

SAVING NORTH AMERICA'S ENDANGERED SPECIES

THE PROGRESS REPORT OF THE U.S. FISH AND WILDLIFE SERVICE

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This is a brief report on some of the birds and mammals that are, or have been, on the endangered list and which, in whole or in part, are under the jurisdiction of the United States Government. It describes the position up to June 30, 1958.

Species that apparently have been lost for ever include the ivory-billed woodpecker, *Campephilus principalis*, and the Eskimo curlew, *Numenius borealis*. It is believed that the last ivory-billed woodpecker was seen by a biologist of the Fish and Wildlife Service on what is known as the "Singer Tract" in northern Louisiana in 1944. Within recent years, reports have been received that there were a few of these birds in some remote swamps in northern Florida. Careful investigation by qualified ornithologists failed to confirm these reports and the refuge set up for their intended protection has been abandoned.* There has not been an authentic record of the Eskimo curlew since 1945, when two were rather reliably reported from Galveston Island, Texas.

In so far as the continental United States is concerned, the woodland caribou, *Rangifer caribou caribou*, must be considered extinct. At one time, this animal was found along Lake Superior on the upper peninsula of Michigan, but it has not been reported from that region for more than forty years. It also was found in the northern parts of Wisconsin, Michigan, and Maine and occasionally in the northern parts of some Western States. The last animal reported in the United States was in 1939 in the Superior National Forest. It is believed, however, that there are small numbers of these animals in various parts of Canada where they are widely distributed.

On the credit side of our wild life ledger, at least two birds and one mammal may be taken off the endangered list. These are the trumpeter swan, *Olor buccinator*, the Hudsonian godwit, *Limosa haemastica*, and the sea otter, *Enhydra lutris*. During

* But up to 1956 at least, not less than six pairs of the almost identical Cuban ivory-billed woodpecker still existed. *Vide* Research Report No. 1, Pan-American Section, International Committee for Bird Preservation—The Ivory-billed Woodpecker in Cuba, George R. Lamb. New York, N.Y., December, 1957.

the last twenty years, the trumpeter swan has had a most gratifying increase, chiefly at the Red Rocks Lake National Wildlife Refuge in south-western Montana, and in Yellowstone National Park in north-western Wyoming. It is the opinion of some biologists that the numbers of these huge waterfowl are approaching saturation of the available habitat. Large flocks of Hudsonian godwits have been recorded in recent years from several of the national wild life refuges. The largest flock, estimated at 370, was seen on 23rd April, 1956, on the Squaw Creek Refuge in Missouri. The herd of sea otters in the Aleutian Islands, Alaska, has steadily increased to the point where there is currently no fear for the perpetuation of these interesting mammals, once so nearly exterminated because of their exquisite fur.

More than the usual attention has been directed recently at several endangered species, including the key deer, whooping crane, Hawaiian goose, Laysan teal, and Kirtland's warbler. All of these are low in numbers and most are in need of additional safeguarded habitat.

THE FLORIDA KEY DEER

The tiny key deer, *Odocoileus virginianus clavium*, has attracted the interest and sympathy of conservationists for several years. As a result of this interest, the Boone and Crockett Club provided funds through which, in 1951, an agent was employed by the Fish and Wildlife Service to study the deer and do what he could to arouse local interest in their protection. Human predation and fatalities, resulting from fast-moving motor traffic on the Overseas Highway along the Florida Keys, were the chief causes of loss. Following this initial gesture by the Boone and Crockett Club the National Wildlife Federation stepped into the picture to supply necessary funds.

The obvious need was a refuge in the Florida Keys region, and this has moved close to accomplishment, thanks to legislation passed at the first session of the 85th Congress. Sparked by the efforts of two Florida representatives and a Senator from the State of Washington, a bill was passed through Congress which makes possible the establishment of a National Key Deer Refuge. This measure has been signed into law by the President. Under it, the Secretary of the Interior may acquire "by purchase, donation, the use of donated funds, and exchange for unreserved public lands" lands not to exceed 1,000 acres for administration as a refuge. There is a proviso that the land cannot be acquired

by condemnation. Subsequently, the acquisition of the necessary lands has been progressing, due in large measure to the efforts of the National Wildlife Foundation. This organization has an active programme of acquiring lands which in turn are deeded to the United States Government.

According to the latest estimate, the number of key deer has increased from a low point of only twenty-five, a few years ago, to about 125 to-day. Nevertheless, the rapid development of the Florida keys threatens such a drastic change in environment that the little deer would be doomed unless some haven is provided. It is hoped that the refuge will soon become a reality.

WHOOPING CRANE

The whooping crane, *Grus americana*, has become the living symbol of wild life conservation in North America. In recent years, it has been graphically portrayed on conservation stamps issued by the United States and Canada. Intensity of interest seems to be about equally divided between the wild population and the few birds that are held in captivity.

When the Aransas National Wildlife Refuge was established on the coast of Texas, north of Corpus Christi, in December, 1937, it was recognized that it would be of great importance to the cranes in preserving a sizeable portion of their remaining winter range. Most of the wild population spends the winter on the refuge, with some use of adjacent Matagorda Island. The United States Fish and Wildlife Service has kept an accurate record of the wild birds since 1938—at which time they were at their lowest numbers—there being in that year only ten adult and four immature birds. By 1940, the total had gone up to twenty-six which included five immatures. That was the highest point for the next eight years; the annual total in the interim dropping to as low as fifteen in 1941; but by 1949 it had climbed back to thirty-four, of which four were birds of the year. Thirty-four is the highest point that has been reached in the last twenty years, and in 1954 the total had declined to twenty-one. In that year, no immatures showed up at the refuge. During the last two years, the total population has been recorded at twenty-four in 1956 and at twenty-six in 1957.

The whooping crane's breeding grounds are in Wood Buffalo National Park, in the Northwest Territory of Canada, and are jealously guarded by Nature and by the Canadian Wildlife Service. They were discovered by a biologist of that organization.

The whooping crane is given full protection both in the United States and Canada and, due to continued publicity by radio, television, and press in both countries, the public has been alerted to watch for and guard them on their 2,500-mile migration route. This has been effective for during the past few years there have been no verified reports of losses due to shooting.

A brief history of the captive mated pair will have special interest. The female, "Josephine," was captured after she had been crippled by a farmer in Louisiana in 1940 and was turned over to the Audubon Park Zoo in New Orleans for recuperation and safe keeping. After attempts to mate her with two other captive crippled cranes had failed, she was mated to a bird known as "Crip" while both were in residence on the Aransas Refuge. In 1945, their mating resulted in two eggs, one of which hatched, the first recorded hatching of a whooping crane in captivity. This young bird was named "Rusty" but it lived only a few days. In December of 1951, the mated pair were transferred again to the Audubon Park Zoo in New Orleans but, for the next four years, no eggs were laid. In 1955, they were sufficiently at home in their paddock to produce two eggs, which were later trampled accidentally when the birds were frightened by an electrician working near their enclosure. In 1956, another pair of eggs was laid and both of them were hatched. One bird was very weak at birth and disappeared within a few days. The other chick lived for forty-five days, when it died of the fungus disease known as aspergillosis. It is now mounted and preserved in the museum at Louisiana State University at Baton Rouge. Two eggs were again laid in 1957. These hatched and the chicks were successfully reared to maturity, due in part to the watchful care given them by a trained aviculturist from the New York Zoological Society. They are still at the Audubon Park Zoo and are now full grown. In the current year, two eggs were again laid but only one of them was hatched, the other being infertile. This chick is thriving. It was taken from its parents a few days after hatching and, following an interval of two or three weeks, Josephine laid a second set of eggs. Although both birds faithfully performed the task of incubation, both eggs of this set failed to hatch.

Another adult crane is on deposit at the San Antonio Zoo in Texas, and it is the hope of the Bureau of Sport Fisheries and Wildlife of the U.S.A. Fish and Wildlife Service that eventually a mate may be provided for it. In its operations with the captive cranes, the Bureau is guided by the recommendations of an

advisory group selected from the leading conservationists and aviculturists in the United States and Canada.

THE HAWAIIAN GOOSE OR NENE

The Hawaiian goose, *Branta sandvicensis*, or Nene was, for a time, feared to be almost or quite extinct in the wild state in the Territory of Hawaii. In July, 1955, in the upper Hilo Forest Reserve on the main island of Hawaii, a flock of twenty-two was sighted. This was the first time in more than eighteen years that a flock of more than eight had been seen. As a result of careful protection, these birds increased until the latest report indicates there are about fifty. Their range is on the west coast of Hawaii, encircling the volcano "Mauna Loa" on that island, roughly between the 5,000 and 7,500 ft. elevations. There also appear to be a few in parts of Kau, North Kona, and South Kohala.

This goose has been adopted as the official bird of Hawaii and Delegate John A. Burns introduced a bill into the 85th Congress authorizing the Federal Government to spend \$15,000 a year for the next five years in an effort to perpetuate it.

One of the pressing problems in the preservation of this species in the wild is to provide areas of breeding habitat where it will be safe from molestation by man and domestic animals, for most or even all its territory is included in one large cattle ranch. If the whole of this area were to be devoted to the grazing of livestock, the fate of the Nene might well be sealed. The Bureau of Sport and Fisheries and Wildlife has, however, learned from the President of the International Committee for Bird Preservation that the President of C. Brewer and Company, the owners of the ranch, has given a special game preservation lease to the Hawaiian Board of Agriculture and Forestry.

Strangely enough, there are apparently more Nene geese in captivity than are known to exist in the wild. The Wildfowl Trust at Slimbridge, Gloucestershire, England, reports in July of this year that it has a stock of seventy-three—the progeny of a male and two females it acquired in 1950–51. In addition, as an insurance against disease or other catastrophe, the Trust has distributed single pairs of Nene to five other important collections of waterfowl, in Holland, France, Switzerland, the United States, and England. Mr. Peter Scott, the Director of the Trust, has stated that by the end of this season they should be in a position to start sending young birds back to Hawaii for resettlement in the wild state. There are also one or two small flocks of captive Nenes in private possession in the Territory of

Hawaii, so the prospect for the preservation of this interesting bird seems much brighter.

THE LAYSAN TEAL

The Laysan teal, *Anas laysanensis*, which is found in nature only on the tiny island of Laysan some 1,000 miles west of Honolulu, near the end of the Hawaiian Islands Wildlife Refuge, has had a curious history. In 1911, an expedition which included Professor William Alanson Bryan was able to find only six of these birds. In 1923 Dr. Alexander Wetmore counted twenty; these had decreased to nine or eleven in 1936 when George C. Munro of Honolulu visited the island; by 1950 Vernon Brock of the Hawaiian Division of Fish and Game counted twenty-six adults and seven young. This was the last count for several years until 1955 when Donald L. McKernan, then Director of the Pacific Oceanic Fisheries Investigations, stopped briefly on Laysan and counted 161. Two years later, in June and July, 1957, Biologist David H. Woodside of the Hawaiian Division of Fish and Game made a careful investigation of the birds, including two separate estimates of the population. His first estimate was 740 birds but, recognizing that his method of counting was subject to errors, he revised his procedure and gave a final number of 580 which he stated was a fair estimate of the actual number of adult teal present on Laysan at that time. This is a most astounding figure as it is easily the largest population of these birds recorded within historic times.

Recognizing that such a large population concentrated in such a small habitat was liable to catastrophe due to disease or action of man, the Fish and Wildlife Service's Bureau of Sport Fisheries and Wildlife has taken steps to have a reserve population produced by artificial propagation to be available for repopulating Laysan should this ever be necessary. Under a permit issued by the Bureau in the spring of this year, thirty-six teal were removed from Laysan and brought to Honolulu to be acclimatized and adjusted to captive life. Arrangements are in process as this is written to turn over two pairs of these birds to each of several zoological parks and aviaries that have trained aviculturists on their staffs, and to a few private aviculturists. With one exception, the Wildfowl Trust in England, all of these points for artificial propagation are in the continental United States and Honolulu. Under the terms of a co-operative agreement, the recipients of these birds agree to make the progeny available to the Bureau for restocking of Laysan should such action ever become necessary.

KIRTLAND'S WARBLER

Among song birds, the Kirtland's warbler, *Dendroica kirtlandii*, has occupied a rather unique position. It is known to breed in only a few counties of central Michigan and it winters in the Bahama Islands. Because of the fact that it has special habitat requirements, the Michigan Department of Conservation in co-operation with the Michigan Audubon Society is making a positive effort to preserve the type of habitat required. These two agencies are setting up a project for the establishment and maintenance of permanent Jack pine areas so essential to the welfare of this bird. Trees 5 to 12 feet high are optimum for the bird's use, so a programme of continuous successional management must be established.

OTHER SPECIES

There are several other birds and mammals, whose status of which is giving concern to wild life conservationists. These include the Greater Prairie chicken, *Tympanuchus cupido cupido*, Attwater's Prairie chicken, *Tympanuchus cupido attwateri*, and the lesser prairie chicken, *Tympanuchus pallidicinctus*. The continued existence of these prairie grouse is threatened because of habitat destruction due to agricultural expansion.

All known California condors, *Gymnogyps californianus*, are in the Los Padres National Forest, where they are jealously guarded by the United States Forest Service and the State of California. They are, however, extremely vulnerable and, although no late reports are available, it was estimated in 1953 that there might be sixty in existence. As a result of a hurricane some ten or twelve years ago, it was thought that the Cape Sable seaside sparrow, *Ammospiza maritima*, found only in extreme southern Florida, had been exterminated. Information received by the Fish and Wildlife Service within the last year, indicates that this bird has been rediscovered at a point on the west coast of southern Florida. No estimate has been made of the number that may be inhabiting this new locality. All three kites, the swallow-tailed, the white-tailed, and the everglade are considered to be in a rather precarious situation—most concern being felt for the everglade kite, *Rostrhamus sociabilis*, of Florida, whose habitat is being threatened by drainage and agricultural exploitation. They are, of course, given full protection on the Loxahatchee National Wildlife Refuge near Palm Beach. The Puerto Rican parrot, *Amazona vittata*, is found only in the Caribbean National Forest on the

Island of Puerto Rico. A report received this year indicates that there are about 200 of these birds, which cannot be considered dangerously low considering the restricted habitat available for them.

During the last year or two, grave concern has been felt for the Pacific walrus, *Odobenus divergens*, and the Polar bear, *Thalarctos maritimus*, off the coast of Alaska, in Bering Sea and the Arctic Ocean, which have been subjected to increased killing through the use by hunters of airplanes that pursue them beyond the territorial limits, where Federal and Alaskan enforcement officers can exercise control. Both of these animals are most important in the economy of the Eskimos so drastic action may be necessary. A revision of the Alaska Game Law recently introduced into the United States Senate may, if approved, provide the machinery to accomplish this objective.