

been removed in the fall of 1942 several miles from my enclosure, returned and joined the others. The hybrids of the 'Canadian-type' cannot be distinguished from the full-blooded parents.

Detroit

Michigan

THE RECORDS OF A PROFESSIONAL DUCK HUNTER

BY HAROLD B. WOOD

DEFINITE records of the number of birds killed in large numbers by sportsmen or professional gunners are rare because usually none are kept. Lamentable as mass killings and continued shooting are, definite records of birds killed over a period of years show interesting figures. They suggest the relative prevalence of various species during past years, indicate migrational seasons, suggest variations in bird populations, show present rarities, and add unknown species to a local list. Some colloquial names are learned.

About 17,000 waterfowl fell in fifty-three years before the gun of the professional gunner of the olden days whose records are the basis of this account. He kept daily accounts of his bags, and his diary I was permitted to copy. It is reminiscent of the days of fifty years ago when every meat market had its racks festooned with many species of waterfowl. The maker of these records, Hardie Disney, was born in 1873 and lives on the banks of the Susquehanna River opposite Harrisburg. He began to shoot when eleven years old, in 1884, and bagged fourteen birds the first day. Later, he professionally shot game to supply the five hotels of Harrisburg, and received a dollar a duck, with three to five dollars apiece for Canvasbacks. The hotels offered a roast-duck dinner, with all the trimmings, for \$1.50. It was a gunner's living in those days. In the fall of 1906, for instance, Disney's accounts show that he received \$161.75 for 445 ducks. He shot for a living, although with sad consequences which he could not foretell.

The ducks seemed to be in inexhaustible quantities and there were no restrictions on gunning. "There were thousands of ducks in those days, and every year there was more," as he expresses it. "When a boy, I got up at 4 A. M. and went out and killed ducks before I went to school. I ducked in March and April." All shooting was done from a boat as he and his 'buddy' paddled in the shallow, mile-wide Susquehanna. He sometimes used wooden decoys, never live ones, and never baited the water. He shot among the small, grassy islands called 'patches,' where the ducks collected. The de-

sirable ducks were Canvas-backs, Black Ducks, Pintails, Mallards, and Redheads; others he calls 'trashy.'

"We were allowed to shoot all we wanted. The law made it eight months to shoot 'em. We had a right to kill all the ducks we could. The ducks were here in countless thousands";—but now he states: "Since you can't sell any ducks now, the daily bag should be limited to two ducks. The season should not be open before December [here], after the young ducks can fly." The ducks are here from late September until the river freezes over in December.

From 1884 to 1898 he shot 7000 ducks and 22 geese, he declares. From the autumn of 1897 to the autumn of 1938, his diary shows he shot 9185 waterfowl of 27 species, and 72 other birds. Prior to 1897 he kept daily records on slips of paper but left all these behind when he moved to a new home. After 1897 all daily records were written in a blank book, which diary with many photographs of the bags, has recently been acquired by the Archives Division of the Pennsylvania State Library.

In 1892, 1894, and 1895 he had his biggest days, bagging as high as 80 to 93 ducks in one day. He killed as many as 160 in October; 446 were shot during the autumn of 1906—his top limit; 54 Pintails in one day; 198 ducks during the week of April 11, 1904; 95 Blacks and Mallards in four days in the spring of 1905; 30 White-winged Scoters out of a flock of 50. His 2587 ducks shot in the autumn and 2374 in the spring during thirteen years indicate the result of unrestricted shooting.

Spring duck shooting was stopped by the Pennsylvania legislature in 1919. The wisdom of this decision as a measure for protecting the birds is shown by Disney's results. From 1897 to 1923, during open seasons, he shot 22 Canada Geese in the fall and 58 in the spring days of migration. Large ducks, such as Redheads, Blacks, Mallards, Canvas-backs, and Pintails, are most numerous in March, but few are found in April. During thirteen years of gunning, Disney shot 389 Mallards in the fall, 224 in the spring; Black Ducks, 250 in the fall, 668 in the spring; Pintails, 366 in the fall days, 278 in the spring; Redheads, 96 in the fall, 292 in the spring; Scaups, 694 in the fall, 635 in the spring; Golden-eyes, 158 in the fall, 52 in the spring; Buffle-heads, 245 in the fall, 128 in the spring; Scoters, 182 in the fall, 10 in spring shooting. These fall gunning days numbered 354; the spring, 240. The totals averaged 6.7 of the above waterfowl per day in the fall, 9.5 in the spring gunning. The days of gunning were mostly during October and November and the following March and April.

Monthly variations are shown by the collated records. During the first quarter of this century, Disney shot during forty-one days in September (getting 26 Black Ducks and others); 304 days in October (256 Blacks); 255 days in November (204 Blacks), and thirty-four days in December, until the river froze over, netted 36 Black Ducks and others. He killed 18 geese in March, two in November, and one each in December and April.

During the fall months and early spring, the river serves principally as a resting place for the ducks. When low, it affords some feeding. The river varies greatly in depth, in relation to the precipitation over the large watershed. The records for fifty years show the average spring stage is only 1.6 feet over that of the fall.

Some rare birds fell before this hunter's guns. A European Baldpate (*Mareca penelope*) was shot March 25, 1908. A Surf Scoter (*Melanitta perspicillata*), shot November 2, 1908, and a Golden Plover (*Pluvialis dominica dominica*), shot October 26, 1920, with a Shoveller, shot September 16, 1908, and a Lesser Snow Goose, shot October 23, 1916, were mounted at the time and recently were presented by Mr. Disney to the State Museum. His records show that he shot six eider ducks on November 26, 1920, six on December 6, 1920, and two in 1929. He states that they were King Eiders. Old State Museum records note that he sold to the museum two King Eiders; one of these, a certain King Eider (*Somateria spectabilis*), was found recently in the attic of the museum. Bill Minick, his 'buddy,' on November 12, 1930, shot a Blue Goose (*Chen caerulescens*) which was mounted and added to the State Museum. All these birds were shot on the Susquehanna at Harrisburg and are very rare for this district—the only records. Golden Plovers, giving the only records for this area, were shot in 1920, 1922, and 1919 (two). In his day, Disney had shot Long-billed Curlews here and saw Turnstones. He never saw an albino duck. He saw a Passenger Pigeon in 1878 or 1879.

After 1920, when the Biological Survey took over the banding of birds, he shot 1901 ducks, but not one had been banded. Among 350 Canada Geese that he shot (85 since 1897), one which was shot in 1930 carried a band put on by Jack Miner the previous fall.

Colloquial names applied to waterfowl, as recorded in the Disney diary, are: Horned Grebe, chickenbill; Gadwall, gray duck; European Widgeon, penelope widgeon; Baldpate, ballphate; Pintail, sprigtail; Shoveller, spoonbill; Redhead, red neck; Ring-necked Duck, acecorn, acorn, or ringbill; Scaup, blackhead, bay blackhead, broadbill, blue-

bill, and bluehead; Golden-eye, whistler; Buffle-head, piddy; White-winged Scoter, muscovy, also coot; Surf Scoter, sea scoter; Ruddy Duck, stiffy; Merganser, fisherman, fish duck. The 'blackhead,' of which 1746 were shot, was possibly the Greater Scaup Duck, and the 'bluebill' and 'bluehead' perhaps the Lesser. The 'shad duck' or 'shaddy,' with two recorded, was probably a young Scaup, according to his description.

Other birds which fell before the gun of this erstwhile hunter included 19 other plovers, Wilson's Snipe, Bob-white and Pheasants, a Wild Turkey, rails and doves. When hunting he assumed the attitude of others, that the quantity was limitless, but he now appreciates the fact that such gunning has, at least in his neighborhood, practically exterminated such birds as the Ruddy Duck, Gadwall, Redhead and Brant, and has made the Canvas-back, Ring-neck, Buffle-head, and Scoter such local rarities that to discover one is an event.

WATERFOWL SHOT BY HARDIE DISNEY AT HARRISBURG, PENNSYLVANIA,
1897 TO 1938

Common Loon, <i>Gavia immer immer</i>	1
Horned Grebe, <i>Colymbus auritus</i>	2
Whistling Swan, <i>Cygnus columbianus</i>	16
Canada Goose, <i>Branta canadensis canadensis</i>	85
Snow Goose, <i>Chen hyperborea</i>	8
American Brant, <i>Branta bernicla hrota</i>	9
Common Mallard, <i>Anas platyrhynchos platyrhynchos</i>	909
Black Duck, <i>Anas rubripes tristis</i>	1534
Gadwall, <i>Chaulelasmus streperus</i>	81
European Widgeon, <i>Mareca penelope</i>	3
Baldpate, <i>Mareca americana</i>	269
American Pintail, <i>Dafila acuta tzitzihoa</i>	902
'Teal,' <i>Nettion carolinense</i> and <i>Querquedula discors</i>	189
Shoveller, <i>Spatula clypeata</i>	21
Wood Duck, <i>Aix sponsa</i>	25
Redhead, <i>Nyroca americana</i>	639
Ring-necked Duck, <i>Nyroca collaris</i>	100
Canvas-back, <i>Nyroca valisineria</i>	413
Greater Scaup Duck, <i>Nyroca marila</i>	1751
Lesser Scaup Duck, <i>Nyroca affinis</i>	196
American Golden-eye, <i>Glaucionetta clangula americana</i>	274
Buffle-head, <i>Charitonetta albeola</i>	503
King Eider, <i>Somateria spectabilis</i>	9
White-winged Scoter, <i>Melanitta deglandi</i>	336
Surf Scoter, <i>Melanitta perspicillata</i>	1
Ruddy Duck, <i>Erismatura jamaicensis rubida</i>	680
Merganser, <i>Mergus</i> sp.?.....	214
American Coot, <i>Fulica americana americana</i>	16

Harrisburg

Pennsylvania