SOCIETY FOR THE CONSERVATION OF BIGHORN SHEEP

The Sheepherder

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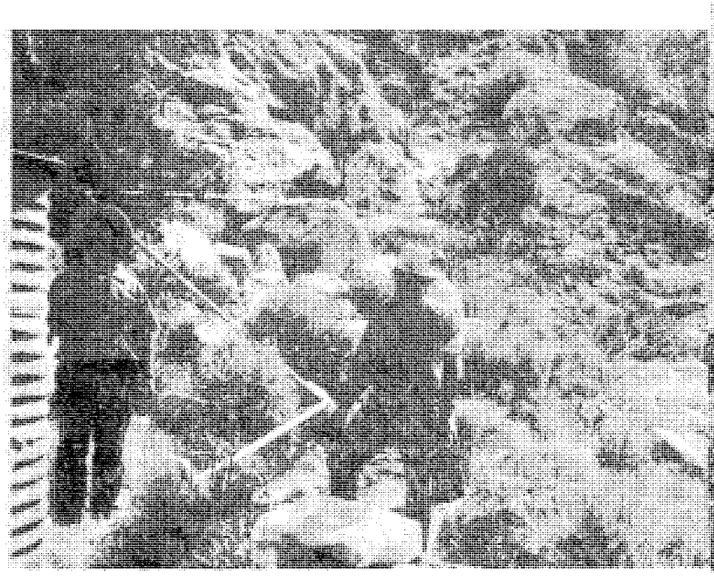
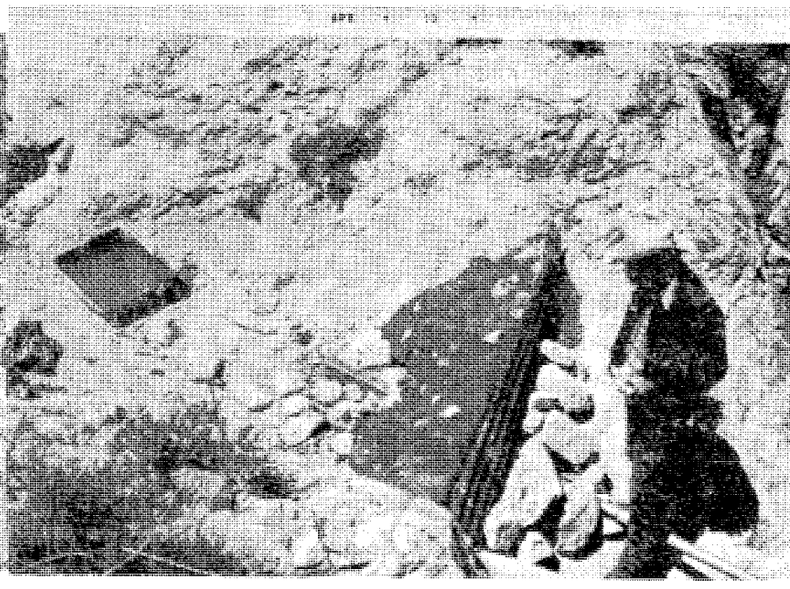
BLUE SPRING PROJECT COMPLETED IN THE PINYON MOUNTAINS.





On Saturday and Sunday, April 28 and 29, 1973, a BLM planned project in the southern end of San Diego County received the enthusiastic support of the California Department of Fish and Game, and the Society's Volunteers.

A new spring box, connected to a downstream drinker, is producing four gallons per minute for a heavily used summer sheep water source. A Navy helicopter failed to deliver materials to the site, but 22 sturdy volunteers portaged up from the trucks in the wash.

Significant was that this was the first completed project for an all San Diego crew put together by the Society, and this good nucleus has ambitious plans for further improvement in the Southern Anza Borrego.

Our thanks for the spirit and leadership of Bill Mortimer and Lou Jurs of the BLM's Riverside office.

(reported by) Tom Clotfelter, Travis Spears and Ron Speyer.
Photos by Bud Wiedeman.

NOTE: It is the understanding of the editor that there were actually two tanks installed on this project. The tanks are the 9th and 10th , of the 18 tanks donated by the Pennzoil Company, to be installed on water-for-wildlife projects in recent months.

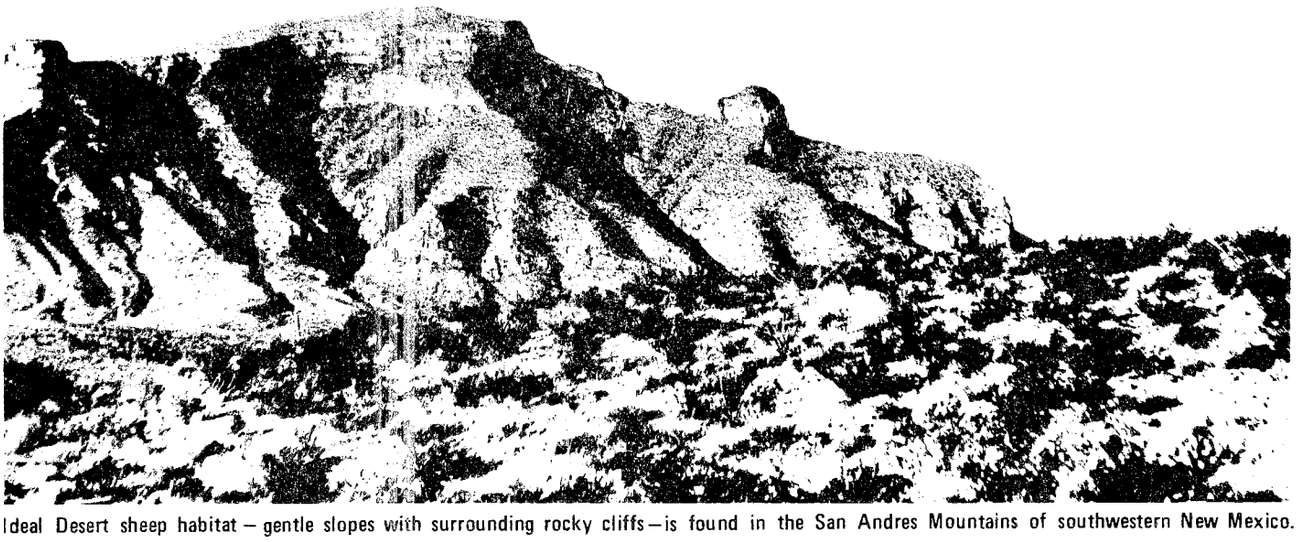
Related to the above is a report given at the Desert Bighorn Council meeting in Hawthorne, Nevada, the first week in April, 1973.

BIGHORN STUDIES AT ANZA BORREGO STATE PARK -----Mark C. Jorgensen

The Park lies just north of the Mexican-US border and contains some ½ million acres of which about 200,000 acres of sheep habitat...More than 50 springs have been surveyed...with some 200 sightings of sheep. The Pinyon Mountains are near the center of the Park and contain the lue Spring which has been the site of two separate water projects. During 1972 there was conducted a sheep count involving 20 men for three days--- 392 sheep were counted....The sheep range varies in elevation from 1200' to 4,400'. The Park headquarters is at an elevation of 750'.....The chapparal is said to be the limiting factor---There are deer, but they inhabit the denser areas. A Study is needed concerning the deer - bighorn relationship in order to determine if

there is any conflict and if there is one, to what extent it exists. ... In the McCain Valley off road vehicles have become a very severe problem...Damage to McCain Valley has become very severe and clear up into the Tierra Blanca Mountains.....There is a proposal to build a four lane highway down Coyote Canyon, and to have it within 50 feet of the creek in the bottom of the canyon. If constructed this highway will create a serious problem with the sheep who use the creek as their source of water... The Middle Willows and Lower Willows areas near the Coyote Canyon are important concentration and watering areas.....Riverside County has deleted this particular highway from their plans. However, San Diego County has not followed suit. There are many Mountain Lion in the northern part of the Park. Coyotes are not thought to be a problem concerning predation. However, this is not a certainty...Poaching is considered to be a major problem, especially in the Pinyon Mountains.
"THE FUTURE OF THE DESERT BIGHORN SHEEP IS IN THE HANDS OF MAN"

NEW MEXICO WILDLIFE/March-April, 1973



Ideal Desert sheep habitat – gentle slopes with surrounding rocky cliffs – is found in the San Andres Mountains of southwestern New Mexico.

NOTES from the Desert Bighorn Council

GUIDLINES FOR RE-ESTABLISHING AND CAPTURING BIGHORN, Lanny Wilson , BLM, News Mexico coordinator with the assistance of Jerry Day, Araizona G & F. Dep't;Jack Helvie, Bureau of Sports Fisheries and Wildlife, Las Vegas; Gerald GAtes De't. of Game and Fish, New Mexico; Tommy Hailey, Texas Parks and Wildlife Dept.; George Tsukamoto, Nevada DFG. Seven major categories of study must be considered in any desert bighorn re-introduction. Techniques discussed by the panel have resulted in more than 50 bighorns being captured and released in enclosures with only two mortallities. Exceptions to the recommendations should be based upon the biological requirements of individual bighorn populations rather than administrative exceptions should alwa-ys be considered and should greatly enhance the probabilities of a successsful program.

1. Thoroughly research any o ld documents, reports, journals of early pioneers, and books which will document the entire historic bighorn range. This is one of the most improtant considerations in a bighorn restoration program, yet one of the most easily overlooked....In most instances, areas historically occupied by desert bighorn sheep are generally known, but too often the full extent of the range is not known or determined.

2. Determine as accurately as possible the factors responsible for the decline of the historic bighorn population, and take every precaution that the same limiting factors will not reoccur if bighorn are introduced. These wo uld include disease introduction by domestic livestock; changes in vegetation resulting from livestock grazing and climatic changes, urbanization and encroachment on bighorn habitat, construction of wire fences restricting bighorn migrations and seasonal m ovements, illegal hunting and the loss of water sources.

3. Determine the dominant plant communities that existed in the historic

bighorn area when inhabitaed by bighorn and examine the range to substantiate that the same or similar plant communities exist today. Historically overgrazing by livestock has changed grasslands to sagebrush, mesquite and creosote and other less desirable plants. Normally accompanying overgrazing is the loss of top soil. In some instances adequuate top soil may have been lost so that native climax plants cannot become reestablished even if subclimax plants are eliminated. This is an important factor to be considered.

4 Determine the present land status of the historic bighorn area and secure an y cooperative agreements which will define the management practices between the land and wildlife administrators to insure the welfare of the bighorn .

5. Undertake an active predator control program prior to and during the

first year when desert bighorn are reintroduced into an area. Bighorn released into a new area are more vulnerable to predation than animals familiar with escape routes and escape terrain.....Predator harassment will magnify the stress on the sheep.

6. Habitat characteristics between bighorn capture sites and release sites should be as similar as possible. This consideration can be extremely important...Geologic formations and water sources if similar will be an asset.

7. Reintroduced bighorn from an area different in habitat characteristics to the new habitat type should be placed in an enclosure of approximately 640 acres for a minimum of two years. The enclosure should be located in a variety of subtypes within the major habitat type. This will result in two new generations of lambs and will imprint the new arrivals with the existing habitat.

8 Bighorn introduced in an area where a seasonal and/or elevational distribution may occur over the course of a year, should be introduced in an enclosure located on winter range having lambing gr ound characteristics. The winter range a~~rea~~ selected should Not be one occupied by another ungulate population such as deer or cattle. The bighorns should be retained in the paddock for a minimum of two years.

The enclosure site should be located on high ground with good drainage, with breaks in terrain consisting of rock outcrops and areas of cover. The en closure site should provide native year long forage but supplemental feeding and salting may be n ecessary.
Enclosures should be constructed of two inch by four inch welded wire a minimum of eight feet in height and should encompass an area of not less than 640 acres for each 25 bighorn. The larger the fenced area the better the chances of successfully raising bighorn who will retain their natural behavorial and wild instincts. Animals reared in confined areas are more vulnerable to predation and accidents after release.
All predators should be removed within the enclosure prior to releasing bighorn and an active predator control program should be maintained in the area while bighorn a re being raised. The bottom of the enclosure should be buried, and an electric wire should be installed about 12 inches out and at a right angle to the top of the woven wire.
All water developements in the enclosure shou ld be designed so the wa ter can be regulated.
Public access should be developed to and around the enclosure i n such a manner to concentrate visitors to a limited area.
It is paramount to strive to capture female and young bighorn from the same family or social group. Less social strife among the reintroduced bighorn will occur if this is done....Dominance within fami ly groups will have been established which will reduce the po ssibility of injuries occurring between bighorn who do not know one another.
If family groups can not be captured, an effort should be made to select bighorn one to three years of age and no animals over eight years of age.Bighorn captured from various areas within a population, Bighorn captured from different populations should be placed in an enclosure a minimum of two years to establish family and social groups before they are released i nto a new habitat.....a minimum of 12 bighorn should be released in enclosures, and a minimum of 20 bighorn released in areas of extensive habitat at a ratio of one ram per three ewes.....About every five years through the first 20 years and adult ram from a different population but of the same subspecies should be released with the introduced population.
Advantages of use of a capture gun are: (1) Animals can be selected; (2) the bighorn caught can be caught during the cooler times of the year when the sheep are less susceptible to shock; (3) sheep can be collected in a variety of terrain and habitats.; (4) Capture can be expected to be successful upon short notice.....An old established regularly used watering site which lends itself to construction of a trap ofminimum 20feet by 40 feet and readily accessible by vehicle should be selected if possible. The trap should be rectangular---round traps ineffective. Triangular traps can be dangerous to the entrapped anim als....permanent traps should be constructed using wooden posts and nylon netting 3" to4"

mesh, brown or black in color and at least 8 feet high. .. must be attended at all times.. Pull or drop gates should be used with permanent traps.... Bighorn should be hand carried to the transportation vehicle as soon after trapping as is possible....Loading ramps have proven unsatisfactory... A, B series Bell helicopter with a 260 supercharged engune ir an equivalent helicopter with an experienced pilot should be used..... Only the pilot and the gunner should be in the helicopter in order to reduce weight and reduce the chances of accident....The PALMER CAPCHUR Co_2 gun with open sights, loaded with the designated charge for the projectile syringe, and fired at about a 20 degree angle is recommended... The two (2) cc. or three (3) cc. projectile syringe with a three-quarter inch long semi-barbed needle should be used... a number of different drugs have been used and appropriate dosages have been determined for the different age and sex groups...Approach should be from an even level or one slightly above the target animal...they must be darted only when standing, OTHERWISE THE ANIMAL MAY BE ENDANGERED....Never shoot at a moving bighorn, and aim to hit the sheep in the hip or rump area. After being darted wait 15 minutes for the drug to take effect...Let the animal lie down before approaching from the direction most dangerous to the animal. Blindfold and keep the animal in an upright position(Head and chest); check for injuries and any signs of stress--may need oxygen . Keep blinfolded until the animal is safely in the transportation vehicle, which must be darkened inside-- well padded(sides) and have 12" to 15" of either timothy or meadow hay on the floor.(These are dust free -- for this reason alfalfa is not satisfactory). Keep rams separate from ewes and lambs in the transportation vehicle... Reversal drug must be administered and the animal must be carefully watched for at least two hours. Check hourly during transportation... Sheep must have room enough to lie down comfortably and to feed, as they will be ravenously hungry after the drugging...Bighorn held longer than 48 hours in a transprotation vehicle should be fed and watered.. Only the required number of personnel needed to release the bighorns should be present at the site of release, and they must remain out of the way of the sheep ...Escape ramps of dirt should be provided at the release site and the sheep permitted to leave the vehicle at their own will...Large rams should be kept separate from the ewes and lambs, but where they can be near and see each other.....These social contacts seem to be very necessary.

A bighorn ewe shows off her shy lamb, the first born at the Lava Beds reestablishment site. DFG photo by Wally Macgregor.

ALL IS WELL AT THE LAVA BEDS

A letter from James A. "Jim" Blaisdell, National Park Service:
Dear Lew:

Lady Fortune continues to smile upon us. We now have 20 California bighorn in the enclosure at Lava Beds National Monument. Each of our eight adult ewes had a lamb this May, and we still have the two lambs from last year. So all goes well with bighorn in this end of the state". Sincerely,--Jim.

A letter from Ray Arnett, Director of Calif. DFG states in part,"As you know, we are very proud of our reintroduction of California Bighorn to northeastern California. The herd presently stands at 20 and shortly we should be able to use stock from this source for additional transplants. We are also considering transplants of desert bighorn in areas which might be suitable. However, in many of these areas there is a problem in the lack of water or competition with burros.

We have been working with other states, Nevada and Colorado, on a system of permanent marking of legally taken bighorn sheep. It would be nice if a uniform system could be applied through all of the states....."

DIDEASE LOSSES IN NEVADA BIGHORN---a report given by Dr. Robert E Taylor,a practicing Veterinerian --whose time is spent 17% in teaching at the University of Nevada; 33% in private practice working with cattle diseases and 50% with the Nevada Department of Fish and Game., whefe his time is further divided between the whirling disease in trout and the problems relating to bighorn sheep. He makes it a practice to visit the Hawthorne sheep enclosure every other day during the lambing period... Carcasses of sheep lost at either Hawthorne or at the Corn Creek Station are taken to thelaboratory for pathological study. Each fall hunters are requested to bring in samples from the rams they have been successful in taking. In 1972 the samples requested were: lungs, liver, two vials of blood; kidneys, at least two pounds of the rumen and at least one shin bone. The shin bone was to be sent to a radiation laboratory for testing for radiation. Hunters were to note any irregularities that they might observe,

such as adhesions in the lung cavity or around the liver. Adhesions show(indicate) past infections--such as bouts with pneumonia ...Hunter samples were nearly all normal, with little lung worm damage, but nearly all showed some lung damage which is the evidence of the constant battle with infections such as the chronic battle with pneumonia. Studies show that there may be a possibility of the transferral of lungworm to the fetus of the unborn lamb.

Twenty-one lungs from desert bighorn sheep killed by hunters were examined for pathology and cultured. The majority showed evidence of interstitial pneumonia and lungworm infection. Cultures were negative for viruses and mycoplasma but a variety of bacteria were isolated. Six of 10 serum samples from these animals had antibodies to myxovirus parainfluenza-3 but were negative for other antibodies tested.

The cause of death in 3 bighorn sheep received from the Corn Creek enclosure was bronchopneumonia. One adult ewe died in the Dutch Creek enclosure from a chronic neck wound with other pathology noted. Doctor Taylor thanks the hunters who supplied these tissues and numerous personnel with the Nevada Department of Fish and Game and the Desert National Wildlife Range who were responsible for the samples arriving at the laboratory in good shape. As an example of the care needed for these samples, the hunters were instructed prior to the hunt, that if successful, blood samples should, if possible be taken by use of hypodermic syringe from the artery in the neck or from the heart itself; then tightly stoppered; care to be taken not to shake the contents, nor to permit it to be frozen (even to take the vials to bed with the hunter.).....Part of the laboratory work was done by Ken Heddleston of the National Animal Disease Laboratory at Ames, Iowa., and part at the Nevada Department of Agriculture Diagnostic Laboratory.. The studies were funded through the Nevada DFG with Pittman-Robertson funds(which come from the sale of firearms , cartridges and other sporting goods); Federal Aid in Wildlife Restoration and contributions from the Boone and Crocket Club and the National Rifle Association.....One adult ewe was examined from the Dutch Creek enclosure...Just prior to death she was observed to be emaciated but exhibited no other clinical signs. After Microscopic examination of the tissues the cause of death was attibuted to liver and kidney pathology....The four animals received from Corn Creek all had had cases of bronchopneumonia..Corn Creek will probably suffer from continuous disease problems because of the close confinement of animals on contaminated ground. Low level antibiotic feeding might help to control the bacterial pneumonia which appears to be rather common..... Initial test results on samples from the wild population confirm earlier beliefs that lung disease may be contributing to the demise of the bighorn . Myxovirus Parainfluenza-3 antibodies have been reported in Rocky Mountain Bighorn .. In cattle this virus combined with Pasteurellae and stress cause "shipping fever" pneumonia, which occurs frequently. We would expect that this virus aided by lungworm damage could cause a similar syndrome in bighorns.

VOLUNTEERS ARE NEEDED

In a telephone conversation today, July 2nd, with Mr. Harold E. Thompson, Chief Ranger of the Death Valley National Monument we learned that the proposed census, sheep count, is being planned for September 6th, 7th, and 8th. There are 19 springs which are to be manned. A toal of 27 volunteers are needed. There is of course, always the possibility of a rain-out, in which case the count would have to be postponed for two weeks. This would be September 20, 21, and 22nd.

The majority of the springs are nearly a days travel time from the Monument headquarters at Furnace Creek, this includes the time needed to hike into the spring.

Some of the springs are near the end of the road. Others will require up to 2hours to hike into them. Some of these springs can be reached by roads using pickups. Others will require the use of a four wheel drive vehicle . It is desired that two persons go together as a team. However, there are some of the springs where it will be safe for a person to go by himself, alone. (provided he can stand his own company).

It will be necessary to make dry camps, well away from the springs to be surveyed.

Mr. Thompson tells me that he would like to know the names and addresses of those who wish to volunteer---Plans are always subject to change. A rain could cause postponement and he has no desire to have anyone go on "awild goose chase". So,when you write to him also include your telephone number.

IF YOU CAN HELP ON THIS PROJECT WRTIE TO:

Mr. Harold E. Thompson, Chief Ranger,
Death Valley National Monument
California 92328

GIVE YOUR NAME, ADDRESS , ZIP AND PHONE NUMBER

and do it as soon as you can. Mr. Thompson needs to know who is available and what kind of a vehicle you will come to the Monument in , so that he can disperse the volunteers to the best advantage for the count.

A couple of other things: The Monument personnel are putting the finishing touches to a water system for the bighorn sheep in the northern part of the Monument. The 1500 gallon tank is completely buried. The only visible part of the project is the drinker. The personnel of the Monument feel the loss of Chuck Hansen very deeply,

as do all of the other sheepherders. He knew more about sheep and the sheep of the Monument than any other person alive . I first met Chuck about 10 or 12 years ago when I went into headquarters to turn in a sheep skull I had found up inTitus Canyon.

In the Society for the Conservation of Bighorn Sheep as in the Desert Bighorn Council, a title of respect is to be called a sheepherder. Therefore, we fellow sheepherders want Chuck's family to know that the sweat, the tears, the triumphs and the heartaches have not been in vain. The endless tracks that Chuck has left across this land can never be filled. We, and all future sheepherders, can only strive to follow the trail hehas left us. We do not say goodbye to Chuck, rather, we look forward to seeing him again in the Greatest of all Bighorn Societies, in that well watered land where a warm sun nurtures hills covered with grasses gently swaying in a soft caressing breeze.

CHUCK HANSEN MEMORIAL FUND

A letter from Lanny Wilson, Secretary of the Desert Bighorn Council--in part," At the present the fund is over $800. mark and any contributions can be sent to me - Lanny Wilson, Secretary-Treasurer, Desert Bighorn Council, 2351 Placita La Marquesina, Santa Fe, New Mexico. 87501.

Not much else to say except we have had a warm wet spring and early summer so far this year and our lamb survival in New Mexico should be up. Keep your fingers crossed."

REPORTS FROM THE "FIRE" ING LINE.

This past week Bill Phifer and Roy Cutter began their 3-day sheep count at a waterhole in the Santa Rosa Mountains. The first day they saw eight full curl rams and one ewe. However, the fire broke out and they had to make a run-for-it. They then joined up with Doctor Lutz in another canyon and completed their time in the field. In all they counted 197 sheep, during those three days, which came in to water. The weather was hot. The crew who went into the Turtle Mountains saw 55 sheep. Athird crew that has reported had spent their time watching a water hole in the Granite Mountains . However, they saw nothing. Other reports should be coming in shortly. We will try to have a summary of all the counts in t he next issue.

MARTINEZ CANYON

Funds are still badly needed for the purchase of the property in Martinez Canyon. If these funds are obtained, then we can save this band of sheep. The property desired sits astride the only possible route through which a roadway can be built. This will preserve a great deal of public lands for wildlife and will block the certain subdivision of this land and the loss of these sheep. The Society would like very much to have a greater number of life members at $200. This can be paid off in four annual payments if desired.

NOTES FROM ELSEWHERE

The Sportsmen's Council of Central California adopted resolutions in support of S. 1041 and H.R. 5289. These were authored by Senator Henry M. Jackson and by Representative Bob Mathias. and are known as the National Resource Lands Management Act of 1973 and the California Desert National Conservation Area act. Both are badly needed by the BLM to manage and protect the natural resources of the desert and of the other National Resource Lands. The S.1041, commonly known as the BLM Organic act would give the BLM the needed authority to enforce regulations which they adopt as ameans of management. HR 5289 is especially adapted for the desert and its proper management and the management of people. These resolutions were both adopted by the California Wildlife Federation at the meeting held in Sacramento June 23 and 24. These bill are still in their respective Committees of Interior and Insular Affairs.

From the FRATERNITY OF THE DESERT BIGHORN ----The Nevada Society.
Officers chosen for the coming year: President Carl Ciliax ; Vice President, Joseph Spahn and Connie Fuller will serve as the Secretary-Tresurer

The Fraternity expects to complete another water project in the Muddy Mountains by mid-July. Thanks to the efforts of Jack Cooper,(Nevada Department of Fish and Game), a helicopter has been lined up to freight in the necessary cement . Gene Baker with the Silver State Helicopter Service is donating the copter and his time.

A recent report from the Dutch Creek enclosure,(near Hawthorne) states that four more lambs were born in the month of May. All breedable ewes had lambs. Note: your editor is preparing an article concerning this project and will report on it in the September-October issue.