

BLACK DUCKS: FORTY YEARS OF MISMANAGEMENT?

By James H. Phillips

The black duck once reigned as the wariest species in North America, a bird so sagacious that only the most highly skilled waterfowlers could hope to bag a limit. This was the view of the outdoor press and many gunners who haunted the tidal marshes, beaver ponds and secluded coves along the eastern seaboard where it once was the No. 1 duck in the bag.

Its range is limited to the eastern third of the nation. It is not, as many Westerners think, strictly an Atlantic Flyway duck. Large concentrations once were found in the eastern half of the Mississippi Flyway, places like Lake St. Clair in Michigan, the Lake Erie marshes in Ohio and Long Point in Ontario.

But the black duck has fallen on hard times, as you can see in the following graphs.

Black Duck Winter Populations

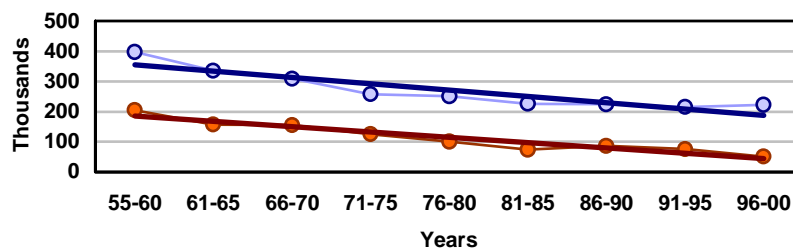


Figure 1. For nearly half a century black ducks have steadily declined. The blue data shows the Atlantic Flyway winter population has dropped from an average of 398,000 during the years 1955-60 to 223,000 from 1996-2000, a decline of 44 percent. The Mississippi Flyway population (shown in red) has fallen from an average of 205,000 in 1955-60 to 51,000 in 1996-2000, a decline of 75 percent. The solid lines show the long-term trend. Source: USFWS.

As bad as this is, the situation is even worse if we compare the peak population for each flyway with the count this past winter. It shows the Atlantic Flyway flock has fallen from 582,500 in 1955 to 255,403 today, a drop of 56 percent. The Mississippi Flyway has fallen from a peak of 264,400 in 1958 to 39,367 today, a decline of 85 percent.

There is nothing to indicate this trend is likely to be reversed.

Various causes have been cited for this decline. – changes in forested breeding habitat, declining juvenile production, hybridization with the mallard and the eastward expansion of mallards that displace black ducks from parts of their historic breeding range.

None has proved to be the definitive problem. The black duck’s forested breeding habitat, especially in the Maritimes, has not been as radically altered as that of the prairies and parklands, where the closely related mallard has survived without a steady, long-term population decline.

Productivity is another issue, as you can see in the following graph.

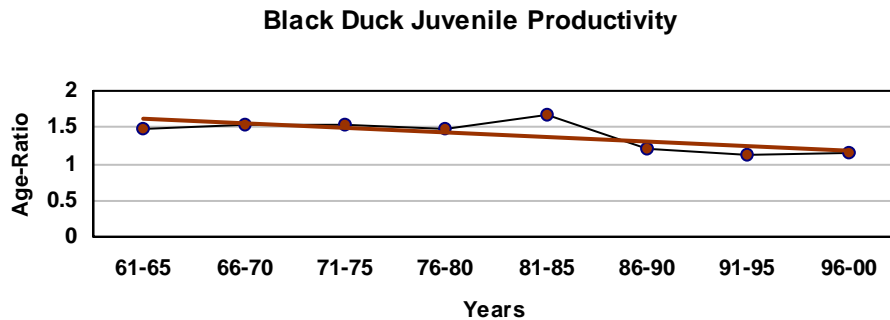


Figure 2. Black ducks have fledged fewer young in recent years, as shown above. The age-ratio, the number of juveniles per adult in the hunter’s bag, suggests juvenile production has dropped 23 percent in the past 15 years. The cause(s) for this decrease are unknown.

Source: USFWS

The seduction scenario also falls apart under close scrutiny. An analysis of the proportion of mallard-black hybrids in the bag over the years shows no change.

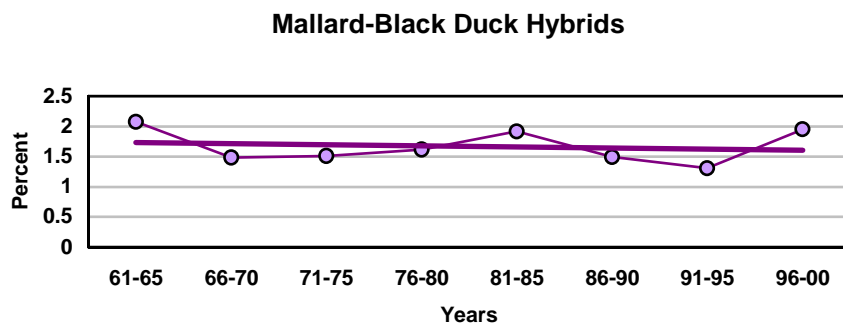


Figure 3. The percentage of hybrids in the Atlantic Flyway bag of mallards and black ducks has remained constant over the past four decades, averaging less than two percent annually. This suggests hybridization is not a major factor in the black duck’s population decline.

Source: USFWS.

Another issue involves the eastward expansion of mallards. Some have suggested mallards have invaded and displaced black ducks from their traditional breeding haunts. This is true in some parts of the black duck's range. It also suggests the Atlantic Flyway mallard population is increasing.

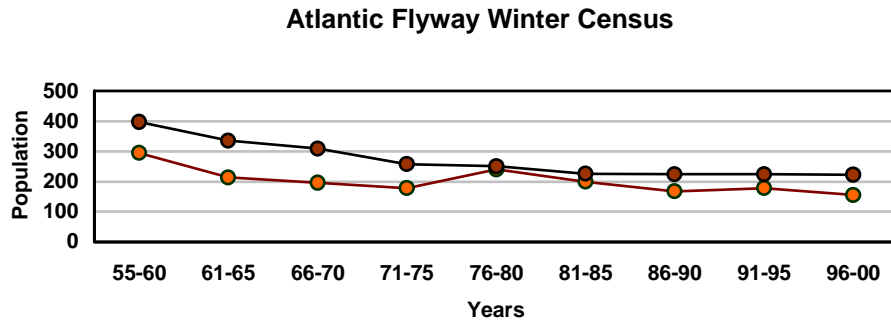


Figure 4. Winter counts reveals black ducks (shown in brown) and mallards (red) have declined in the Atlantic Flyway by 44% and 47% respectively over the decades. This suggests growing numbers of mallards are not overwhelming native black ducks.

Source: USFWS.

Finally, we must examine the effect of hunting. Restrictive gunning regulations limiting hunters to no more than two black ducks daily were imposed in 1963. This was reduced to one daily in 1985, coupled in some states with reduced season lengths.

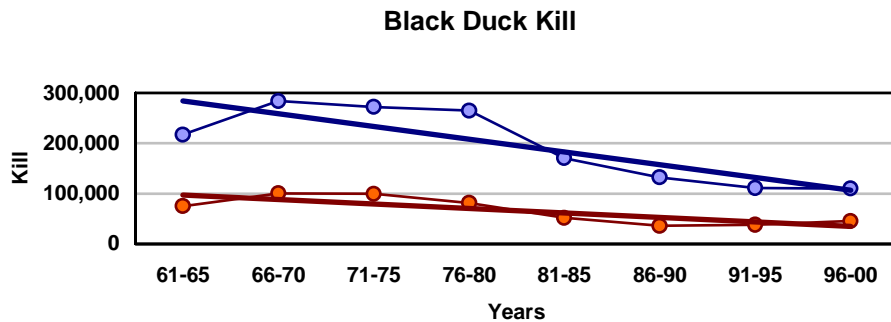


Figure 5. Restrictive gunning regulations have reduced the average annual black duck kill in the Atlantic Flyway (shown in blue) from a peak of 283,700 in 1966-70 to 107,500 in 1996-2000, a decline of 62 percent. Harvest data reveals the Mississippi Flyway (red) kill has fallen from 100,720 in 1966-70 to 45,260 in 1996-2000, a decline of 55 percent.

Source: USFWS.

The most disturbing feature of the kill is not the number of black ducks taken each autumn. It is the extraordinarily high percentage of hens in the bag. This holds true for adult hens (the most important component of the breeding population) as well as juvenile hens.

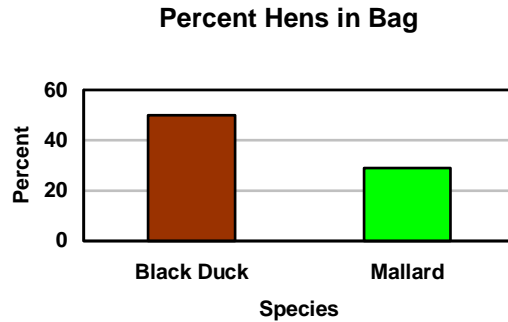


Figure 6. Harvest data reveals black duck hens suffer disproportionately high losses from the gun. From 1996-2000 hens accounted for 50 percent of the black duck bag, compared to 29 percent for mallards.

Source: USFWS.

A further analysis of the black duck data reveals from 1996-2000 hens accounted for 53 percent of all juveniles killed and 47 percent of the adults. These are astonishingly high percentages, aggravated by the fact few hunters can identify hens from drakes in flight because the plumages of both sexes are similar.

Thus, the data reveals the reduced kill has not offset declining juvenile productivity and the high bag of hens. As one senior U.S. Fish and Wildlife Service recently noted, “We really haven’t ever restricted the harvest far enough to make a difference.”

Is it time for a moratorium on the hunting of this important species to allow its numbers to rebuild?

If we take care of the ducks, the ducks will take care of us.
