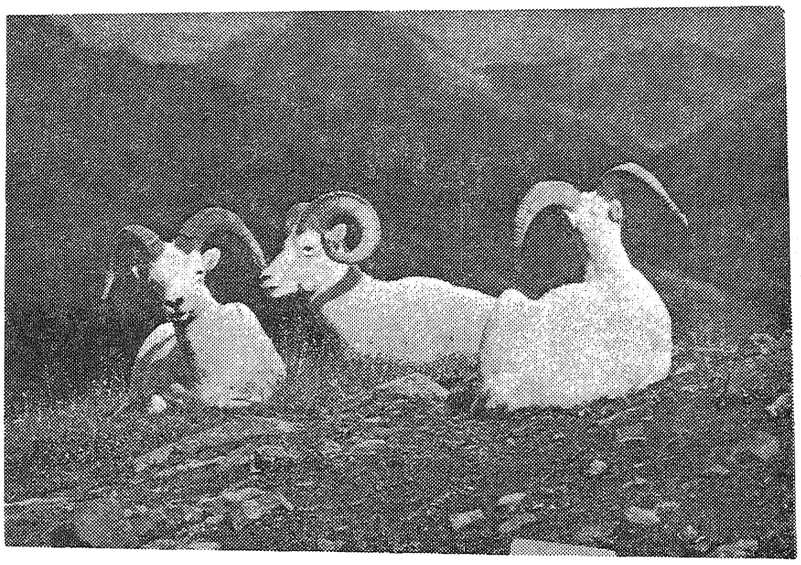
RAM HORN GROWTH AND POPULATION QUALITY
THEIR SIGNIFICANCE TO DALL SHEEP MANAGEMENT IN ALASKA.
Study by
Wayne E. Heimer and Arthur C. Smith III

Wild sheep are considered by many to epitomize rugged wilderness and solitary grandeur of mounainous areas, and large rams rank among the highly prized game animals of the world. Although the wilderness character of their habitat is partially responsible for the high esteem in which they are held, most of their appeal to hunters and nonhunters alike is attributed to the size oftheir horns.



Alaska Department of Fish and Game recognize that recreational hunting is the dominant use of Dall sheep in much of the state. Because recreational quality and horn size are inseparable to many, it is apparant that with increased hunting pressure it well be necessary to manage selected portions of Alaska for the production of "trophy" rams.

Through the years sheep hunters and biologists have believed that there are variations in conformation and size of sheep horns from these mountain ranges. To some extent records of horn sizes maintained by the Boone and Crocket Club confirm this belief, Since most exceptionally large rams have been taken in the Wrangall and Chugach Mountains of Alaska. Areas chosen for "trophy" management must be those in which the inherent characteristics of sheep are compatible with this objective. For example, management for trophy production in an area where sheep have small, slow-growing horns would be impractical.

Even though the primary objective of this study was to provide information for making planning decisions, it also provided data with which to test Geist's (1971) "Quality Hypothesis" for North American wild sheep populations as it applies to horn growth. Geist postulated, in part, that quality differences exist between sheep populations and high quality populations are characterized by more rapid horn growth and more massive horns at any given age than are populations exhibiting lower quality. Also Geist in his Dispersal Theory poses the hypothesis that, "Mountain sheep evolved during postglacial dispersal into uninhabited favorable terrain. They specialized increasingly toward delivering a more forceful clash and changed by growing relatively heavier horns, larger rump patches, acquiring more pneumation in the skull, increasing the length of the horn cores, shortening and rounding the ears, and losing the cheek and neck manes." (Reviewed in T.S. issues of March-April; and May-June 1976.)

For their study Heimer and Smith divided the 7 mountain ranges of Alaska each into two or three subareas, making a total of 18 areas. In order to determine the "Quality" the study was divided into four arbitrarily categories. These were: Mean Volume of Horns at Seven Years of Age; Mean Maximum Attainable Volume;Mean Maximum Sustained Growth Rate; and Average Diameter of Horn Curl Measured on the 90 degree - 270 degree Plane.

W hile horn length is an important measure of trophy quality to most hunters, the volume of the horn is its massiveness which is also an important index of quality.

Samples of horns for the study was limited by the ages of the sheep harvested by hunters within the given areas. This included current sheep harvested and also some horns that had been harvested in previous years. Each of the 18 study areas was then comparatively rated in each of the above categories. Following this rating a composite rating was made of the 18 areas on the basis of the first comparisons. On these basis the sou theastern end of the Wrangall Mountains was the leader in total quality scores; followed by that part of the Alaskan Range to the east of Mt. McKinley National Park; The Central portion of the Chugach Range in third position closely followed by the southern portion of the Talkeetna Range.

If the hypothesis of Geist, which was formulated for a geologic time frame, remains valid, it seems logical that mountain sheep living in areas which are extensively glaciated at present should have larger horns than those living in areas of less glaciation. Likewise, since the definition of quality is based almost entirely on horn size, it also should follow that Dall sheep presently occupying areas of extensive glaciation would be of higher quality than those of presently unglaciated areas.

Cold temperatures, moderate snowfall and persistent winds are important componenets of favorable winter habitat for Dall sheep. These factors result in a ready availability of winter forage for the animals. In the Wrangall Mts. (east) these conditions prevail (as indicated by the high quality population and relatively high density of animals on the range) and the southern exposure of slopes to the winter sun apparantly results in very favorable wintering conditions.

The study states in summary:

1. Quality differences exist among Dall sheep populations with respect to ram horns where quality is defined in terms of horn volume at a comparable age, maximal attainable horn volume, maximum sustained growth rate and diameter of horn curl.
2. Generally speaking, quality in Dall rams is inversely related to population density.
3. Physiography, glacial history and present glaciation appear to influence quality to an extent which, although unknown, is less than that exerted by population density.

4. Climate appears to regulate sheep population density and is probably the ultimate determinant of sheep quality through mechanisms which are not yet understood.

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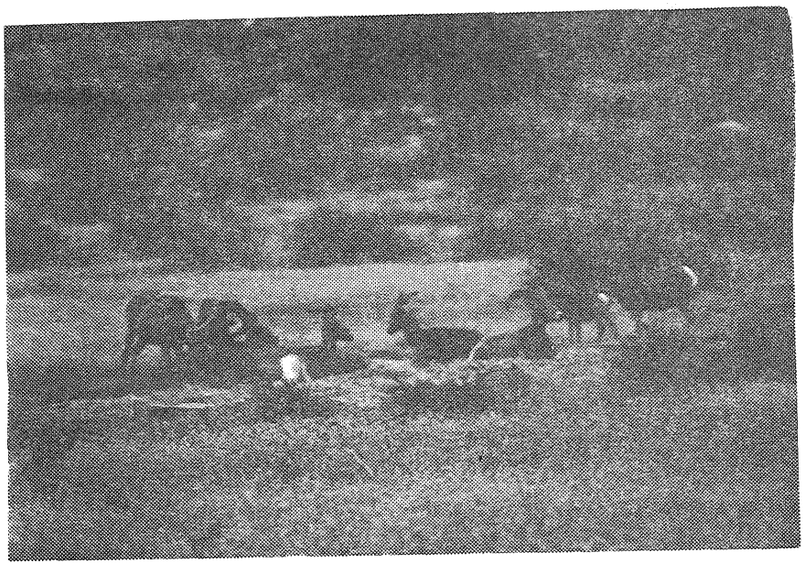
SHEEP TRANSPLANT INTO ZION NATIONAL PARK DOING WELL.



In the January 1976 issue of THE SHEEPHERDER we carried an article concerning the capture of 12 desert bighorns of the River Mountain herd at Lake Mead and their subsequent release into an enclosure near the Visitors Center of the Zion National Park during the year 1973. The photo at the left was taken the latter part of July 1976 by the editor whle he and family members were visiting there. Only 14 adult sheep and four lambs were at that time visible. A letter just recently received from Henry McCutchen, Park Biologist states: " .....Not too much is going on with the bighorns. Six lambs were born this year, for 21 sheep total. Both of the larger rams are two-year olds. We are finalizing plans for a release into the Park this year, possibly in the fall, and will try to keep in touch with you on its success."

Please note the dimensions of the horns of the large ram lying down---second from the left. It seems to bear out the thesis of Dr. Geist that when bighorns are dispersed into a new and good habitat t hat the rams do develope massisve horns at an early age. The two year old rams are the sires of the six lambs produced this spring.

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ENCOURAGING NEWS FROM THE LAVA BEDS NATIONAL MONUMENT

In a recent letter from James A. Blaisdell, Research Biologist of the National Park Service, Klamath Falls, Oregon reports on the present status of the California bighorn sheep. Jim reports as follows: "The Lava Beds National Monument transplant of 1971 is again showing signs of success. Domestic animal disease complications have beset the herd for the past two consequitive years; bluetongue disease decreased the herd from 23 to 15 in 1974, and ecthyma or soremouth dropped numbers from 22 to 15 in 1975. Reproduction has been excellent through these hard times.

Summer 1976 may be a different story if weather trends and animal health continue as they have through August. The diseases experienced the past two years are especially evident during hot, dry summers, and they hit with all their unrelenting ferocity during late August and early September. The first freeze in the fall usually stops the diseases abruptly. Spring of 1976 saw the birth of eight lambs to the eight adult ewes; in addition the two year old ewe, apparantly bred at one and a half years, produced a very small, late lamb which was lost in a short time. The weather, at least as most everyone in Northern California is aware, has been cool, the precipitation during August being over three inches--probably ten times normal. As of the end of August, all 23 sheep, including eight lambs, eight adult ewes, one young ewe, five adult rams and one yearling ram, are healthy, fat and doing famously. All we can do is watch them closely, hope the weather stays and the diseases never develope."

Thank you Jim for the good news. This small flock of bighorns brought to California from near Williams Lake in British Columbia has certainly had its ups and downs these past few years. We do hope that the trend will now be all upward.

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GOOD PRODUCTION, SURVIVAL NOTED FOR DESERT BIGHORN

July 12, 1976 news release of the Department of Fish and Game, Region 5, Long Beach, Calif.

A census of desert bighorn sheep in the San Jacinto and Santa Rosa Mountains indicates a good production of lambs in 1976 and excellent survival of the previous year's lamb crop, the Department of Fish and Game reported.

Figures compiled during surveillance of 14 waterholes on July 6, 7, and 8 showed a total of 253 bighorns, with a ratio per 100 ewes of 48 rams, 37 yearlings and 38 lambs was recorded.

These results are considered similar to the last count held in 1973, when 272 sheep were seen and a ration per 100 ekes of 53 rams, 27 yearlings and 47 lambs was recorded.

Participating in the triennial survey were representatives from six agencies plus three Mexican biologists assigned to that county's bighorn sheep management program.

The American agencies included the California Department of Fish and Game, California Department of Parks and Recreation, U.S. Bureau of Land Management, U.S. Forest Service, University of California at Riverside, and the Riverside County Parks Department.

In torrid temperatures ranging up to 122 degrees fahrenheit, the participants camped out at the 14 waterholes to maintain a constant watch on the bighorn sheep as they came down to drink.

"The heat was not enjoyable, but it did make for a successful survey, because it tended to concentrate the sheep close to the waterholes,"said Bonner Blong, DFG wildlife biologist who headed up the project along with wildlife biologist Vernon Bleich.

Blong noted, however, that there was bright moonlight during the three nights of the survey, which allowed some of the sheep to come to the springs at night rather than during the day. This apparantly decreased the sample at some of the springs.

Blong emphasized that the 253 sheep in noway represented the total bighorn population of the area.

"With this excellent increment of lambs and yearlings, it would appear that the population is now at a peak," he said.

The effort produced some useful byproducts, Blong noted. A better understanding was obtained of the spring impovement work needed in these mountains. Age ratio counts were made for three species of quail that inhabit the desert slopes. The observers also documented other wildlife observed included coyotes, bobcats, kit foxes, badgers, prarie falcons and golden eagles.

In a related but separate bighorn sheep census, the Department of Parks and Recreation held a count on the Anza-Borrego Desert State Park, from Middle Willow south to Tubb Spring, over the Fourth of July weekend.

Volunteer observers in this census counted 127 desert bighorn sheep, with a ratio per 100 ewes of 55 rams, 11 yearlings, and 17 lambs, according to park authorities."

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STATUS OF LEGISLATION CONCERNING WILD FREE-ROAMING HORSES AND BURROS

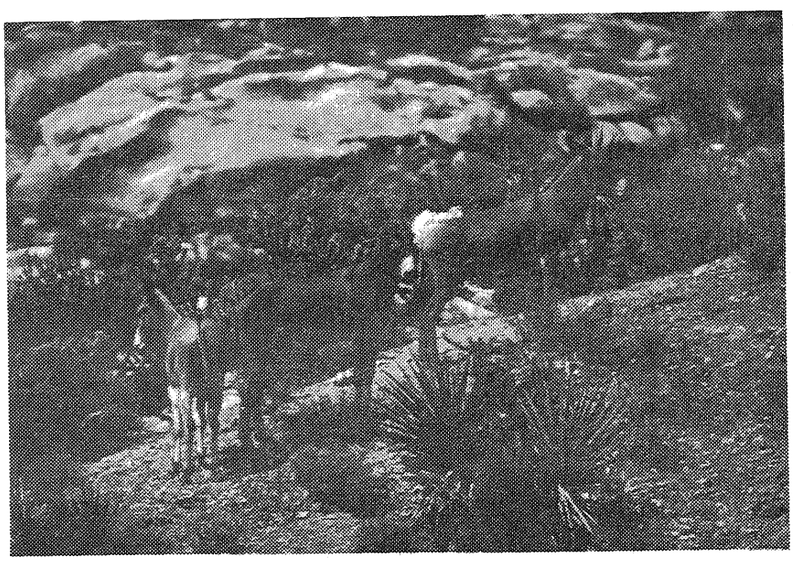

Photo--by the editor, taken July1, 1976 at Coyote Spring in the Granite Mountains

Early in August the language of S-2077, authored by retiring Senator Howard Way of Exeter was amended into AB-1763 authored by Assemblyman Michael Wornum of Sonoma and Marin Counties. The bill then got to the floor of the Senate without any opposition. However, Senator Walter Stiern of Bakersfield (see June-July issue) argued long a nd loudly against the bill and obtained its defeat. Therefore, management authority of the feral burro for the California DFG is now dead for the 1976 session of the Legislature.

Nationally: HR-13777 by Congressman John Melcher, Montana, which did give the Secretaries of Interior and Agriculture some management authority cleared the Interior and Insular Affairs Committee of the House of Representatives where the language of HR- 13777 was amended into S-507 adopted by the Senate and similar to it, except that S-507 had nothing concerning the management of the so called Wild Free-Roaming Horses and Burros . A letter from Congressman Melcher advised the editor, who is also the Legislative Secretary of the Sportsmen's Council of Central California to contact The Honorable Henry Jackson, Senator from Washington and Chairman of the Senate-House Conference Committee and to request that management language become a part of the bill adopted by the Conference Committee. This was done. Also Mr. Gerald E. Hillier the newly appointed District Manager for the Bureau of Land Management at Riverside, California made the same suggestion. Because the language of HR 2935 is thought preferable to the present language of Section 213 of HR 13777 it was suggested that this language be adopted. The language of HR 2935 is that originally suggested by the Washington office of the BLM. Outcome is uncertain. However, I do have a letter from Senator Alan Cranston stating that he will oppose any changes to the PL 92-195--The Wild Free-Roaming Horse and Burro Act of 1971. He seems to prefer to base his action on emotionalism rather than on evidence gathered by the research of biologists and the professional land managers. Probably Senator John Tunney will follow the lead of Senator Cranston.

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SHEEP COUNT AT DEATH VALLEY WASHED OUT.

A short note from Pete Sanchez, Natural Resource Specialist of the Death Valley National Monument says: "As you probably heard, or deduced from the look of the skies, the count got rained out. Flash floods resulting from quite severe thunderstorms even caused road wahouts in the northern Grapevine and Cottonwood Mts. BLM had a small lightning fire in the Hunter Mt. area. Still, most counters stayed on their springs until the last- at least until Sunday. I still don't have all the reports in but I have heard that several parties did see bighorn." The editor was enroute to the D.V.N.M. when a severe breakdown of the vehicle occurred.

The Future Outlook for Desert Bighorn sheep in New Mexico

DESERT BIGHORN COUNCIL

William O. Montoya, Assistant Director of the New Mexico Department of Game and Fish reported on this topic during the April meeting of the Desert Bighorn Council held at Kino, Mexico in early April this year.

As a result of the encouraging efforts of the captive bighorn herd at Red Rock, New Mexico, a research and management program has been initiated in the State of New Mexico to include life history studies of the remnant population of bighorn in the Hatchet Mountains. Food habit studies will be undertaken on a parallelbasis to establish the variation of food habits, if any, from the San Andreas Range to the Hatchet Mountain bighorn range. A study for complete evaluation of potential release sites for bighorns will be initiated and completed within the next two years.

The future outlook for bighorn in New Mexico must address the following problems before the release of now captive herds is carried out. The San Andreas for example, has an estimated population of 350 bighorns (desert). They inhabit 10 to 15 % of what appears to be the total potential habitat. Why and what are the forage differences, and to what extent do they vary inthese areas? How can we create migratory and roaming characteristics within the herd to provide expansion into apparantely unoccupied range? Secondly, what are the differences in the inhabited area and other potential release sites such as the west side of the Sacramentos, the Guadalupe, or the Alamo Waco Mount ains? What is required of these animals in regard to resting areas and lambing areas? What is the past and present live stock competition, etc? Thirdly, is there any effect on the inhabited Big Hatchet Mountain herd by the border fence on the New Mexico/Mexico line and has it, in reality, limited the migration of this once healthy herd?

The answers to these problems will be attacked and are being undertaken by a graduate student working on the San Andreas Wildlife Refuge. This study was established, to this point, using federal funds with the State matching share provided by the Game Conservation International. It encompasses the life history study of the population on the San Andreas, and willbe directed toward forage variations within that mountain range. In the future, it will compare by computer, the same information to data gathered on the Alamo Mountains, the west side of the Sacramentos, the Guadalupe range, and the Big Hatchet Mountains in southwestern New Mexico. It also will compare much of the data derived from non-inhabited areas on the San Andreas range itself. The present study has proceeded to the point of gathering information on vegetative type, topography, and habitat types, occupied during the summer and winter months. It has also provided a vast amount of data on the requirements for resting areas, lambing areas, and water requirements during various seasons of the year. For example, the study has shown that, apparantly, the lambing season extends from December until about June in the San Andreas Mountains---reported by Andrew Sandoval in early 1976. The lambing season in the Big Hatchet, for example, was found to run from late October to May (G ordon, 1953). At this point, it has shown that the success and survival of lambs during the summer of 1975 was 70 lambs per 100 ewes. However the ratio decreased drastically, averaging 27 lambs per hundred ewes for the fall of 1975 according to Sandovalin 1976. Although the precise cause of high lamb mortallity is unknown, limited evidence suggests that disease and breaking down of family groups might be responsible for some of that mortallity. There have been lambs observed wandering alone, miles from the nearest known sheep, in September and August 1975. It is suggested thatthese wanderings are the result of rut activities during this time of the year. T he information gathered on the inhabited range and the potential release sites will be computer analyzed for comparison in an effort to pinpoint the major differences and possible reasons for non-sheep use.

Looking further into the future, the Bureau of Land Management has funds available under the Sikes Act for implementation of research on bighorns. This will include complete evaluations of all potential release sites on BLM controlled land. Initially, this will be a one-year study but can be extended to a second year if necessary. This particular study will be a subcontract to New Mexico State University through the Department of Game and Fish. We are presently working with a similar proposal to include research on uninhabitedorest lands. Presently, both these studies are set up on a one-year basis, with the possibilities of extending to a second year if necessary."

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ALSO FROM NEW MEXICO --Roberto the Red Rock's Latin Lover going strong

Two years ago Roberto, one of the three ram lambs born to ewes that had been captured and brought to the Red Rock Game Pasture from Mexico in 1972 successfully sired six lambs born to the six adult ewes of this pasture. He was successful in battling off the competition of Felipe and Pancho who were smaller but of the same age. Roberto proved, once again that rams at 18 months of age can be successful at breeding, if given a chance. These ewes had been obtained from Mexico in a trade for New Mexico antelope to Mexico,

The Game and Fish Department's herd of desert bighorn sheep at the Red Rock Pasture is growing, even though there have been some losses. During he spring of 1975 coyotes did kill at least two lambs. Two female coyotes were found in the enclosure and were killed by Department personnel. Stomach contents showed that these coyotes had been feeding on the dead lambs. Although the pasture is fenced to exclude predators, they do get in by digging under the fence. Several years ago a coyote killed a valuable Persian gazelle in one of the pastures.
By late February 1976 (my last report) showed that seven bighorn lambs had been located at that time and more were expected as there were then 17 breeding age ewes in the herd. This gave a total of 32 bighorns in the pasture. The Department is now considering where is the best place for re-introduction into the wild. Serveral areas are under consideration as possible release sites, all of which are areas from which bighorns have been extirpated.

The Department, under a cooperative agreement with the Bureau of Land Management is also negotiating contracts with the New Mexico State University's school of Wildlife Management for assignment of a contract graduate student to conduct similar studies fo the smaller herd in the Hatchet Mountains. The study will be a follow up to Andrew Sandoval's work, and will be funded by the BLM under the Sikes Act, which makes funds available for wildlife habitat research, planning and developement on federal lands.

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THE STATUS AND TREND OF DESERT BIGHORN SHEEP IN NEVADA

By

Robert P. McQuivey

This study by McQuivey was made possible by funding obtained through Pitman-Robertson Act's Federal Aid in Wildlife Restoration. The funds derived from excise taxes paid by sportsmen on firearms and ammunition.

Information of the report is based on the collection of miscellaneaous datw over the past several years in addition to intensive ground and aerial inventories during the year of 1975. The study areas were the Castle Mountain, Paiute, and the New York Mountain Ranges. The majority of the habitat does lie within the boundaries of California. Only a small part of suitable habitat is within Nevada.

The Nevada portion of these ranges is located about 10 miles west of Searchlight in Clark County, Nevada. Only the Nevada portion was used for the study. Elevations range from 3600 feet on the valley floor to 5543 on Hart Peak near the state line. Most of these Castle Mts. is rolling hills with limited cliff area. Thesame is generally true for the New York Mts. Average rainfall is about 8 inches at Searchlight and generally well distributed throughout the year.

EARLY INHABITANTS:
The Colorado River area was historically occupied by basket makers, pueblo dwellers, and wandering digger Paiute Indians. Archeological sites show a very limited amount of use by these early Indian people.

Mining Activities: The Crescent Peak area was activated by miners in 1894 with the discovery of turquise mines that were apparantly worked earlier by Indians of the area. Limited mining activity still occurs in the form of annual assessment work, the peak of mining activity ended during the 1930's.

Livestock Grazing: No records are available on past livestock use prior to the Taylor Grazing Act, but old-timers in the area can attest to the grazing of both cattle and domestic sheep throughout the area. Since 1936 domestic cattle have been the primary livestock in the area with only intermittent sheep use, Cattle use has varied from 300 head in 1951 to 1100 in 1968 (March through May). Water is well distributed throughout the area.

The study of Dick WEaver in 1968 showed that there are probably more mule deer in the New York Mountains than there are bighorn sheep. There is evidence that there are predators such as mountain lion, coyote, bobcats, and golden eagles in these mountains. However, it is doubtful that any have a significant impact on present population levels.

There are no known wild horses or feral burros in the study area, although the potential does exist for these species to expand their present ranges from the south and west.

BIGHORN HABITAT information

Critical components of the habitat for bighorn include water, shelter, and vegetation. All three of these factors are needed in order to be of value to bighorns. Changes in any of these factors may directly effect the number of animals an area can support.

Water is often considered to be the most important single limiting factor in affecting sheep distribution in southern Nevada and the only habitat component that can be directly manipulated by man. Past water development, mainly windmills and wells, for use by domestic livestock presently provide the most important free water utilized by sheep in this area. Jack's Well w as recently developed with a horizontal drill and currently provides sufficient water at the source in addition to being piped to the valley floor.

The two most important water sources near the state line listed by Weaver (1968) are Dove Spring on the Castle Peaks and Kidney Spring on the south side of Hart Mountain. Kidney Spring was recently developed by the California Department of Fish and Game for the exclusive use of bighorn.

About 73% of the total habitat utilized by sheep in the area is within a two-mile radius of free water, some of these waters are not utilized by sheep as they are not near escape cover, have limited competition with domestic livestock or are near oiled roads.

Vegetation both in the New York Mts. and the Castle Mt. Range consists in the main of annuals. There are in all some 200 species of these annuals which will germinate during a good or exceptional moisture year.

Statewide analysis of about 200 rumens collected from bighorn sheep suggest a preference of grass species with seasonal use of forbs and browse. Browse species important to bighorn are lacking for the most part in this area so it is assumed that the perennial grasses in the area and seasonal use of forbs provide the basic nutritional requirements for sheep. Rumen analysis data is lacking from this area.

TOPOGRAPHY

The single most important factor limiting population numbers and sheep distribution in the Castle and New York mountains of Nevada appears to be the lack of abundant escape cover. Weaver's study in 1968 showed the New York and Castle Mts. extremely important for bighorn sheep and containing all of the necessary habitat components. As the range crosses into Nevada, however, the terrain becomes much more gentle and for the most part lacks the steep, rocky escape cover needed by sheep. Although utilized by bighorn, this area appears to be marginal with respect to terrain.

There are no early records of bighorn use in this area other than from the petroglyphs occurring in some areas. With the influx of mining around the turn of the century and the livestock grazing, people camped near the known springs to the detriment of bighorns and these people did utilize the bighorns as food whenever they had the opportunity. Population levels were estimated as being about 150sheep by Karl Weikel, the local livestock permitee since the early 1950's . Present population of bighorn in Nevada is placed at about 25 bighorn. Some sheep do wander back and forth into the California parts of these study areas. Average density is thought to be about one bighorn to one square mile. Increased use of highways and the fencing of boundaries by the BLM . and lower population levels there have been fewer observations of sheep crossing the highway in recent years.

HUNTING AND HARVEST TREND:

This area has been open to hunting, except during four years, since 1952. The area has been included as a part of a much larger area and so has had verylight hunting pressure over the years. There has been no apparznt adverse effects on the bighorn population during the 20 years open for hunting. Better habitat and higher sheep populations have tended to divert hunters to other more productive areas. Only three legal rams have been taken during this period of time. There have been 4 illegal rams and 5 ewes also taken. The taking of an occassional large legal ram will have no adverse effect upon the bighorn populations of the study areas.

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Note:

Nevada Department of Fish and Game Conducts their sheep hunts on a permit basis. About 50 to 55 permits are granted annually on a drawing basis. Ten percent of the permits go to non-residents of Nevada and the balance to Nevada residents only. There is a required indocrination session with the Game Managers of the DFG prior to the hunt. All permitees are required to attend this session. ALSO: Nevada has a regulation that specifies that a legal ram must be either 7 years of age or score a minimum of 144 Boone & Crocket Club points, using the score of the best horn doubled. Hunters are also required to submit samples of rumen, blood, lungs, heart, kidneys and a shin bone of each ram taken during the hunt. Legal rams then have a hole drilled through one horn and a steel wire secured with a lead seal of the DFG attached thereto. This latter requirement was suggested by the Desert Bighorn Council a few years ago.

The Society for the Conservation of Bighon Sheep was created for the purpose of Conservation, preservation and proper utilization of the wild sheep of North America. Membership is open to persons of any age. The Society is specifically soliciting those who are concerned with our County's wildlife and the conservation of it's natural resources. The Society needs members who are aware of the vast problems in these areas, and are determined to assist in solving them. Aconservation attitude and a willingness to be of assistance, when called upon, are all that is necessary. IF YOU ARE INTERESTED---DO NOT DELAY, MAKE YOUR APPLICATION TODAY. The Bi-monthly -THE SHEEP-HERDER attempts to encompass each aspect of events and causes that are of concern to this rare, and in some areas, an endangered specie.

The Society advocates: putting the bighorn sheep under the control and management of the Fish and Game Commission, rather than the Legislature; development and improvement of water sources; elimination of the checker-board patterns on National Resource Lands; reduce competition from domestic and feral animals on the sheep ranges; the transplanting of sheep into matched environments; continuing the annual censuse of sheep throughout their ranges, and the making of recommendations as a result of these censuses; find the basic cause(s) of infant mortallity and endeavor to correct the cause(s); and the obtaining of adequate funding for the Department of Fish and Game so that it may be effective.

OREGON'S ROCKY MOUNTAIN BIGHORN SHEEP--A STATUS REPORT---Victor Coggins, Wildlife Biologist

In 1954, California bighorns were reintroduced to Oregon, marking the beginning of a successful restoration program from this subspecies. Efforts were made in the early 1960s to obtain Rocky Mountain sheep stock but it wasn't until 1971 that bighorns were obtained from Jasper National Park in Alberta, Canada. Two groups of 20 sheep each were released in April and November 1971. The first reintroduction was made in the Snake River Canyon above Hells Canyon Dam. It consisted of 5 rams and 15 ewes. At the time of this report (January 1976) the Snake River sheep seem to have apparantly disappeared. The Wallowa herd transplant (November 1971) appears to have been very successful.

The Hells Canyon sheep were released in April and soon after at least some dispersal occurred. Small groups of sheep were reported as far north as Salt Creek on the Snake River, a distance of 23 miles, airline, from the release site. Some animals apparantly adopted the Short and Steamboat Creek drainages(above the dam) as 10 bighorns, including three new lambs, were located in June of 1971. In August 1972, 13 sheep were located, indicating that reproduction continued. In March 1973, nine bighorns were located just above Hells Canyon Dam during the annual spring elk inventory. Since that time, only a few straglers have been sighred by Wildlife Commission personnel and reports by canyon visitors have diminished. The success of this introduction is in doubt.

TheWallowa Mountain bighorns were released in November and little permanent dispersal occurred. Nineteen of the original 20 sheep wintered on the grass-covered slopes in the Silver Creek burn above the Lostine River. The following spring, considerable dispersal occurred and in early June 1972, five sheep from the Lostine River were seen 21 air miles northeast of the release site along Highway 3. Identification of individuals was positive because all the sheep were eartagged shortly after they were captured in Canada. The animals later returned to the Wallowa Mountains as 20 bighorns including three new lambs were located on the Hurricane Divide east of the Lostine River in July 1972. The sheep moved to the high peaks of the Wallowas their first summer and have continued to use the same general summering area. Reproduction has been good and eleven new lambs were observed in 1973 and eleven again in 1974. In December 1974, 40 bighorns were counted on the sheep wilter range above the Lostine River(the same range they have used since their release in 1971). Thus, the population has at least doubled in the three lambing seasons since the introduction.

WHERE DO WE GO FROM HERE? The limiting factor of the Lostine sheep herd appears to be the winter range. The animals have a very large summer range that they share with a small number of mule deer and Rocky Mountain elk, and Rocky Mountain goats. Whenth e deep snows fall, they are forced to move down to a winter range less than 1000 acres in size that must be shared with deer and elk. Numerous studies have shown that the species can be its own worst enemy. (See The Sheepherder reports of January-February 1976). They are subject to overpopulation and disease problems, compounded by their reluctance to seek new ranges. The species is not a pioneering one. Unlike deer and Rocky Mountain elk, they are reluctant to move into new country. The better bighorn ranges, especially winter ranges, are those with steep rugged terrain and an abundance of bunchgrass interspersed with rocky cliffs for escape. Sheep ranges may or may not utilize high elevation alpine country for summer range. The Wallowa Mountains, lower Imnaha and Snake River Canyons have a high potential for bighorns. All three areas historically harbored healthy sheep populations.

Since so much former sheep country is presently unoccupied, it is beleived that managment efforts should be directed towards a trapping and transplanting program. The Lostine sheep herd has a limited wintering area and, if the present rate of increase continues, will soon overpopulate its range. This bighorn herd appears to have the potential to provide stock for other unoccupied habitat. Hopefully, by trapping and transplanting animals, the Rocky Mountain bighorn sheep can be restored to much of its historic Oregon range.

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DATES TO REMEMBER:
OCTOBER 2nd----Dinner at Michael's in Los Angeles---Send in your reply card to Doctor Lutz.
March 19, 1977---Dinner meeting at Maitia's Basque---700 Truxton Ave., Bakersfield,Calif.

(You are cordially invited to use this)

APPLICATION FOR MEMBERSHIP

NAME_____

ADDRESS_____

_____

PHONE : Home_____Business:_____

PLACE OF BIRTH_____DATE OF BIRTH_____

OCCUPATION: _____

Enclosed you will find my check or money order for $._____ This includes my initiation fee of $5.00 and my first year's dues of $15.00. (Student annual dues $5.00)
I will endeavor to do my part on behalf of the Bighorn Sheep.

Date of application_____ Signature_____