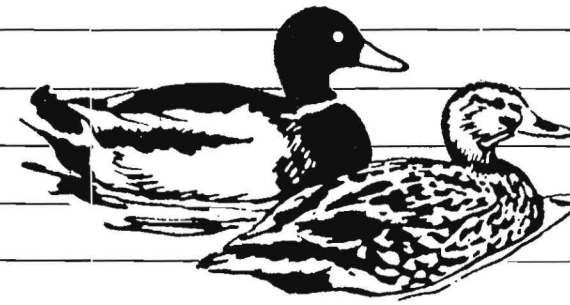
Research



Information bulletin

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Harvest of Blue-winged Teal in the Neotropics

The harvest of blue-winged teal (*Anas discors*) in Mexico, the Caribbean, and Central and South America (i.e., the Neotropics) has traditionally been considered low, partly based on the low number of blue-winged teal band recoveries from that region. The harvest of blue-winged teal in the Neotropics could be estimated from band recovery rates, but reporting rates are not known.

After the breeding season, most blue-winged teal migrate as far as northern South America. Censuses in the southern United States and in Mexico in winter do not account for a large proportion of the total blue-winged teal population. The winter waterfowl survey by the U.S. Fish and Wildlife Service in 1960 revealed that wetlands on the Caribbean lowlands of Colombia and Venezuela in northern South America are among the most important blue-winged teal wintering areas. Our studies of waterfowl in the Ciénaga Grande de Santa Marta, Colombia, revealed that the Ciénaga Grande is an important blue-winged teal wintering and stopover area.

Subsistence hunting of blue-winged teal is common in the Ciénaga Grande. Blue-winged teal are either shot or captured at night from dugout canoes equipped with small oil lamps. Canoe operators use casting nets similar to those used for fishing. A good catch on a calm, moonless night varies between 20 and 60 or more. Canoe operators typically keep some birds for their families and sell the rest to their village neighbors. Sport hunting in the Ciénaga Grande is often practiced by city hunters from other parts of the country or from abroad.

Blue-winged teal are hunted throughout the entire Neotropical region. In fact, blue-winged teal bands have been recovered from at least 20 different countries in the Neotropics. No attempts have been made to evaluate the band reporting rates in the Neotropics; however, many Neotropical biologists believe that only a very small proportion of the bands are reported. In a preliminary study of waterfowl use of the Ciénaga Grande region in 1979–80, we collected 103 blue-winged teal bands from local fishermen and hunters in the primitive villages around the wetland. These bands, kept as souvenirs and never reported by the hunters, represented 5.5% of the total number of recovered bands in Colombia until 1980 or 2.9% of all recovered bands in South America. Hunters in the Ciénaga Grande were not familiar with the bird-banding programs, did not understand the message on the band, and in most instances had limited access to post offices. Low blue-winged teal band reporting rates from the Ciénaga Grande region are possibly typical of the Neotropical region.

Band reporting rates in the Neotropics possibly vary among countries and among the regions of each country. City hunters, who may have been exposed to banding as a technique for the study of bird migration, are more likely to report bands than hunters from remote areas. For example, in Colombia, a greater number of blue-winged teal bands have been reported from wetlands near large cities such as Bogotá, Cali, and Barranquilla than from wetlands in the more remote eastern savannas or llanos, where blue-winged teal also winter.

If the Neotropical band reporting rates were similar to the reporting rates in the United States and Canada, the harvest in the Neotropics could be estimated from the proportion of the bands that is recovered from the Neotropics. A total of 9,468 (21.4%) of 44,186 recovered blue-winged teal bands until 1980 came from the Neotropical region. These data suggest the harvest of blue-winged teal in the Neotropical region is about 20% of the total harvest. The assumption of uniform reporting rates, however, is questionable.

The Neotropical and the total blue-winged teal harvests could be estimated from assumptions about the ratio between blue-winged teal band reporting rates in the United States, Canada, and the Neotropical region. If this ratio is assumed to be 5:1, which may be a conservative figure, the corrected proportion of the blue-winged teal harvest in the Neotropical region would be 58% of the total, and therefore the total blue-winged teal harvest would be 86% larger than if reporting rates were uniform. Similarly, if the ratio is 10:1, the total blue-winged teal harvest would be 193% larger than if reporting rates were uniform.

We propose that the available data suggest the harvest of blue-winged teal in the Neotropics is substantial. However, much research is needed to support our contention.

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