An evaluation of feral burro at Organ Pipe Cactus National Monument

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Martin Harton Harriston Marton & Park Service Departmentor (b) Interior San Franciscu, Ca. 94003

An evaluation of feral burro at Organ Pipe Cactus National Monument by

R. Hungerford University of Arizona

INTRODUCTION

Free-roaming burros (Equus asinus) are an exotic animal inhabiting Grand Canyon, Death Valley, Bandelier, Organ Pipe and perhaps other National Parks and Monuments. Their successful survival and increase under western desert conditions both within and without the National Park System demonstrates their northeastern African origin and their adaptation to dry climates and terrains as rugged as the Sahara. Few of the world's larger mammals are the equal of the burro in competing for survival under high ambient temperature with limited and infrequent watering places. Few of the world's mammals can match their ability to utilize successfully a wide variety of desert plants that are often thorny, ephemeral, or unpalatable (Russo, 1956). Kurt Schmidt-Nielsen (1964) compared them to the desert adapted camel in his Sahara research as to their resistance to high temperatures and their ability to conserve water. He concluded that the camel has water storage capabilities not possessed by the burro, but only the camel's sand adapted feet and greater speed and range make the camel the ship of the desert and not the burro. Schmidt-Nielsen found that a dehydrated burro was able to drink enough water in a few minutes to fully regain its water balance and replace all water previously lost. The native desert bighorn (Ovis nelsoni) is perhaps the best adapted large American ungulate so far studied (Wells and Wells, 1961). On the same range, the burro is more aggressive at water holes (Russo, 1956), uses larger branches of some jointly used food plants like palo-verde (Cercidium sp.) (Ohmart, 1975), seeks forage plants almost as high on desert mountains (McMichael, 1964), and outbreeds the desert bighorn (Ohmart, 1975). This later capability is particularly

Mearns (1907) documented use of surplus water for irrition by the Papago Indian. He described ground that was well plowed with ingenious wooden plows at Sonoyta, just south of the OPCNM. The most logical power to pull a plow would be the burro, although he did not name it (the only feral animal mentioned in his survey of the Mexican boundary is the feral pig in areas eastward and less arid). McKnights (1958) conclusion that the burro's value as food and as a beast of burden precluded its release to the feral state seems to be substantiated by this evidence.

If we assume the presence of at least a minimum breeding population of burro in OPCNM at the time of its establishment, we might then ask what effect it might have upon its environment?

It is unfortunate that the impact of several levels of burro populations have not been monitored on OPCNM. However, competition with native species from bighorn (Russo, 1956) to small mammals (Carouthers, 1976) has been well documented in other arid areas in Arizona. The burro and especially a free-roaming feral burro is noted for its ability to eat most any green plant to the extent that burro weed (<u>Aplopappus</u>) and burro brush (<u>Hymenoclea</u> sp.) indicate recognized unpalatable plants that none but a burro will consume.

In recognition of burro impact on National Parks and Monuments, excess numbers have been removed just as other exotic plants and animals have been controlled. When 1500 burro were counted in Death Valley in 1938, control programs were initiated. Between 1939 and 1953, 3,578 burro were eliminated (USDI/NPS, 1975). In Grand Canyon, 2,060 burro were removed (252 captured) in the period from 1924 to 1969 (Carouthers, et al., 1976). More recently, 52 burro were shot in Bandelier, New Mexico (Fletcher, 1975). No federal control of burro has been undertaken on OPCNM, yet a population has been present there for a considerable period. We might ask, why has this not been necessary? Organ Pipe Cactus National Monument is bounded on three sides by the Papago Indian Reservation, Mexico, and the Cabeza Prieta Game Range. On the latter area I can personally attest to the fact that burro were controlled by personnel assigned here. In Mexico the economy still dictates that no excess meat is wasted and on the Papago Reservation the same was perhaps true until they recently qualified for increased federal aid.

Public opinion is not a single item. There are various "publics" and therefore several opinions. Of those segments of the public living in areas where burro are present, the majority of the people are, I would conclude, anti-burro. As an example of this, several people in management positions in state and federal government wear 50 and 100 burro "pins" in their lapels, indicating that they have removed that many burro themselves. Pima County Sherrif Cox (1973) reported that from OPCNM westward along the border after the outbreak of WW II, army calvarymen patrolling in armored scout cars had slaughtered several hundred burro with machine guns mounted on armored cars. He further expressed the feelings of this public segment . . . "that to allow them to reproduce without control, jeopardizes the existence of wildlife of the jointly used area today" (Cox, 1973). The de facto control of burro on OPCNM itself has continued up until late in 1975. At least one of the ranchers grazing cattle here has utilized burros trapped at water holes as a source of income. The cattle are rounded up by water trapping. Any burros caught at the same time were sold to the Papago

Indians. However, the price received in 1975 (\$3.00 $_{\rm P}$ er head) made it no longer an economic operation and such future control is doubtful.

A key purpose of this preliminary investigation was to evaluate the present and the future impact of feral burro on OPCNM. A primary question might be, is there a present or potential threat to the Monument by their presence here?

METHODS

Organ Pipe Cactus National Monument was visited from March 14 through 16, 1976. All of the primary road net was covered by vehicle and short hikes were made at several points, especially in areas of observable damage to ocotillo (Fouquieria splendens) and palo-verde (Cercidium sp.). Areas near watering places were investigated as were places that showed heavy and obvious trailing by livestock. Several professionals were interviewed including Roy Martinez (Superintendent), Terry Peters and others at Monument headquarters. Local residents at Why and Lukeville, Arizona and ranch hands at the Grey ranch west of Lukeville were personally contacted. Terry Peters accompanied me on one trip and he and other Park Service employees were most helpful. Those interviewed later about the present and past burro situation included Larry May, Gale Monson, and others.

A record was kept of over 50 individual ocotillo plants that showed obvious damage by breakage or peeling of cambium tissue. The nearest track or fecal dropping of larger mammals to the plant was recorded as was any observable difference in teeth marks in or near the cambium damage. The presence of and probable number of burro using specific water sources and trails was recorded. The presence of wild or feral animals could be determined by circling and following trails radiating from watering places, although it was not possible to estimate the number of the more abundant cattle. In this way, mule deer (<u>Odocoileus hemionus</u>), javelina (<u>Pecari angulatus</u>), and Sonoran pronghorn (<u>Antilocapra</u>, <u>americana sonoriensis</u>) tracks were identified as well as burro and cattle tracks.

In the early morning of March 17th, pilot Mike Billotte and I left the Marana Arizona Flight Center in a two place Cessna 150 high wing monoplane. We flew from the NE corner of the Monument along the foothills of the Ajo Mts. and flew grid patterns at low elevation covering the mouths of three larger canyons. Continuing this procedure, we covered the Santa Rosa, Sonoyta and Quitobaquito hills before proceeding north and flying a more intensive aerial search of the Cipriano Hills, Puerto Blanco Mts. and the south face of the Bates Mountain. Several grid patterns were flown here covering more heavily vegetated washes and foothill canyons near known water sources. We then flew NW via the Growler wash and foothills of the Growler Mts. leaving the Monument near its NE corner. We then proceeded to Ajo and Gila Bend to refuel. We returned near Growler Pass and Bates Well to continue the survey.

During the morning flight, no burro were seen although we had recorded quite a few head of cattle, four mule deer and a number of jackrabbits (Lepus californicus). We had assumed that the majority of the burro would be near known, permanent waters which are in the foothills or the flats. However, on our return in the afternoon, we flew up canyons on the north face of the Bates mountains to survey some of the

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higher terrain. On 2 of these passes up a canyon, small pool of water was noted in a tenajas altas or natural rock catchment basin. Burro were seen north of here. About .5 inches of rain had been recorded at the Monument headquarters in the previous 30 days. Evidently this was enough to replenish the water here and in similar high tanks even though this had been a very dry spring.

Several major canyons on the north and east face of the Bates Mts. were surveyed all the way up to the upper benches or ridges. Some of those on the south face of these mountains and on the north face of the Puerto Blanco Mts. were also covered in a similar manner. Very low level flight was not possible in this procedure in contrast to the level flight over the foothills and washes. We then left the Monument and returned to Marana after 6¹/₂ hours of flight time for this survey.

RESULTS

The first objective was to estimate the impact of feral burro at Organ Pipe Cactus National Monument. An obvious feature of the area exhibiting possible burro damage is the plant ocotillo (<u>Fouquieria</u> <u>splendens</u>). Almost everywhere this plant was observed to be in continuous stands, at least part of the plants in each stand exhibited broken branches and peeled cambium. At the point of fracture, bark and cambium were often stripped away for several inches (Fig. 1). This damage is not all recent because some plants exhibit regrowth following past injury and had a hedged or bushy basal cluster (Fig. 2). McMichael (1964) recorded this type of damage in Yavapai County by burro; some of the plants had reached an extremely hedged and bushy condition.

Of the more tha 50 individual ocotillo plants .t were recently damaged, only five were attributed to burro by evidence present. An additional four could have been either burro or cattle, two sustained rodent damage, and over 40 were classified as probable cattle injury. The criteria used were the nearest fresh tracks, the nearest droppings, or tooth marks on the damaged areas of the plant. Tooth marks between these two animals differ because only the burro has both upper and lower incisor teeth. However, either animal may not necessarily grasp the stem in its teeth while feeding, but simply strip off the green and succulent portion that splits away from the stem. Tracks were usually easily identified except on very rocky ground and droppings were usually identifiable. Cattle droppings, however, often assumed differing shapes under varied diet and moisture conditions. Burro droppings in contrast changed in size but not shape as the burro fed on coarser materials or drier vegetation. Fig. 3 shows the shape of calf or yearling cattle droppings with a ball-point pen in the field for size contrast. These could possibly be mistaken for deer or bighorn droppings. Older cattle frequently left larger droppings of a similar shape. While cattle droppings varied considerably they could be distinguished from burro. Terry Peters confirmed this observation and remarked that he had seen them fall from cattle and was surprised at their round pellet-like shape.

All other obvious plant damage was attributed to cattle by these criteria. Damaged plants included palo-verde (<u>Cercidium sp.</u>) Fig. 4, -jojoba (<u>Simmondsia chinensis</u>) Fig. 5, and salt bush (<u>Atriplex polycarpa</u>) Fig. 6. While this latter species is palatable to cattle, it is much overused at this time. The shrubs in Fig. 6 should be about three feet high and form a continuous ground cover. Schultz et al. (1965) had a

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similar photograph of this site near Aguajita spring and there is perhaps additional site deterioration since that time. Schultz et al. (1965:8) quoted a special report by a NPS Forester, H. M. Ratcliff in July 1946 who stated at that time . . . "Destruction of vegetation by cattle continues to become more and more noticable each time I visit the area". Perhaps the 1976 spring dry season makes it more obvious, but the pitiful condition of almost all cattle seen was reflected in current plant damage and accelerated erosion. For example, Fig. 7 shows an area north and west of Poso Nuevo well which should have considerable ground cover of big gallata grass (Hilaria rigida) as seen in Fig. 3. During the present survey, dead cattle were seen both on 1101 II 014 - -. . . . the ground and from the air but Fig. 8 shows one dead cow and two other cattle in very poor condition to illustrate Martinez's (1975 in Master inter entry and not Plan, 1975) point of the danger to people traveling U.S. Highway 85. erper verstill, jlyl 3 Sabes ins an The cow shown had been killed by a vehicle on the night of May 15, 1976 it. -foint for up the at a point just south of the Monument headquarters. Cattle were attoll. トリア こうぎょう 金市 しごうしつ うろう tracted to the road edge by the additional ephemeral vegetation that alan <u>1</u>. ar 11. ar 17. ar 1. ar freguera. sprouts there. The paved road surface acts like a rain-water catchment しゃかやい ふだらが産のご · and increases considerably the effectiveness of scant rainfall in producing plant growth in a narrow strip at the very edge of the asphalt. 411 Other plants that might be seriously overused by grazing animals include several mentioned as being heavily used by Schultz et al. in - 21 1965. White bur sage (Franseria dumosa), bush muhley (Muhlenbergia porteri), and side-oats grama (Bouteloua curtipendula) were found only as remnants in the places visited this year, and range ratany (Krameria spp.), desert honeysuckle (Anisacanthus Thurberi) and other shrubs expected to be here were looked for yet not found. These and other plants might be considered be endangered by grazing and owning animals and this in turn might result in further stress upon Sonoran pronghorn antelope and other native mammals.

The results of the second objective of this survey, to determine the distribution and use of specific sites within the Monument, are considered next. The burro's current presence was most easily detected by observing tracks. Fig. 9, for example, shows the imprint of a jenny and her young foal over a tire track that is 7.5 in. wide. A list of observed track sites follows and it should be noted that in all cases, the tracks indicated less than six burros were present at one time. Burro bands are often in small units due to fighting and the territorial behavior of the dominant jacks.

| Monument headquarters | Dripping springs |
|-----------------------|------------------|
| Bonita Well | Poso Nuevo Well* |
| BM 1272 | BM 1240 |
| Bates Well | Pitahaya Canyon |
| BM 1786 | |

Most of these sites are near water; burro may water infrequently and cattle use obliterates the tracks rapidly in either trails or at drinking areas.

The results of the May 17th flight did not yield visual sightings less than two miles from any point in the above list. The burros found were in the upper ends of canyons like the one shown in Fig. 10. These upper canyons became quite steep, were several miles from known wells but near tenajas or natural rain-water-filled rock basins. In such sites, two burro were seen in the canyon shown in Fig. 10, and a group of four were seen in another canyon about three miles to the south. Total animals seen in the 6½ hours of air survey were as follows:

Domestic cattle131Feral burro6Domestic horses4Desert mule deer4Jackrabbit7

*Sonoran pronghorn (2) tracks were seen here and at Aguajila spring (1).

This aerial observation method was adequate; even de ort quail and mourning dove could be distinguished at times, but coverage was not adequate for a total population determination of any of the species recorded. Schultz et al. (1965) cited a helicopter survey made by the NPS just under ten years ago with the following numbers being observed:

Domestic cattle 678 Feral burro 8 Horses 7 At that time, 1,375 cattle were estimated to be on the Monument. No estimate was made by Schultz et al. of total burro numbers, but the field team observed 10 burro in 2 months of ground work and 4 burro in short helicopter flights.

The present ground and air reconnaissance indicates burro frequented at least the north half of the Monument, especially in the rougher canyon areas. They were not limited by high elevation or rough terrain if water was present and at the time of the survey, ephemeral waters were perhaps keeping them at higher elevations.

The final result to be reported is the approximate density of burro in key areas and an estimate of burro numbers within the boundaries of the Monument. The Bates Mts., centering around Kino Peak, represent the key area most thoroughly investigated. Within a 36-square mile township centered on Kino Peak there are approximately 15-20 burro or nearly one burro to each 2 to 2.5 square miles. Other key areas with probable lower density include the Puerto Blanco Mts. and the northern foothills and west face of the Ajo Mts. My estimate of the total number of feral burro occupying the Monument in the spring of 1976 is from 50 to 65 animals of all ages. This density would be one animal for each 8 to 10 square miles within the Monument but much of the area would be unoccupied by burro at least for much of the year.

MANAGEMENT RECOMMENDATIONS

Organ Pipe Cactus National Monument is a major biological treasure in a position where three different zones of desert life meet and it has been recognized by UNESCO's International Coordinating Council as one of twenty U.S. biosphere reserves for its Man in the Biosphere program (Bryan, 1975). The American public expresses its interest by increasing visitation and scientists continue to respect its potential for research in ecology and for the presence here of equally endangered plants, animals and habitats.

Therefore, the following recommendations are made, with the suggestion that they be carried out in the order presented.

1. <u>Immediate removal of surplus burro</u>. Obtain cooperation of the Grays who own the livestock on the Monument for:

a. The use of present cattle traps and corrals for trapping feral burro at sites not now used by livestock. The trapping process to be carried out by Park Service personnel.

b. The capture by water trapping along with cattle operations conducted by the Grays (with a subsidy to them by the Park Service if necessary). The purpose of these two steps would be to continue a removal of burro from the Monument that would reduce their impact and attempt to keep up with their breeding potential. The removal of 12 animals/year would probably achieve this objective and approximate the carrying capacity for burro cited by Hansen (USDI/NPS, 1976) for Death Valley.

c. Advertise in the Ajo, then Phoenix, and Tucson newspapers as burros became available offering them for sale to the public on a first-come, first-serve basis with the interested individual sending a certified check or money order payable to OPCNM for \$25. When notified, the individual would have a right of refusal (the next person to apply would then be contacted). Each person agreeing to accept a burro would be required to come or send a representative with a suitable vehicle and horse trailer to the trap site and upon acceptance of the animal, would receive a certificate of ownership from the NPS. Once the animal left the Monument boundaries, it would essentially be his without restriction and Arizona (or Sonora) estray laws and humane treatment laws would be the only restriction upon the individual. The cooperation of or a cooperative agreement with the state brand inspector and the Mexican border station might be necessary before this operation begins.

The funds collected under this arrangement should help defray the cost of the operation and it could help pay for government transport out of the Monument of unwanted older animals and mature jacks not desired by the public. Perhaps the leaders of Papago villages would accept these unclaimed animals if delivered to village corrals.

2. <u>Removal of all domestic cattle.</u>

3. A study of burro impact.

Burro impact elsewhere has been well documented, but as each situation is different, further research is indicated for the Monument (USDI/NPS, 1976). The following research plan is therefore the second recommendation: Title: An analysis of the impact of feral burro (Equus asinus) on

Organ Pipe Cactus National Monument

Objectives:

- To determine the present population of burro in the various vegetative divisions of the Monument.
- To determine the relative amount of vegetation removed seasonally by feral burro and the effect upon specific plants and plant communities of such consumption by burro.
- To find the annual increase of the burro population and quantify those natural controls now presently reducing said increase.
- To assess the result of burro presence upon native vertebrate species within the Monument.

Justification: (see the above report of the May 1976 reconnaissance) Methods and Materials:

Throughout the 12-month field study several methods would be applied to quantify both the total numbers or herd numbers by units of the Monument. Aircraft census would be followed by index methods dependent upon marked animals. Animals could be marked by immobilization at water, self-marking devices, or color marking from a helicopter. Once individuals were identifiable from a distance, partial counts made by any means could yield total numbers by index formulae.

The effect upon vegetation would be studied in carefully selected study sites, using standard plant ecological procedures along with field observation. Two proposed techniques to quantify burro use of plants would be the feeding minutes method and dropping analysis. If a manageable feral burro was available for the project, food choice could be obtained by observing its seal-nal choice of native plants at ... fferent sites.

The other objectives should be achieved by continuous field observation by a competent field investigator devoting essentially full-time effort for one year.

Study deadlines:

- 1. Study plan in detail - 3 months after agreement
- Progress reports Quarterly thereafter 2.
- 3. Field work - 12 months after acceptance
- Final report 18 months after acceptance 4.

Proposed Budget: (USDI/NPS Contribution)

A. Salaries

| Principal investigator | \$ ` O |
|-------------------------------------|------------------|
| Graduate Research Assistant | 7,242 |
| Undergrad or unskilled | 300 |
| Total salaries | 7,542 |
| Total salaries plus fringe benefits | |
| (5%) | 7,578 |

B. Travel

923 Ground - 6150 mi. at .15/mi. Air-fixed-wing 20 hrs., helicopter-10 hrs. 5,000

- Total travel 5,923
- C. Equipment and Supplies

Spotting and recording supplies, animal feed, fencing supplies and marking equipment 500

D. Indirect Costs

46% of salaries and wages 3,469

TOTAL

\$ 17,476

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IN REPLY REFER TO:

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P.O. BOX 38, AJO, ARIZONA 85321

United States Department of the Interior

NATIONAL PARK SERVICE

ORGAN PIPE CACTUS NATIONAL MONUMENT

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September 21, 1976

Memorandum

To: Regional Director Western Regional Office

From: Superintendent Organ Pipe Cactus National Monument

Subject: Burro reduction program Organ Pipe Cactus

During our meeting in the Regional Office in May of this year it was agreed that controlling the increasing burro population within Organ Pipe was essential, and as was mentioned during the resource management session, we had started a field evaluation of the burro problem in March conducted by Dr. Roger Hungerford of the University of Arizona. Dr. Hungerford has since completed that evaluation (report attached). His report reflects that with the current breeding population there is reason for concern and he recommended the initiation of a control program as soon as possible.

A plan of action was informally started during our regional office visit which required clarifying the status of ownership of the burros if any and a means of disposing of the animals when trapped. I have cleared through the Gray family that they do not claim the animals and that they favor the removal of these feral animals as we do. I have subsequently contacted the Arizona livestock board to ascertain if they would accept those animals we trap for removal. On August 19, 1976, I met with Mr. Gerald Vanlandingham and the Director of the Arizona livestock board in Phoenix both agreed that if and when we had animals to dispose of they would accept them as stray animals and would dispose of them through normal procedures.

At this point we were preparing to inform your office of these arrangements and to obtain concurrance from your office to proceed, however upon receiving your August 31, 1976 memorandum: Kleppe v. New Mexico regarding the wild free-roaming Horse and Burro Act: it would seem that what we would be attempting to do here might be in direct conflict with what the supreme court decision in that court case was preventing.



Therefore, we would appreciate receiving some clarification of whether or not we are affected by this case and whether or not our intent to trap burros and relinquish them to the Arizona livestock commission is an appropriate method of removal. Any suggestions or information on this subject would be appreciated. In the event this plan is acceptable the attached action plan is submitted for your approval.

Ray G. Martinez, Jr.

NATURAL RESOURCES PROJECT STATEMENT

- <u>PARK AND REGION</u>: Organ Pipe Cactus National Monument, Western Region
 <u>PROJECT NAME AND NUMBER</u>: Burro Management Plan.
 <u>STATEMENT OF PROBLEM</u>: Evidence in the form of sightings, vegetation damage, physical sign and statements by the resident cattle ranchers suggest the number of burros is increasing. Historically their numbers were held in check by organized groups from Mexico who killed them and jerked the meat. Young animals were captured and taken to Mexico to be used as beasts of burden. In more recent years burro were trapped by the resident ranchers and sold as an income supplement. More recently the demand has decreased to the point that it is no longer economically feasible for them to so remove the animals. Burros are not part of the indigenous fauna and therefore should be removed in order to comply with legistlative mandates.
- 4. <u>WHAT HAS BEEN DONE</u>: (see above) A preliminary investigation was conducted by Dr. Roger Hungerford of the University of Arizona in the spring of 1976.
- 5. <u>DESCRIPTION OF THE WORK TO BE UNDERTAKEN</u>: Feral burros will be removed by water trapping where that method is practical. In other sites where they are depending on natural tinajas or where trapping fails they will be disposed of by other acceptable methods. <u>These</u>
- 6. <u>LENGTH OF TIME NEEDED</u>: Two years additional control will be undertaken at such time in the future as additional animals are located.
- 7. WHAT WILL HAPPEN IF NOT UNDERTAKEN: Burros will continue to damage range that is already seriously overbrowsed. They will threaten fragile surface archeological sites and compete with the native desert bighorn at tinajas. They will continue to foul the scarce desert springs and make it necessary to keep fences in place that should be removed for the benefit of the wildlife.

8. WHAT ARE THE ALTERNATIVES:

Solution Party of the providence of the providen

- a. Permit herds to increase unchecked until some natural force prevents further increase.
- b. Maintain the herds at a population consistent with carrying capacity determinations.
- c. Total Elimination or main tenar at towest pussible level.

9. <u>PERSONNEL:</u> Can be accomplished with existing personnel working in cooperation with resident ranchers.

Recommended: Superintendent Concurred: General Superintendent Approved: Regional Office

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ARIZONA

UNITED STATES DEPARTMENT OF THE INTERIOR OFFICE OF THE SOLICITOR SAN FRANCISCO FIELD OFFICE 450 GOLDEN GATE AVENUE, BOX 36064 SAN FRANCISCO, CALIFORNIA 94102

November 17, 1976

RECEIVED Western Regional Office NOV 1 8 1976 Degional Orestor "gions' sie Administratio Coparations Th Res. Mgmt. Plan. Prog. & Budget EED Public Affairs Menut, Appraisal Action Taken nero se ORPI 6

Memorandum

To: Regional Director, Western Region, NPS

From: Field Solicitor, San Francisco

Subject: Burro Reduction - Organ Pipe Cactus

Your memorandum of October 22, 1976, requested advice as to whether the proposed burro reduction plan at Organ Pipe Cactus National Monument is in conflict with the recent United States Supreme Court decision in <u>Kleppe</u> v. <u>New Mexico</u>. It appears that the Superintendent has contacted <u>New Mexico</u>'s livestock board which has agreed to dispose of such burros according to State law as the Monument delivers to them.

I have reviewed the Supreme Court Decision and the Wild Free-Roaming Horses and Burros Act and do not find any conflict with what it proposed by the Superintendent. Although the Act is directed to the Bureau of Land Management and Forest Service lands, it sets forth a concept adoptable here in that the Secretary is responsible for the management and protection of the land and may consult with and enter into agreements with the State in this regard. Earlier the Court of Appeals, Ninth Circuit, in <u>New Mexico State Game Commission v. Udall</u> (410 F.2d 1197) held that the Secretary, through the National Park Service, could take whatever steps necessary in game management to protect the resources of a park area.

The Supreme Court in <u>Kleppe</u> v. <u>New Mexico</u> found that the Wild Free-Roaming Horses and Burro Act was constitutional and that regulation of such animals on BLM lands was "an integral part of the natural system of the public lands . . . and . . . necessary for achievement of an ecological balance on the public lands." It further held that under the Property Clause of the Constitution, the United States has the power to manage and protect its lands and where state law conflicts with that responsibility, the Federal takes precedent.

Although the Horses and Burros Act does not apply to Park Service land, the rationale of the Kleppe Decision, together with the Udall Decision, are consistent with and in fact fully support the Superintendent's proposal in this situation.

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Ralph G. Mihan Field Solicitor San Francisco



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December 2, 1976

Memorandum

To: Superintendent, Organ Pipe Cactus Through: General Superintendent, Southern Arizona Group ACTINA

From: Regional Director, Western Region

Subject: Burro Reduction - Organ Pipe Cactus

We apologize for the delay in responding to your September 21 request for a Solicitor's opinion on this subject. Past discussions between members of our staff recognized that the delay was due to our temporary loss of your original request with its attached action plan, and our request for an opinion to the Field Solicitor. We have since found your original memorandum of September 21.

Field Solicitor Ralph G. Mihan has provided a favorable opinion for the elimination of burros from Organ Pipe Cactus. We are aware that action will now have to be deferred until weather conditions are favorable for carrying out live trapping activities and, in addition, we feel the Natural/Cultural Resources Management Plan will be completed prior to any action being taken to eliminate burros. We therefore do not feel a formal approval of your action program is necessary at this time.

(SGD) JOHN H. DAVIS

Enclosure

cc:

General Superintendent, Southern Arizona Group w/enc

bc: Jacot (WR)RNR w/enc

FHJACOT/hb/jw: 12/2/76