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GRAND CANYON NOTIONAL PARK

Nature Notes

of

Grand Canyon



## U. S. DEPARTMENT OF THE INTERIOR NATIONAL PARK SERVICE GRAND CANYON NATIONAL PARK

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This bulletin is issued monthly for the purpose of giving information to those interested in the natural history and scientific features of the Grand Canyon National Park. Additional copies of these bulletins may be obtained free of charge by those who can make use of othem, by addressing the Superintendent, Grand Canyon National Park, Grand Carron,

J. R. Eakin - Superintendent. G. E. Sturdevant - Park Naturalist.

## AN EXPERIMENTAL REPAIR JOB By E. T. Scoyen, Chief Ranger.

Of all the native wild animals that once roamed our plains in countless thousands, the antelope, or prong-horn as he is called, is perhaps the most interesting. I think I am also safe in saying that he is the most distinctive American animal; because he looks like himself and nothing else.

The prong-horn is noted for his speed, and justly so. His sole p protection against his enemies is his ability to out-run them, and under natural conditions against other animals, Dame Nature gave himsome protection to spare. However, he did not have enough to out-run the white man's bullets, and he soon started to go the way of the bison. He was forced from the plains to the foothills and finally to the deserts and mountains. Crowded on a restricted range; hunted and killed in a wanton manner; trying to live under conditions that were strange, new, and unfavorable to his mode of living, he soon started to dissappear from the sections where he had once roamed in countless bands of hundreds and thousands.

Several years ago, the American Dison Association, and other conservation organizations, found growing evidence that the antelope was in danger of being added to our list of extinct native wild life. Since that time every effort has been made to prevent such a tragedy, and 'n this work, government agencies have cooperated to the fullest extent.

In connection with this work a very interesting experiment is now being conducted in the Grand Canyon National Park. The records of early explorers show that anteloge once occurred in the park in great numbers, but when the park was created in 1919, there was not a single prong horn to be found within its boundaries. The present experiment is an effort to repair the damage that has already been done, by re-introducing these

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animals into this area in which they were completely killed off.

The experiment is made possible through the unselfish interest and act of Dr. E. E. Brownell of San Francisco, Calif., who was the originator of the idea, and who provided the funds necessary to start the work.

About 5,100 feet below the rim, the Grand Canyon flattens out and forms a narrow shelf about an average of one-half mile in width; this is called the Tente Plateau. While here on a visit, Dr. Brownell conceived the idea of liberating a band of antelope in this plateau where there seemed every chance that they would multiply art spread out. From certain angles the location was ideal. The animals could not get away because the canyon walls shut them in, water was plentiful, and the area was free from large predatory animals. The only problem related to forage conditions, as the hundreds of wild burros had practically destroyed the natural vegetation. However, this public-spirited citizen had enough faith in the venture to try at least.

In making a study of the ordine plateau, it was found that the area around Hermit Camp was the most favorable location for a successful experiment. This was due almost entirely to the fact that the burros had been fenced cut of this area for a number of years, and forage conditions were much more favorable than at any other point.

The only expensive part of the operation as far as the National Park Service was concerned, was the construction of the necessary fences. The area fenced in is so large that the chimals are never conscious of the fact that they are under wire. The fencing was woven wire, seven feet high. We have since found that our fencing job was much more elaborate than necessary. However, there are few places where so little fence encloses so much area. A short section from the first large cliff to the edge of the immer gorge did the job at each end of the pasture. The rest of the fencing consists of walls of the compon.

On September 20, 1924, six buck and six doe antelope were received from Reno, Nevada. These had been caught while only day old faxes, and were raised on an ordinary nursing bottle by the U. S. Bureau of Biological Survey. All of the animals were exceedingly tame, and have remained so to this day.

All of the preliminary work had now been done, and the antelope were now in the park. The next problem was to transport these timid and delicate animals over seven miles of trail that wound down over the canyon walls from the rim to Hermit Camp. Many methods were suggested including the carrying of each animal by hand. However, it seemed that the most logical method was to pack them in on mules. Each animal arrived so 'rely crated, and the crates were small enough to be tadd on a pack animal. However, the uncertain elements were the antelope and the nules. We did not know how the forms would not when they were put on a mule, or how this traditionally stubborn animal would not under a live load. The results showed that our worries were entirely unnecessary. The packs were put on, and no trouble of any kind was encountered during the trip. During the packing operations, one of the forms got his leg out between the crate

and the mule and was so badly injured that he later died. We learned a lesson from this which will be applied in the future. The only compensating feature was the fact that he was a buck instead of a doe, and there were enough bucks left anyway.

In weighing the ultimate success of this experiment, several things must be taken into consideration. In the first place, the animals must be able to breed under the new conditions, and must also be able to subsist on the natural forage available. They must also be able to increase steadily in face of all natural obstacles.

During the past spring, five fawns were born; thus settling this part of the problem. Of this number, three have survived, and we consider it lucky that all of these are does.

It has been necessary to feed the herd except for a very few months. This is the one vital problem that still shows no indication as to its final solution. The animals go out and graze during the greater part of the day, but if their grain ration is reduced, they soon start to fall of in condition. Except for one or two months during the year, the natural forage has not been sufficient to keep them in a satisfactory condition. However, the new generation may be able to shift for themselves and settle this part of the question to the satisfaction of everyone.

Since the herd was introduced we have suffered the loss of three does and two bucks. Counting the increase this year, there are now 10 animals in the herd, a net loss of two since they were introduced. This part of the problem causes but little concern as we never doubted but that there would be some deaths.

In many ways, this is probably one of the most interesting little band of animals to be found onywhere. They are as tame as any domestic animal. I have seen tourists try to photograph them, but they secure good pictures only by expending a considerable amount of patience. This is due, not to the wildness of the animals, but to the difficulty in keeping far enough away. One morning a man was trying to photograph one with a reflex camera, and he was considerably put out because one of the does came up and licked the lens. The three fawns which were born this spring are quite wild, and can not be approached closely; this is rather strange in view of the tameness of their elders.

Very few people realize that animals have personalities. However, "Shorty" Welsh and "Doc" Daniels, who have been closer to the herd than perhaps anyone else, will talk of the various animals in the herd as so many different people. For instance, there is the buck "Hook-nose", noted especially for his nearmessand that he has been responsible for injury to several of the others.

In considering the herd as a whole, however, the outstanding

personality is "Nellie". Ever since the herd was first placed near Hermit Camp, she has been by far the most tame and also the most sensible in most matters. She has demanded more attention than all of the others put together. Persons at the Park Service trail camp who tried to keep cool during the hot summer nights by making their bods down outside the house were sure to be disturbed by Nellie, who insisted on getting into bed with them. As a special privilege, Doc used to allow her inside the garden fence at Hermit Camp where she could nibble on the alfalfa and other weeds. Every morning at eight o'clock she presented herself at the gate and started to blat for Doc. He let her in, and after a while she walked back to the gate and asked to be let out. This was good thing for Nellie, until she extended her nibbling operations to include young fruit trees and sprownting vegetables; then she lost the privilege. She injured her leg last spring, and was nursed along like a baby for a long time. Viewed from every angle, Nellie has been more the problem of raising a human than that of raising an ordinary animal. However, she does not act the least ashamed of all the trouble she has caused, and walks around with a very complacent expression. Why shouldn't she? Hasn't she raised a fine daughter the past year, which should more than pay us for our trouble?

It is still too early to try and predict the final outcome of the experiment. Although these little animals are very close to our hearts, we must keep in mind the fact that the entire project is still in its experimental stage. At times during the year they look fine, and other times not so good. It is my opinion, that, if they weather the next year successfully, there is a very good chance that the experiment will be a success. The only question, that will then remain to be settled, will be that of forage. If the new generations can live on the natural plant life, the last obstacle has been removed.

## YOU'RE NEXT: MR. DUCK By E. T. Scoyen, Chief Ranger.

Conservationists throughout the country are much concerned about the disappearance of our wild ducks. It seems that ducks have decreased at an alarming rate the last few years, and close students of the game problem are trying to fine out the why and wherefore in order that some solution may be advanced.

The greatest obstacle to be overcome in combatting the danger of our ducks and other forms of wild life becoming extinct, is the apathy, shiftishness, and in many cases, the pure ignorance of our average American Citizens, and should be vitally interested in wild life conservation. The plain undarnished facts relating to our past policy in handling our wild life, reflect no credit upon us as a nation, and show an absolute lack of sympathy for our wild life, and a total lack of foresight in handling an unprecedented game heritage. If it had

not been for the great fight made by a few onlightened men, who sacrificed time and money for the benefit of mostly unappreciative brother citizens, seme of cur most magnificient and distinctive wild life specimens would now be extinct.

In order to judge the duck problem, it will perhaps be interesting to consider a few similar situations which have occurred before, and to see that the results have been. It is a well worn statement that you can judge the future by the past, so I wish to call the attention of true lovers of our wild life to two of many incidents in the past that fit the present; thus can we judge the future.

A good many years ago, certain sections of the east were noted for the remarkable flights of passenger pigeons that occurred each spring and fall. It is said that they often shut out the sun as they passed overhead in great clouds. Hunters killed them by the millions for sale in the markets of eastern cities. One year the flocks went north but never returned. The local sportsmen said, "They have changed the route of their flight, but we will wait until they return." They are still waiting.

What person, even though only a casual stadent of history, has not heard of the famous lost buffalo herd? The great plains herd started its annual spring migration to the north; they never returned. The hunters said, "They have changed the direction of their drift, they will return next year." Today, in the mountain fastness of the Yellowstone Park, the last remainent of our wild American Bison are struggling for existence. They are carefully protected by the government, and of the millions that once roamed the plains, there remains but 125. There are other herds in in the Yellowstone and other sections of the country that aumoer a great many more animals, but this is and only wild herd on the face of the earth; a herd that has never been under Tende or been fed and pampered by humans. The hunters, who expected the herd to return, were disappointed, and could see no answer to the problem in the million carcasses left to not by the hide hunters.

It is apparent that our ducks are no longer able to overcome the obstacles we have placed in way of their struggle for existence. In view four lessons in the past, it is surprising that the time-worn explantion should again be brought out. However, the other day I read in a Phoenix paper a statement so the effect that ducks have been scarce this year, but it was the consensus of local sportsmen that they have nearly changed the route of their flight, and will return next year. It is not only in Arizona that ducks have been scarce, and it is not the only place where this explanation is given. If everyone is to be given credence for his statements, the ducks must be going south via the North Pole and Siberia.

There have been other changes of drift and flight in our history, It is a fact that they have always foreshadowed the disappearance of some species of our wild life from a certain section, or arom the entire country. The explanations advanced for decrease in the numbers of our ducks have a tragic foregoding, when considered in the light of history. It is not the time for sportsmen to explain why there are fewer ducks, but time to act. If history repeats itself, and we ignore the lessons it has taught, "You're next. Mr. Duck."