

BANDING THE LAST HEATH HEN

By ALFRED O. GROSS

THE last Heath Hen, the sole survivor of his race since December 8, 1928, a bird which is free to roam the scrub-oak plains of Martha's Vineyard Island, Massachusetts, was trapped and marked with two numbered metal bands on April 1, 1931. As soon as the bird was banded and photographed it was again liberated in his favorite retreat among the scrub oaks, apparently none the worse for his experience.

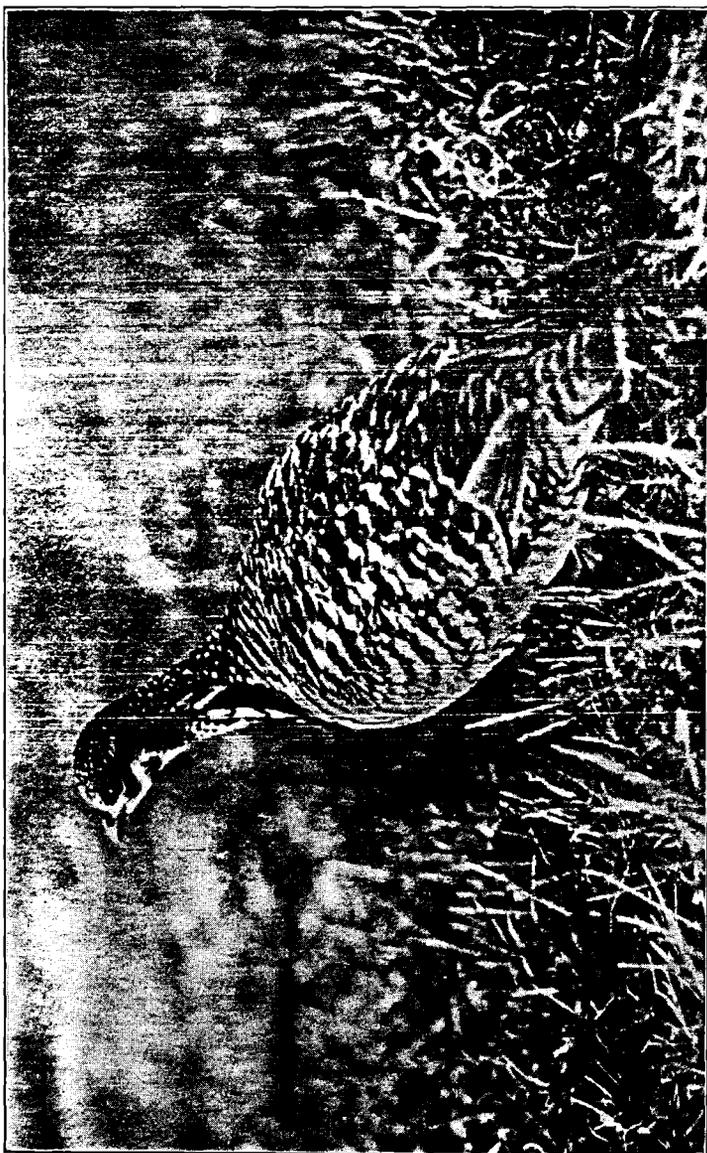
In the past the Heath Hens came each spring to the clearings or open grasslands to go through their weird courtship performances. The last bird, true to the traditions of his race, visits the meadow on the farm of James Green, near West

Tisbury, which is its ancestral booming-field. Because of this curious instinctive trait it is possible to entice this bird to within a few feet of a wooden blind set up in the midst of the field where it comes with unfailing regularity. The blind enabled the observers to trap the bird as well as to study and photograph it at close range.

The trap employed was a simple iron frame covered over with fish-seine netting, the latter being used instead of wire to prevent injury to the bird. The trap was released by a string running from the trigger stick to the blind. The day on which the Heath Hen was trapped there was a steady down-pour of rain. The bird came out of the scrub oaks at 6.45 A.M. and walked steadily but cautiously toward the vicinity of the blind to secure the grain which had been placed there to lure it to close range. The bird exhibited no fear of the blind and at first paid not the least attention to the traps, entirely new objects in the environment of its feeding-place. The bird ate greedily of the grain, adjusted its plumage to shed the rain, and then settled down in the grass stubble with its head facing toward the driving "northeaster". In about a half-hour it sauntered towards the trap, and after a brief inspection entered to pick at the ear of corn used as bait. It was an exciting moment inside the blind; the least false move would mean failure. Promptly at a prearranged signal the trap was released and the last Heath Hen was made a temporary prisoner. Though the heavily overcast sky and heavy downpour of rain made conditions unfavorable for photography, moving pictures and stills were made of the entire procedure.

Two bands were used. An aluminum band, number 407880, was placed on the tarsus of the left leg and a copper band, number A-634024, was fastened to the right tarsus. It is desirable to have both legs marked in the event of the bird's being killed by some predatory animal or hawk and the two legs torn apart and separated. In the future, after the death of the bird, if either leg is found the remains can be readily identified. The bands will also serve as a definite identification as long as the bird continues to live. The banding operations did not seem to harm the bird in the least. It returned to the blind the very next day, giving the observers an opportunity to secure additional moving pictures.

The last Heath Hen is a splendid, well-groomed male. It is heavy, plump, and exceedingly strong and resistant. An examination of the bird revealed no trace of disease or external parasites, which were common among its last companions examined by the author in past years. There is no way of as-



certaining the age of this bird, but since the last record of any young was in 1924, it is probable this individual is at least seven years old, and perhaps much older. Birds are known to live long lives, and it is possible for the Heath Hen to live on for a considerable time. The last two Passenger Pigeons which were in captivity at the Cincinnati Zoölogical Society, Cincinnati, Ohio, were more than twenty years old at the time of their death. How many years the last Heath Hen will prolong the life of its race cannot be predicted, but it is truly remarkable that this lone bird has been able to escape all of the vicissitudes of the elements and the constant danger of predators and disease. This fact is further emphasized when we review the recent history of the decline of these birds and note how rapidly the flock was reduced to one bird. In April, 1924, the annual census accounted for fifty-four birds, but in spite of the combined efforts of the State, the Federation of Bird Clubs of New England and other organizations the birds decreased rapidly. In 1927 there were thirteen birds, only two of which were females. In the autumn of that year seven birds made their appearance. This flock appeared regularly on the open meadow of the Green farm, but during the course of the winter it dwindled one by one until only three males remained at the time of the annual census in April, 1928. At the approach of summer the birds dispersed, as usual, to the dense scrub oaks, where in the course of their wanderings one more bird was lost, and only two Heath Hens returned to the Green farm in the autumn. The two birds were reported almost daily until December 8, 1928. Since that date only one bird has been seen, which we believe is the last of his race.

The three photographs of the last Heath Hen shown were taken prior to 1931.

In recent years many earnest requests have been received that those in charge of the last Heath Hen secure a female Prairie Chicken or some other grouse (as the Ruffed Grouse), as a mate for this last lone bird, either for practical or purely sentimental reasons. In the past many attempts were made to introduce the Prairie Chicken, the close relative of the Heath Hen, to Pennsylvania and the plains of New Jersey, Long Island, and Massachusetts, including Martha's Vineyard. Although these introductions were made in large numbers and with great care, every one of them resulted in failure. Likewise introductions of the Heath Hen, when these birds were abundant on Martha's Vineyard, made to Long Island and the mainland of Massachusetts, never proved a success. All attempts to rear the birds in captivity failed. It is appar-



ent that Pinnated Grouse (Heath Hen and Prairie Chicken) do not lend themselves to such methods of conservation and are very sensitive to any change in their environment. They are not adaptable and are totally unlike the hardy Pheasant, which can be readily transplanted from one part of the country to another. But grant that an introduction of Prairie Chickens to Martha's Vineyard would be successful, there would be only the remotest chance that the last Heath Hen would mate successfully with the Prairie Chickens. One reason of the failure of the Heath Hen to raise young since 1924, when there were still a number of females present with the males, was the fact that excessive interbreeding had brought about declining sexual vigor and sterility. This was further evidenced by the examination of several male birds in which the sexual glands were degenerated, and therefore there is reason to believe that our last Heath Hen is sterile. As far as the many suggestions we have received for mating the Heath Hen with a female Pheasant or with a Ruffed Grouse, they may be dismissed as such a cross is not possible. Incidentally it may be noted that Ruffed Grouse and Pheasants are already resident on the Island.

HEATH HEN NOT THE LAST OF THE SPECIES

A comparative study of the Heath Hen and Prairie Chicken from the standpoint of their history, distribution, and plumage-variation, as well as a detailed comparison of their life-history, their courtship, and their behavior, is convincing that the Heath Hen and the Prairie Chicken are the same species and that they differ only as subspecies. The birds are merely geographical races. In prehistoric times the Heath Hen and the Prairie Chicken were present in an uninterrupted distribution from the Atlantic seaboard to the plains east of the Rockies, but subsequent isolation resulted in certain differences in the Eastern and Western representatives, such as relative amount of pigmentation in the feathers, number and shape of the pinnate feathers, etc. These differences, however, are so small and so variable that I consider that William Brewster was not justified in describing them as distinct species, as he did in 1885. This opinion, advocated in a report on the Heath Hen in 1928, has now been accepted by the Check-List Committee of the American Ornithologists' Union.

Therefore, the bird on Martha's Vineyard, although the last Heath Hen, is not the last of its species, which is to-day abundantly represented in many States of the Middle West

in the form of the Prairie Chicken. Although this interpretation may take away much of the glamour and romance attaching to the Heath Hen, nevertheless the last bird on Martha's Vineyard has fired our imagination and has served to focus public attention on the necessity of taking immediate positive steps for the conservation of our wild life. If this bird serves as a warning of what may happen to other game-birds, the thousands of dollars expended by the State and various organizations and individuals will not have been spent in vain.

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PROGRESS OF CONSERVATION IN CANADA¹

By HOYES LLOYD

TO BEGIN with, it is desirable to outline Canada's organization for conservation. The nine provinces and the Yukon Territory have control of game matters within their boundaries with certain definite exceptions. The North West Territories are administered by a Branch of the Department of the Interior, which Branch also has jurisdiction over game matters in the Territories. The chief exceptions to this general rule are, first, that the Department of the Interior administers the Migratory Bird Treaty throughout Canada, and, second, that the same Department has charge of the National Parks of Canada, which, in addition to affording complete protection for some of the finest scenic wonders of the Dominion, also serve as sanctuaries for wild life.

The protection of the wild life of Canada is of national importance, and so the Dominion authorities have sought to coördinate all efforts toward wild-life conservation, whether these fell within Provincial or Dominion jurisdiction. One of the principal means of forwarding this unification of effort has been the practice in vogue for the last ten years or so of calling conferences of Provincial and Dominion Game officials. These conferences have been under the auspices of the Department of the Interior, and the Department has defrayed the expenses incurred by Provincial administrations in sending representatives to these conferences. The agenda for each

¹Read at the joint meeting of the Northeastern Bird-Banding Association and the Federation of the Bird Clubs of New England, held at Boston, Massachusetts, January 16, 1931.