THE DECLINE AND FALL OF Tympanuchus cupido cupido

by Dorothy R. Arvidson, Arlington

We felt that the April issue's At-a-Glance bird was an appropriate choice for the month of foolery. The photo is a shot of a mounted specimen supplied from the files of the Massachusetts Division of Fisheries and Wildlife and is, of course, the Heath Hen, a subspecies of the Greater Prairie-Chicken.

So abundant was this grouse on the scrub-oak plains near Boston in the 1630s, Governor Winthrop reported that laborers and servants stipulated in agreements with their employers that it not be "brought to table oftener than a few times in the week" [Forbush, Birds of Massachusetts, II (1927): 41]. The clearing of forests and the planting of grain fields further enhanced the habitat of the Heath Hen which fed on berries, tender leaves and grasses, cultivated grains, scruboak acorns (swallowed whole), buds, small fruits, seeds, and insects. However, it was pursued, trapped, and shot at all seasons - the birds were so numerous that shot was seldom wasted on them - and the young were destroyed by dogs and cats until, two centuries later (between 1821 and 1840), the species had disappeared from mainland Massachusetts and from Connecticut and was very rare throughout the rest of its range. Mrs. Eliza Cabot reported to Brewster that she saw a "prairie grouse" in Newton in her youth and another on Cape Cod after her marriage (1812).



Heath Hen

Courtesy of Mass. Division of Fisheries and Wildlife

This decline of a valuable natural food source finally spurred the Massachusetts legislature to action. In 1831 a hunting ban effective during the breeding season was passed, with a two dollar fine for offenders. In 1837, this ban was extended throughout the year, but any town was permitted to suspend the law within its own limits. Of course, the only towns in which the bird existed took advantage of this loophole! Then, despite dwindling numbers, even this ineffectual protection was discontinued from 1855 to 1860, and a decade later (1870) the only remaining Heath Hens to be found were on Martha's Vineyard. One report of Heath Hens on the mainland (Falmouth) in 1888 (shot, of course) proved to be Greater Prairie-Chickens, probably introduced in the hope that they would interbreed with the Heath Hen. In 1902, three "Prairie Chickens" were released on Martha's Vineyard for the same purpose, but what happened to them is unknown.

So, the inexorable march toward extinction - inevitable when breeding populations fall below fifty to a hundred pairs and the gene pool becomes very limited - went forward, aided by

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For the diagnosis of our "set-up" photo, Peter Alden, Bird Observer's (and birding's) good friend, came through with the following instructive deductions, qualified by the statement that he "is marooned in Connecticut without ready access to any skin collections." His comments, with some editing, read approximately as follows.

Obviously a Tympanuchus with choices:

- (1) phasianellus (Sharp-tailed Grouse) doesn't have such conspicuous
 neck feathers. Note: did not check all subspecies.
- (2) pallidicinctus (Lesser Prairie-Chicken) Kansas to New Mexico. No; flanks are much more lightly barred.
- (3) cupido (Greater Prairie-Chicken with subspecies) does have long neck feathers.

Therefore, subspecies:

- (a) pinnatus SE Canada to NE Texas; flanks barred correctly; vegetation looks correct.
- (b) attwateri coastal Texas and SW Louisiana; small, dark. [Ed. note: This subspecies is endangered; listed as rare in 1981.]
- (c) <u>cupido</u> Martha's Vineyard, Mass. Bay Colony, Virginia; extinct, but this is from files of Mass. Division of Fisheries and Wildlife. [Ed. note: We had to credit the picture, thus providing a dead giveaway - no pun intended.]

Point by point: Coloration of neck stripe - the brilliant whiteness at center clearly indicates a strong white center (cf. L. A. Fuertes) vs. buffy center (cf. R. T. Peterson). Therefore: Heath Hen, cupido.

Note: cupido differs from other subspecies by (1) scapulars broadly tipped with buffy (photo looks buffy) [Ed.: Forbush (II:40) says white]; (b) feathers of neck tufts pointed; (c) less than ten neck tuft feathers (hard to count).

BRING BACK THE HEATH HEN!

inept protection laws, the introduction of raccoons and foxes to the island in 1877, two fires throughout the breeding area (in 1894 and 1916), a large hawk migration, especially Goshawks, in the fall after the second fire, an epidemic of "blackhead," a disease spread from domestic turkeys (1920), and a succession of cold and rainy breeding seasons.

What is astonishing is that despite these calamities, the population of this hardy survivor rose by 1916 to a high count of two thousand! This was due in part to a determined effort by the Commission on Fisheries and Game which took the species under its aeqis in 1907 when a count of the Vineyard birds on May 2 of that year revealed only twenty-one extant. The birds were fed and protected from poachers and predators by competent wardens on a sixteen-hundred-acre reservation. However, even with this care, the grouse were doomed. 1925, only three broods were reported, and the heavy September rains wiped out all the young. At this point, the Federation of Bird Clubs of New England stepped forward with funds to continue the warden service to protect the fifty or so birds remaining. But after December 8, 1928, only one male was seen, and on March 11, 1932, this solitary remnant of the species expired on the James Green farm near Tisbury.

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