SOCIETY FOR THE CONSERVATION OF BIGHORN SHEEP

The Sheepherder

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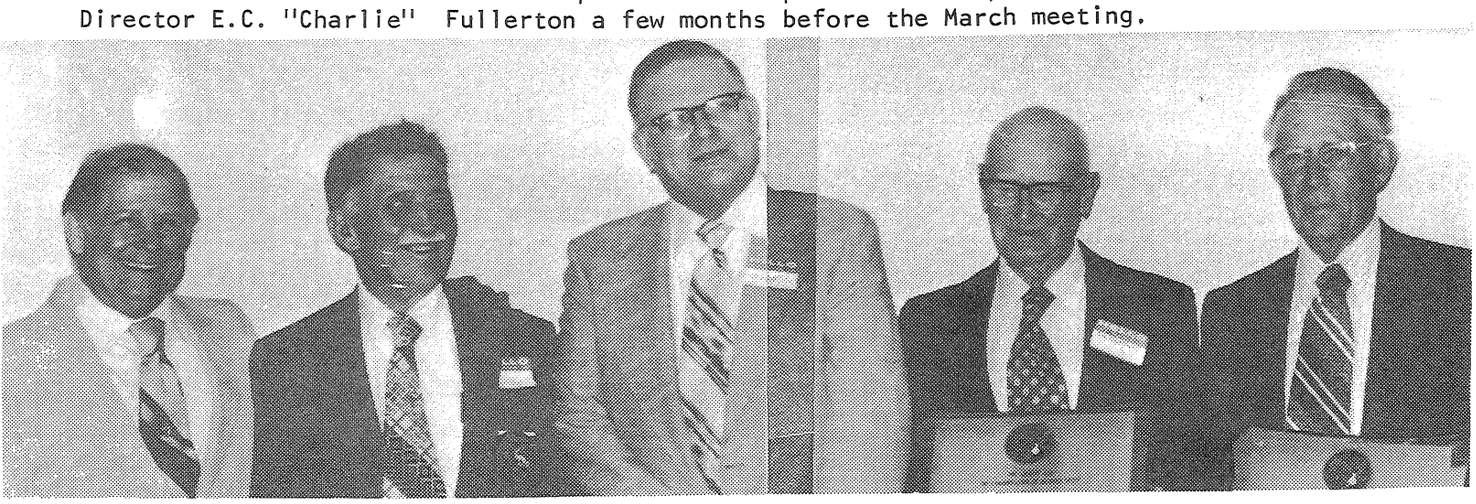
MAY -JUNE 1976

BAKERSFIELD DINNER A SUCCESS

The Annual Bakersfield dinner of the Society for the Conservation of Bighorn Sheep was held the evening of March 20, 1976. Mr. M.V. "Dutch" Doornbos of the Southern California Conservation Council was again the Master-of-Ceremony. There were 85 people in attendance. Dutch introduced those at the head table: Dr. Jack Turner, University of Wyoming; Richard A. Weaver, Field Supervisor, California Departmentof Fish and GAme; Dr. Robert Omart, of the Arizona State University and Mrs. Omart; and Dr. Loren L. Lutz, President of the Society and Mrs. Lutz.

Two extremely large 'pick-up' heads were displayed on the head table. Dr. Lutz spoke briefly of the early search by team captains for water in various parts of the California Deserts and said that the two heads had been found by Society volunteers Grant Squires of Hanford in the Hurricane Canyon area of the San Jacinto Mountains and the other by Joe Brazil of Madera who had found it in the canyon above Sweetwater Spring at the northern end of the Old Woman Mountain while searching for water with Marvin Wood. These skulls had been turned in to the DFG as possession without a special permit is contrary to the California Fish and Game Code section 4700. The DFG had permanently marked these skulls and Dick Weaver then returned them to Squires and Brazil to keep in their custody during their lifetime, they are then to be returned to the DFG. The return of these skulls was the outcome of a petititon by Marvin Wood, a long time Director of the Society and it's Third Vice President. Marvin had presented the petition to Department of Fish and Game Director E.C. "Charlie" Fullerton a few months before the March meeting.



From left to right:
Dr. Loren L. Lutz, Lew Carpenter, M.V. "Dutch" Doornbos, Don Swarthout and Marvin Wood.

Dr. Lutz noted that prior to that evening the Society had never honored a member of the Society for any of their special efforts. In the past years such honors had gone to Dr. Turner, Dick Weaver, to news paper writers, and to Senator H.L. Richardson. (See related article concerning Senator Richardson).

Dr. Lutz stated that this evening the Society was honoring three members of the Society: Don Swarthout for his knowledge of the desert ecology and his ability to convey this knowledge to others; to Marvin Wood for his leadership in the conservation of the bighorn sheep; and to Lew Carpenter for his lifelong devotion to the conservation of wildlife. Dr. Lutz, Don Swarthout, Marvin Wood and Lew Carpenter are also all members of the Safari Club International and the North American Sheep Hunters Association, commonly known as the Grand Slam Club. Marvin Wood has also been honored by the Hunters Hall of Fame. Each of the honorees were presented a large placque bearing an engraved ram;s head and inscribed with their name and the reason for the honor.

Stan Radom, President of the Sportsmen's Council of Central California was introduced and then presented Lew Carpenter with an award in recognition of the many letters that he had written to the Legislators of California and in Washington, D.C. in efforts to promote the welfare of wildlife in general and also in the efforts to protect the interests of the sportsmen of California.

Dr. Lutz re-introduced Dr. Omart a Professor of Zoology at the Arizona State University. Dr. Omart has been carrying on a study of the feral burro for the past several years. The Bureau of Land Management is helping to fund the study of the some 130 burros in the study area. This area lies to the north of the Bill Williams River and on the east side of the Colorado River, in Arizona.

The premise of Dr. Omart is:*"Burros cause no damage to desert habitat or to bighorns."* He then proceded to prove that the premise was wrong. The quantative data derived by the study shows that burros are altering the desert ecosystem and therefore the do have an adverse impact on the bighorns. As part of his study of burros, Dr. Omart has captured and then put collars on them that have radio transmitters attached. With these radios it is possible tomonitor the travels of individual burros and so determine their range and habits. These radio collars cost between $200. and $300. each. The capture of the first burro took 25 man-days of effort before being successful. It has been necessary to use tranquilliser dart-guns in these capture efforts. After capture and before releasing the animals, Dr. Omart takes blood, fecal and urine samples for laboratory testing. The animals are carefully searched for evidence of any parasites. None have been found. .Dr. Omart has learned that the burros breed for the first time prior to the time that they are one year old. The gestation period is 12 months. They then breed again in one month, usually. Consequently the jennies thereafter produce a foal on the average of every 13 months

The burro like other herbivores does prefer grasses and forbs of the range being used. The burro will, however, eat any vegetation which grows on the arid desert lands. The burro will turn to woody plants if grasses are not available and will eat the prickly pear and cholla cacti; they eat the leaves off the palo verde and in the process of getting these leaves break off the branches and they then strip and eat the bark of the large branches and trunk of the tree. As a result the palo verde on the range being used by burros is dying off, with no hope for recovery, so long as burros are in that area. As a last resort the burro will turn to and eat the creosote bush. The burro is the only known animal that will eat the creosote bush. However, they can not only survive on creosote but will keep fat, healthy and reproduce their numbers on that desert shrub. The burro eats not only that vegetation grown during the current year, but also that vegetation which has grown on these shrubs over a period of a great many years, in many cases 15 to 20 years or more.

Within this study area of Omart's both the burro and the bighorns do move from one part of the range to another throughout the year. Therefore, the burros do at one time or another utilize all of the area that is also used by the bighorns. The bighorns do not use all of the range used by the burros. At time their ranges do overlap, and during that time Dr. Omart has not observed any interaction between these two species.

In 1972 Dr. Omart had an opportunity to capture and put a radio-collar on a bighorn ewe. He has monitored this ewe since thattime and knows that she did produce a lamb each of two successive years. Dr. Omart believes that the bighorn population of the study area is about 17.

Eating habits of the burro and bighorn differ. The bighorn, like the deer, takes a nip here and there as they move through an area. The burro tends to stay in one area until it has consumed the entire clump of grass or the entire shrub. Also in the process of gathering food the burro tends to break-off the plants or shrubs and many times even pulls the plant up by its roots. During years of inadequate rainfall some of the plant species of the desert areas do not appear. This in turn puts a greater strain on the remaining vegetation to support the herbivores.

ABOVE: *Mrs. Robert Omart and Dr. Omart*

In the Chemehuevi Mountains, of California, the burros were classified according to ages. All but two were under 5 years of age, and 23% the balance were under one year of age. There was no evidence of there being any bighorns in these mountains.

Results of the burro reduction program in the Bandolier National Monument, where 52 burros were eliminated by the Park's personnel, the effect seems to have been the stimulation of herd growth. The remaining 90 burros produced 22 foals within one year.

There is only one known mountain lion in the Bill William Mountains. It makes a circuit of it's range once a year. There is no evidence that this lion offers any predation on burros.

On the Kofa Game Range, according to Omart, the burros and bighorns seem to exist along side each other in harmony. This is an area of abundant grasses. However, in the Buckskin Mountains the burro are high-lining the cholla cactus and the palo yerde and here burro numbers have increased significantly. Omart recommends that in the Bill William Mountains the burros be completely eliminated and will push the BLM to have this done. Omart believes that it is advisable that a burro preserve be established and that the area and burro numbers be managed for optimum burro health and numbers, in said preserve. He did not offer any recommendations concerning what area should be chosen for such a preserve.

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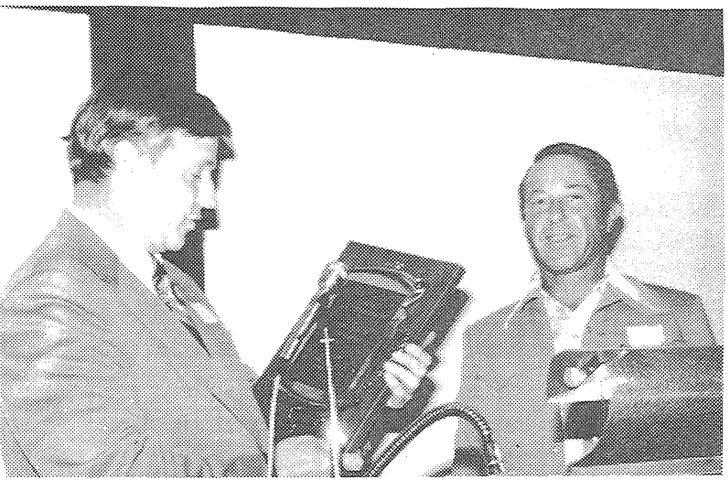
SENATOR RICHARDSON HONORED BY SPORTSMEN'S COUNCIL



Above left: *Senator H.L. "Bill" Richardson;* right: *Stanley R. Radom, Pres. Sp. C. of C.C.*

Senator H.L. "Bill" Richardson, of Azusa was the honored Guest Speaker at the March 13th meeting of the Sportsmen's Council of Central California, held at Pea Soup Anderson's Inn at Buellton. Senator Richardson had been chosen as the Outstanding California Legislator for the year 1975, by the Council. Stan Radom of Solvang, the Council's President made the award.

Senator Richardson has in the past authored legislation at the request of the Society for the Conservation of Bighorn Sheep. In March of 1968 two bills authored by Senator Richardson were signed into law. These were: the request that the Department of Fish and Game conduct an investigation to determine the current (1968) status of bighorn sheep in California to investigate factors limiting bighorn herds and develop a management plan for the species. As a part of the bighorn study a feral burro survey was made.

Richard A. "Dick" Weaver and Jerry L. Mensch were assigned to begin this study in the fall of 1968. Their report indicated that serious problems effecting the bighorns did exist. These problems included lack of water; encroachment into habitat by man with his roads, trails, off-road-vehicles, houses and mining; and the competiton by feral burro for the sparse but highly important vegetation and the scarcer water.

In 1970 the Society again called upon Senator Richardson for legislation to return to the Department of Fish and Game the right and obligation to manage the fast growing herds of feral burros. The Sportsmen's Council and the California Wildlife Federation's Legislative Advocate in Sacramento did lobby this bill S-107 through committees and to the floor of the Senate, where it was lost on a party-line vote of 20 - 6. When Senator Mervyn Dymally (presently Lieutenant Governor) Chairman of the Democratic Caucus accused Senator Richardson, chairman of the Republican Caucus of a Republican plot to kill off all of the Democratic jackasses.

Senator Richardson has recently introduced Senate Constitutional Amendment SCA-49 and Assemblyman John Briggs has introduced Assembly Constitutional Amendment 95----they are identical bills. "This measure, if approved by the voters, would provide that every person, with specific exceptions, shall have the right to keep and bear firearms as provided in this measure and laws enacted pursuant to it or consistent therewith." *Legislative Counsel's Digest.*

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TO CORRECT AN ERROR IN THE MARCH - APRIL ISSUE

At the bottom of page three in the article sent in by Bud Wiedeman the last paragraph should have read : The Old Dad Mt. Project was funded by monies from the 26-D Federal Aid to Wildlife Restoration Funds 75% and 25% from the Fish and Wildlife Preservation Funds of the Department of Fish and Game. NOTE: These funds are almost exclusively derived from the fish and game licences and stamps and tags of the sportsmen.

PROPOGATION FUNDS are those monies that revert to the several counties of California as a portion of fines levied by the Courts, after conviction, for violation of the Fish and Game Code of California.

The dropping of a couple of words from the script did change the context of the statements. The Editor does apologize to Mr. Wiedeman. It has been said, " To err is Human." If this be true; then it proves that the editor is more or less human.....?

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HUGE RAM TAKEN IN LATEST SHEEP HUNT

Arizona's 1975 Desert Bighorn sheep hunt saw a ram harvested that may place among the top five ever taken in the state.

The huge ram was taken by Mark Alley of Ajo in the Growler Mountains. The ram's horns measured 36 7/8 inches over the right curl, and 39 1/8 over theleft, with basal circumferences of 15 2/8 on the right and 15 4/8 on theleft. The spread was 22 3/8 inches.

After Alley's ram has passed the regulation drying-out period, it will be measured again for a more exact score.

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ON THE RELATIONSHIP OF SOCIAL EVOLUTION AND ECOLOGY IN UNGULATES

Conclusion of an article begun in issue of March -April

Dr. Valerius Geist, Ph.D. of the Faculty of Environmental Design, the University of Calgary, Calgary, Canada, has written the above ttitled paper which has appeared in American Zoology, 14: 205-220 during 1974. Dr. Geist sent a copy of the paper to me, the editor. I find the paper to be very thought provoking and do hope that in trying to give, what I consider, to be hte gist of the paper that I have not lost the main thrust of Dr. Geist's theory. In constructing his theory Dr. Geist did not follow tradition and use behavioral and habitat correlates but instead used principles derived from several disciplines and deduced their ecological and/or behavioral consequences. In Dr. Geist's theory he has linked ecological variables to social manifestations using individual selection and reproduction fitness as criteria. In this theory Dr. Geist proposes a total of 16 hypotheses and relates the one to another. THE FIRST NINE (9) OF THESE HYPOTHESES WERE REVIEWED. in the March - April issue of the Sheepherder.

To continue:

10. Habitats stable in space and time(fluctuations less than maximum population growth of species) select for territoriality and reduced sexual dimorphism; habitats which fluctuate in space and time (in excess of maximum population growth rate) select for hierarchial system of dominance in males and increased sexual dimorphism; stable habitats in which food is unpredictably dispersed in time and space but locally abundant select in territorial and hierarchial species for reduced sexual dimorphism. (Ecological parameters: habitat stability and instability of food resources.) If the habitat increases and decreases between years so that the resources for the species vary by a multiple from year to year, then, in years of plenty, females will experience little or no competition for resources and all females can raise offspring successfully.....The male becomes superflous for defense. He can maximize reproductive fitness by maximizing the number of females he inseminates. If the habitat fluctuations are very large, so that the felmales inseminated byone male do not benefit materially from that male's actions to expel other males from their foraging sites to reduce harassment and competition for food, then there will be no selection for territoriality and hierachical male society will evolve. If the female benefits from the male's protection, a system of male territories will overlap the home ranges of females. In both systems there will be selection for large, aggressive males. The male increases his chances of breeding by extending body growth long into adulthood. Intense male competition for females is likely to result in intense agonistic interactions among males, and a short life expectancy for males. Since subordinate males are also relegated to inferior habitat where they suffer increased mortallity, we can expect an adult sex ratio favoring females. In an open landscape with a high carrying capacity of ungulates, or with spotty, periodic food production, selection for sexual dimorphism must collapse. In large congregations of ungulates, males would be hard put to protect a large number of females from the continuous courtship (and hence cost of harassment and running) of smaller males.

11. Where ungulates are faced with a high density and diversity of predators, predators will select against damaging, intraspecific combat in their prey. Clearly, an individual who is quick to attack is quick to be wounded in a counter attack, and thus increases his chances of being weakened, sickened, and spotted by predators as such. The individual less likely to become prey is the one using "ritualized" combat and dominence displays. In regions where the predator density and diversity is low, such as in north-temperate environments, we can expect a relatively greater frequency of deaths and wounding through intraspecific combat.

12. If there is a great range of productivity (long quality gradient) in a stable habitat there will be reduced selection for female aggression; males maximize reproductive fitness by capturing territories in high quality habitat and advertising to females; females maximize fitness by selecting best-qualified habitat, in non-territorial species selecting the most dominant male. The male would gain little defending the aggressive female (no gain in resources in short supply since resources are superabundant) but would maximize his reproduction by maximizing the number of females he can inseminate. These selection pressures would result in reasonably tolerant females which would cluster on high quality sites of habitat and aggressive large, strongly dimorphic males which would place their territories over the best sites. expel subordinate males to poorer sites, and advertise themselves to the females. If female has no need of the male to protect her from harassment or to reduce food competition on her home range, females will select males only on the basis of dominance.

13. Dispersal theory. (Ecological parameter: unoccupied habitat available for colonization. During colonization of vacant habitat, ungulates experience a superabundance of forage prior to reaching the carrying capacity of the new habitat. During the population's expanding phase, selection favors large, vigorous males skilled in intense combat and females producing genotypically large offspring. Since, even in stable populations, at carrying capacity dominence depends on skill in combat and efficiency of weapons and defences, and dominants breed, the evolutionary trend towards specialization in combat and display organs becomes fixed. This is true even though phenotypically the animals become smaller in size. The theory predicts that in tropical, but not north-temperate and periglacial environments, social specialization follows ecological specialization and parallels it. In the north-temperate regions, clinal variations in ungulate races may reflect the dispersal history of the species, not an ecological gradient. Evolutionary trends set during dispersal are irreversable. If lack of ritual, overt aggression, and sexuality are typical of juveniles, advanced species are more overtly aggressive and unritualized

compared to primitive ones. This can be verified for mountain sheep. A small bodied species is locked into its body size range by its inability to increase its energy uptake (and grow bigger) by eating forage of high fiber content(and consequently low digestibility), However, if for some fortuitous reason a population of that species reaches relatively larger body size, it is preadapted to exploit forage of a lower quality, such a fortuitous reason would be a superabundance of forage during colonization of vacant habitats. The same arguments can be used toward the prediction tha, in sexually dimorphic species, the larger males becomes preadapted to feeding on coarser forage. Such selection would be reinforced since males, in their period as subordinates , are forced into poor habitats by dominants. Moreover, once dominant, the male reduces his competition with females on his territory. In mountain sheep it was found that frequency of play, combat, display, and sexual behavior was apparantly related to the quality of the population and to the populations resource base. The better the nutritional state of the animal the more vigorously it acted.

14. Edinger's principle. This states that during evolution body size and legs are first to change, teethare next, and brainsize and morphology last; it was derived from paleontological studies of equids, but appears to have application in primates. Within a genus or family highly diverse species will still show very similar social behavior patterns.

15. Predictable, periodic productivity sets birth seasons and shortens birth and rutting seasons. This leads to idleness of males outside rutting season, as well as intensifying the rutting activities, in particular, combat. (Ecological parameter: seasonal superabundance of forage.) Since the period of idleness in males coincides with the time of greatest productivity in the temperate north, the males are free to draw from the seasonal super-abundance in order to grow large stores of fat and huge horn-like organs. This process is accelerated by the greater caloric density of plant matter available as forage from temperate and arctic regions, compared to tropical ones. The fat, inturn, permits the males to spend their time rutting rather than feeding. This hypothesis does not say what selects for huge excessive, horn-like organs, so common to northern ungulates, but it does identify the ecological conditions when such horn-like organs may evolve.

16. Daily, seasonal, and annual variation in availability of forage may result in a population assuming different social organizations. (Ecological parameter: short term fluctuations of resource abailability.) Ungulate populations have the ability to alter their grouping characteristics -- apparantly in response to differences in the availability of food and cover.-----concentrations are greater during periods of scarse food supply. However, a great difference in density between a population of *Ovis dalli stonei* and *Ovis canadensis canadensis* did not produce any marked differences in the social structure.

Dr. Geist states further: "It may be noteworthy that the 16 hypotheses discussed are linked easily to one another and explain rules from seemingly unrelated biological disciplines. If hypothesis 8 is false, so would be 9, 10, 12, and 13. The dispersal theory explains some old paleontological laws of the irreversibility of evolution; Cope's law that primitive forms give rise to specialized forms; the trend in the evolution of mammals toward larger body size; and, in combination with hypoethis 15, it explains the evolution of huge horn-like organs in ungulates from the Pleistocene. This does not contradict the predictions of the dispersal theory that ecological and social specializations may evolve in parallel, in the sense of advancing in parallel."

In synopsis Geist says: *Much of the social behavior and organization of ungulates can be related to ecological parameters such as fiber content of forage, plant productivity, plant biomass, plant species diversity, productivity gradients, temporal and spatial fluctuations in productivity, habitat stability, food dispersion, three-dimensional structure of habitat, colonization, and predator density and diversity. These ecological variables can be liked via individual natural selection withthe species' anti-predator strategies emphasis on different channels of communication, relative frequency of damaging and non-damaging overt aggression, gregariousness and group structure, juvenile dispersal, home range traditions, monogamy and polygamy, sexual dimorphism, territoriality, hierarchial rank structure, and plasticity of social structures. The ecological variables have primary manifestations which are behavior or which effect behavior, as well as secondary manifestations affecting behavior. There are logical liks between the hypothesis linking ecology and behavior discussed here with some principles from bioenergetics, zoogeography, and paleontology. Although liks do exist between ecology and behavior, they nevertheless represent distinct realms of natural selection in which social behabior appears as the more conservative element.*

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NATIONAL WILD HORSE ADVISORY BOARD TO MEET IN OREGON

The National Advisory Board for Wild Free-Roaming Horses and Burros will meet on June 3 and 4, 1976, at John Day, Oregon and visit the nearby Malheur National Forest which supports a herd of wild horses.

On June 3rd the Board will make an on-the-ground inspection of the Murderers Creek wild horse area, where a joint land use plan has been developed by the Forest Service, Bureau of Land Management and other cooperating agencies.

A business meeting, open to the public, is scheduled to begin at 8:30 a.m., on June 4. Comments from interested individuals or groups will be heard at 2:00 p.m. Persons wishing to make a statement before the Board must notify the Director (330), Bureau of Land Management, Washington, D.C. 20240 before the meeting. Those presenting oral statements should also include a written statement for the record. Written statements may be submitted without prior arrangements.

Those wishing additional details of the June meeting should contact the Forest Supervisor, Malheur National Forest, John Day, Oregon or the Office of Public Affairs, Bureau of Land Managementm 729 N.E. Oregon Street, P.O. Box 2965, Portland, Oregon 97208.

The only Californian on the Board is Mr. William L. Reavley, Western Regional Director for the National Wildlife Federation, 2775 Cottage Way, Suite 39, Sacramento, California 95825. Phone 916 - 483 - 1125.

The BLM is experiencing a great many problems in the assigning of excess horses and burros to people for private maintenance. In the BLM's news release of May 12, 1976 speaks hopefully that the 'adoption' project is beginning to gain momentum. However, as it states, "Once the horse is home, the "foster" parent may train it for riding or other non-commercial uses. The horse would not be privately owned, however, because the law requires the Federal Government to remain as legal guardian. Any offspring of such wild horses would belong to the new guardian."

"An estimated 50,000 wild horses now live in the wextern United States, and this number will likely increase by 8,000 to 10,000 animals per year. In some areas, there is intense competition for forage between horses, livestock, and wildlife. In many of these areas, overgrazing does exist. Overgrazing can destroy plant cover, contribute to soil erosian and, in short, cause serious damage to the environment. Such a situation would b e critical to the survival of the horses, as well as that of other life forms, " Berklund emphasized.-----Presently there are over 700 horses in"foster homes", scattered from New York to California .----------FURTHER INFORMATION AND APPLICATION forms may be obtained by writing to :Adopt a Wild Horse (330), Bureau of Land Management, U.S. Department of the Interior, Washington, D.C. 20240.

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PRESENT STATUS OF LEGISLATION CONCERNING WILD HORSES AND BURROS

The latest information available to the editor (May 15, 1976) is that H.R. 2935 by Congressman G. Wm. Whitehurst is that the bill is still in the BLM's ORGANIC ACT and still reposes in the Subcommittee on Public Lands of the House Interior and Insular Committee.

The Supreme Court has held one day of Oral Arguments on the Constitutionallity of PL 92-195 the so-called Wild Horse and Burro Act of 1971. Decision may be handed down within a month.

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ROCKY MOUNTAIN NATIONAL PARK'S BIGHORN ARE IN DANGER

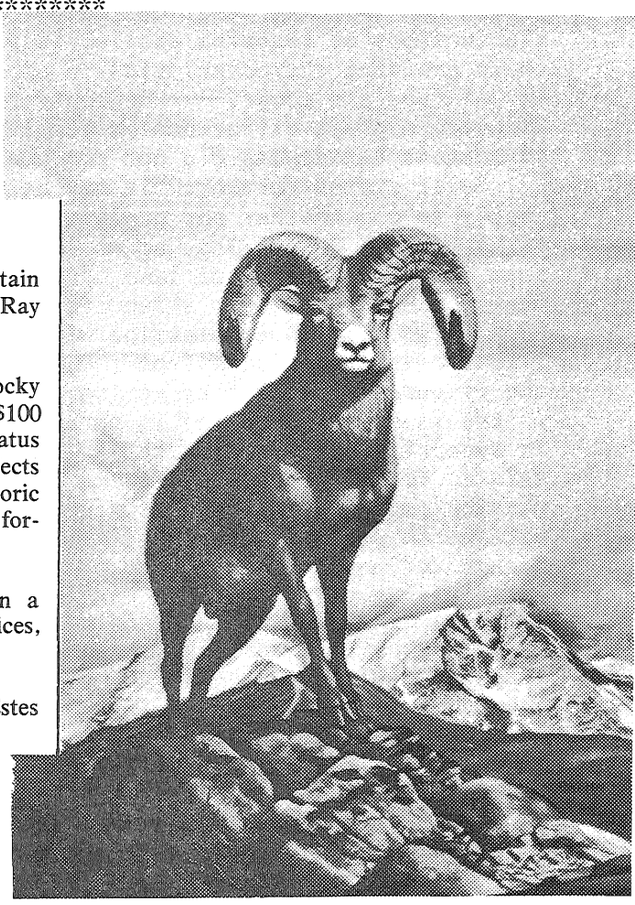
ART FOR WILDLIFE'S SAKE

Art is being brought to the aid of the herd of 200 bighorn sheep in Rocky Mountain National Park. Reproductions of a watercolor painting of a bighorn ram by artist Ray Harm are being sold to raise money for research on the herd.

Five hundred signed and embossed color prints will be available from the Rocky Mountain Nature Association in Estes Park, Colorado at a minimum donation of $100 each. The proceeds will finance research projects to document the bighorn's status and determine the limiting factors which have caused sheep to decline. Other projects will plan and carry out the extension of bighorn populations to their former historic range including the southern portion of the park, and discover how to reestablish former migrating patterns so that the sheep will use low elevation winter range.

Sponsored by the non-profit association, the research will be conducted on a cooperative basis with the Colorado Division of Wiidlife, the U.S. Forest Services, and Colorado State university.

For more information, write to the Rocky Mountain Nature Association, Inc., Estes Park, Colorado 80517.



Courtesy -- National Wildlife Federation's *Conservation News*, issue February 1, 1976.

PRINT SIZE: 22 x 28 in full color

PRICE: A donation of $100.00 or more to be used solely for research on the bighorn sheep population of Rocky Mountain National Park (includes shipping and sales tax).

TAX DEDUCTIBLE: The difference between the fair market value of the print ($40.00) and the amount you pay is tax deductible.

ARIZONA BIGHORN SHEEP LOSING OUT TO BURROS

According to the Newsletter of the Arizona Game and Fish Department issue April 23, 1976 : " A recent helicopter survey of bighorn sheep in the mountains along the Colorado River near Lake Havasu by Rich Beaudry, Wildlife manager in Lake Havasu City, has shown that bighorns are apparantly dropping further behind in their competition with the feral burros.

Beaudry sighted 29 sheep from the air, but at the same time he counted over 70 burros. He estimates there are approximately 450 burros within his area and multiplying by approximately 20 - 25% annually."

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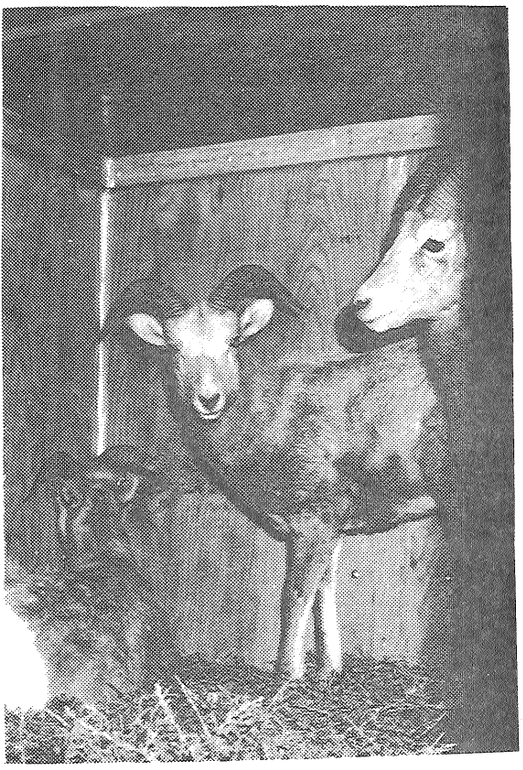
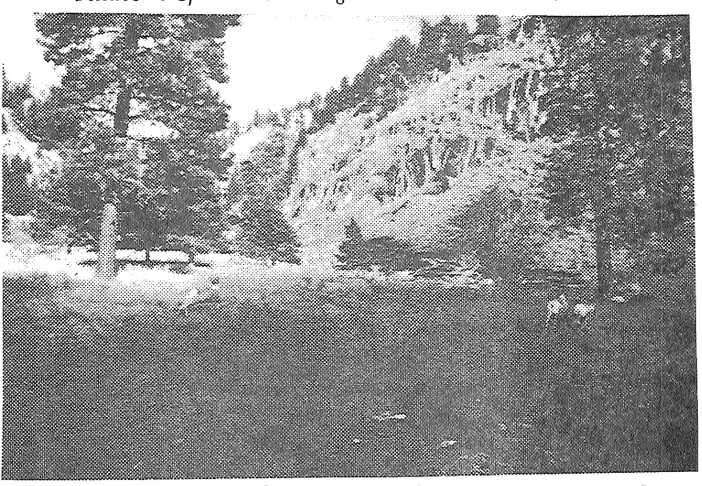
CARBON MONOXIDE CLAIMS SIX BIGHORNS



Photos and information courtesy of Milt Williams Idaho Department of Fish and Game.



In early January this year the Idaho Department of Fish and Game conducted another transplant of bighorns into the Hells Canyon area of the Snake River.

The trap near Panther Creek had been open and baited for nearly two months to give the bighorns time to become accustomed to it, and when biologists Walt Bodie and Bill Hickey found 21 sheep under the net, the trap doors were dropped and the trap sprung. The sheep were then hogtied and loaded onto sleds to take them downhill to the waiting trucks for their 700 mile trip to their new range.

The trucks were covered in order to keep the sheep quiet. Any opening in the truck other than small ventilation holes caused the sheep to lunge at the openings in attempt to escape.

The exhaust pipes had been extended and bent at right angles to deflect fumes away from the truck beds. However, apparantly this bend in the pipe caused a back pressure in the exhaust system to build-up and rupture the muffler allowing the deadly fumes to enter the covered area that contained the 16 ewes and lambs. The precious cargo was check along the route at Salmon, Arco, Carey, Bliss and Boise. It was at Cambridge, the last stop before the end of the journey that showed the first effects of the carbon-monoxide. A veterinarian, Dr. Gerald Wilkins gave the animals oxygen, and the sheep were held at Cambridge for 24 hours. The smaller truck with the five rams had no troubles and reached roads end on schedule. At the roads end the sheep were again hogtied and blindfolded, loaded into wooden crates and strapped to the sides of the waiting helicopter. The helicopter ferried two bighorns on each flight down the canyon to the release site where biologists waited with radio collars for some of the sheep. These radios will help locate the sheep later and give the biologists information on their condition and distribution.

The remaining 10 ewes and lambs were ferried to their release site the following day.

The dead sheep were to be used for research into bighorn sheep anatomy and diseases. These dead sheep are expected to shed some light on parasites of the Panther Creek herd of bighorns.

Last year(1975) a dozen bighorns were also taken into the canyon. On a later flight over the canyon, the department found three lambs had been born that spring from that January's release.

The release site of both of these transplants was 10 to 15 miles downstream of thw Hells Canyon Dam. The five lambs, 10 ewes and five rams were all freed within a forty-eight hour period after the trap doors fell shut near the Salmon River and Panther Creek.

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SOCIETY BOARD OF DIRECTORS MEETING OF May 8th

The regular quarterly meeting was held at the Malibu beach home of Secretary John E.O. Larronde. John with the help of Bud Weideman prepared an excellent dinner for the Board. Those present were Dr. Lutz, Glenn Sudmeier, Robert Johnson, Marvin Wood, James DeForge, Lew Carpenter, Dr. Charles Jenner and Weiedeman and Larronde. (please turn page)

The Society for the Conservation of Bighorn 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 country'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. A conservation 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 publication - THE SHEEPHERDER attempts to encompass each aspect of events and causes that are of concern to this rare, and in some areas, 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 census of sheep throughout their ranges, and 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*

A proposed By-laws revision to raise the number of Directors from 7 to 9 was adopted and Dr. Charles Jenner elected to the Board of Directors.

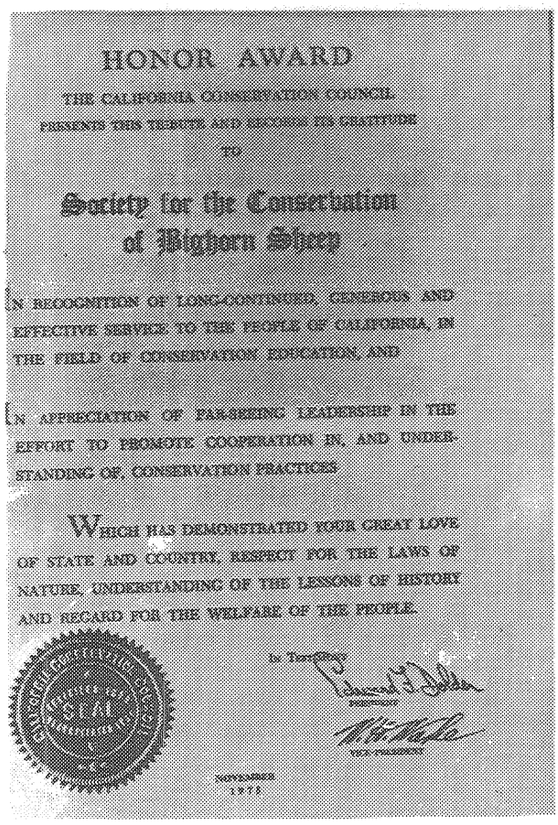
Left to right: Dr. Jack C. Turner, Ph.D. Richard A. Weaver, Calif. Dep't. F&G.

The Board voted to help underwrite the research study of Dr. Jack Turner, Department of Zoology of the University of Wyoming to the extent of $300. Dr. Turner's study will be done this coming summer at the Palm Desert Research Station. Dr. Turner on the left, and Dick W eaver on the right, California Department of Fish and Game have worked together on numerous bighorn sheep projects in the past years.

Dr. Lutz reported thatthe Society had spent in excess of $60,000 during the past year on various habitat projects of benefit to the bighorns. None of the funds so spent were in any form of taxes collected from the general public. The funds came from gifts, Propogation Funds, Preservation Funds, and Pitman-Robertson Funds.

Glen Sudmeier announced that volunteers will again be needed in June for a census of wildlife using desert waterholes in the triangle formed by I -15; I - 40; and the California-Nevada state line. This will be a 6 to 8 hour count---one day, beginning at daylight on that day. THEN: This same area will be observed again over the July 4th weekend for a 3 day waterhole count for bighorns in particular. Sudmeier's telephone is: (714) 735 - 4387. PLEASE TELEPHONE GLENN FOR DETAILS AND ASSIGNMENT TO A WATERHOLE TO BE COVERED-----BOTH FOR THE JUNE WILDLIFE COUNT AND FOR THE JULY 4th WEEKEND COUNT FOR SHEEP ESPECIALLY.

The Board voted to invite the members of Explorer Scout Troop 621X to be the guests of the Society at the dinner October 2nd ---at Michael's in Los Angeles. This troop under the leadership of John (Bill) Lowery has participated on nearly all of the water storage projects of the Society during the past six years.



HONOR AWARD

THE CALIFORNIA CONSERVATION COUNCIL PRESENTS THIS TRIBUTE AND RECORDS ITS GRATITUDE TO

Society for the Conservation of Bighorn Sheep

IN RECOGNITION OF LONG-CONTINUED, GENEROUS AND EFFECTIVE SERVICE TO THE PEOPLE OF CALIFORNIA, IN THE FIELD OF CONSERVATION EDUCATION, AND

IN APPRECIATION OF FAR-SEEING LEADERSHIP IN THE EFFORT TO PROMOTE COOPERATION IN, AND UNDERSTANDING OF, CONSERVATION PRACTICES

WHICH HAS DEMONSTRATED FOUR GREAT LOVE OF STATE AND COUNTRY, RESPECT FOR THE LAWS OF NATURE, UNDERSTANDING OF THE LESSONS OF HISTORY AND REGARD FOR THE WELFARE OF THE PEOPLE.

By Proclamation

PRESIDENT

VICE-PRESIDENT

NOVEMBER 1975

The Board voted to continue the present dues structure of $15. per year for adults and $5. per year for students, in addition to the one time payment of a $5.00 initiation fee. in both categories. The Board decided to set up a special Bighorn Research Foundation Fund and named DeForge, Sudmeier and Dr. Charles Jenner to administer the fund.

Secretary Larronde reported that there are a good many people who are receiving copies of THE SHEEPHERDER and who have not joined the Society or have not yet renewed their membership for the year 1976. The Editor was requested to remind those receiving THE SHEEPHERDER of this oversight. Certainly everyone who believes that the Society's efforts for the welfare of the bighorns, should be willing to assist in the funding of the expenses of these projects. ALL FUNDS OF THE SOCIETY EXCEPT THOSE USED FOR THE PUBLISHING OF THIS NEWSLETTER GO TO PAY FOR PROJECTS FOR WILDLIFE BENEFITS AND ESPECIALLY THOSE OF OUR BIGHORNS.

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CALIFORNIA CONSERVATION COUNCIL HONORS THE SOCIETY.

The HONOR AWARD Pictured at the left was presented to the Society for the Conservation of Bighorn Sheep last October by the Chairman of the C.C.C. Mr. Edward F. Dolder. Mr. Dolder is the Director for Planning of the Department of Transportation for the State of California. Dr. Loren L. Lutz, President of the Society was very pleased to receive the HONOR AWARD for the Society.

(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 _____