FEATURE ARTICLES

HYBRIDIZATION IN WATERFOWL

Preparatory to a discussion of hybridization in waterfowl is an understanding of the term species. For example, the mallard is a different species of duck than the green-winged teal. The mallard and the green-winged teal differ not only in appearance but also have behaviorial and ecological differences. This example illustrates the definition of species which is a group with genetic, behavioral, and ecological traits peculiar to themselves. Although originating from the same ancestor, two or more groups may develop into different populations due to a long period of isolation. These new groups are each considered a sub-species.

An understanding of the term species promotes an understanding of the phenomenon of hybridization. Hybridization is the mating of two different species or sub-species. The offspring of such a mating is referred to as a hybrid. For example, if a drake mallard mates with a hen pintail the resulting offspring would be referred to as a mallard x pintail hybrid.

In general, hybrids have reduced fertility, plumage characteristics derived from both parents, atypical display characteristics, maladapted to the environment and little if any reproductive success. Since hybrids are such unproductive members of a population, nature has several built-in safeguards against hybridization in the form of plumage and behavioral differences. In most instances, these differences do prevent the mating of different species.

Even with built-in safeguards, waterfowl show the greatest tendency for hybridization in the avian world. The mallard is the record-holder for hybridization as this species is known to have hybridized with approximately forty other species. The increasing occurrence of mallard x black duck hybrids in the Atlantic Flyway is a problem for wildlife managers in this area since the black duck is considered a superior game bird to either the mallard or the mallard x black hybrid.

Mallard x black duck hybrids have been sighted on P.E.I. The mallard x black hybrid, if it is a mallard, may show typical black coloration except for some green on the back of its head and some differences in the colored wing speculum. However, more often the hybrid bird shows characteristics of one parent or the other with subtle differences i.e. a slightly lighter color.

In August 1980, the Prince Edward Island Fish and Wildlife Division captured a black x Gadwall hybrid during a night-light banding operation at Indian River Wildlife Management Area. This is the first recorded hybrid of this kind in the Atlantic region. This hybrid is all the more unusual since the Gadwall, as noted in the Prince Edward Island Field Check List of Birds, is considered an "uncommon" (Observer may sight 1-12 birds per fortnight) resident of our area.

Hybrids are an odd but interesting feature of our natural world. The waterfowl population of P.E.I. provides an opportunity to examine this subject first hand.

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