

WILDLIFE CONSERVATION

Conservation Note from Canada

There has been in recent years a notable increase in the numbers of Ring-billed Gulls and Caspian Terns nesting on islands in and near the east end of Lake Ontario. In 1941 at least five breeding colonies of Ring-billed Gulls were reported in that vicinity, four of them on islands in Lake Ontario and one on an island of the Thousand Islands group, in the upper St. Lawrence River. The largest of these colonies is reliably reported to have contained 3,200 nesting Ring-bills. In the same year observers reported two breeding colonies of Caspian Terns, the larger of which contained 100 nesting individuals, as being intimately associated with two of the Ring-billed Gull colonies.

All the colonies here referred to are in the province of Ontario, Canada, although one of them is within a mile of New York State and none, of course, is far from it. It seems very likely that similar colonies of one or both species exist on the New York side of the boundary.

Increase in the population of Ring-billed Gulls and Caspian Terns of Lake Ontario is attributed largely to continued protection of these species in both Canada and the United States in accordance with the terms of The Migratory Birds Treaty.—Harrison F. Lewis.

The Status of the White-winged Dove in Texas

The Eastern White-winged Dove (*Melopelia asiatica asiatica*), an important game bird in the southern tip of Texas, has decreased greatly in abundance during recent years as the Rio Grande delta has been more and more intensively cleared and farmed. The Texas Game, Fish and Oyster Commission has reported that as recently as the autumn of 1924 there were in the lower Rio Grande valley of Texas at least twenty major "flights" of these doves, the estimated population of which totalled four million or more individuals. During the autumn of 1941, State and Federal investigators estimated that fewer than 300,000 "white-wings" were present in the same area.

A joint Federal-State investigation of the status of this dove is now in progress, the principal objectives of which are to determine what can be and should be done to safeguard the future of White-winged Doves in Texas. The two cooperating agencies are the Division of Wildlife Restoration (Pittman-Robertson Division) of the Texas Game, Fish and Oyster Commission and the Fish and Wildlife Service. The investigation is to be completed this year (1942), and subsequently a report of findings and recommendations will be published.

The breeding range of the Eastern White-winged Dove on the mainland extends from Nicaragua northward through eastern Mexico to southeastern Texas. That part of Texas is also the northernmost limit of the types of woodland which this dove prefers for nesting habitat. For this and other reasons no large populations of breeding White-winged Doves are to be found north of the Rio Grande delta.

The doves arrive in April and May, nest from May into August, and leave for wintering grounds in southern Mexico and Central America, especially in El Salvador, from August until late October. During 1940 and 1941 more than four thousand nestling White-winged Doves were banded in Texas. Of these there have been many returns during the hunting season from within a radius of less than one hundred miles. Seven of these banded birds have been reported from a much greater distance; of these, five were taken in El Salvador, one in Guatemala, and one in Mexico approximately 100 miles south of Tampico.

Sufficient research has already been completed to indicate that the three principal limiting factors are (1) the great reduction in acreage of nesting grounds due to the clearing of woodland to provide agricultural land, (2) the reduced production of young due to loss of eggs and young to predators, and (3) the heavy kill during the hunting season.

The present status of the subspecies is not one to cause optimism. Both the acreage of nesting grounds and the production are factors difficult to control. Approximately 500,000 acres of potential nesting cover in Texas have been destroyed during the last twenty years. The high cost of land makes the acquisition of refuge expensive. Eggs and small young eaten by Great-tailed Grackles and Green Jays comprise the bulk of predation, according to studies made during the past two summers. In several small colonies more than 90 per cent of the eggs laid by White-winged Doves were eaten by predators. Records of one major colony show that 5.7 eggs were laid for each fledged young produced during the nesting season. Present information is that most pairs attempt to raise two broods, two young per brood, but because of losses through predation they average slightly less than two fledglings raised to flying age during the summer. Preliminary investigation has not been sufficient to indicate a practicable method for control of predators.

Hunting pressure, however, can be regulated. In 1941, for example, the open season in the lower Rio Grande Valley was limited by drastic changes in State and Federal regulations to five half-days (September 16, 18, 21, 23 and 25, afternoons only). This was a radical change from the 1940 season which provided for shooting on four days a week (Tuesday, Thursday, Saturday and Sunday) between September 15 and November 15, for a total of 35 shooting days.

In the Rio Grande delta the majority of the White-winged Doves nest in colonies ranging in size from a few pairs to a few thousand pairs. The largest known colony had more than 15,000 pairs in 1940 and 1941, with a population density of more than 250 pairs per acre in parts of the woodland. No other colonies have been found in Texas which even approach it in size.

All of the important colonies known are located in dense woodland near former channels of the Rio Grande. The Texas ebony (*Pithecollobium flexicaule*) is almost invariably present either as a dominant or common species and is a favorite nest tree. Granjeno (*Celtis pallida*) associated with mesquite (*Prosopis glandulosa*) form another favored nesting habitat. The soil types represented are among the best in the delta, consequently most of these woodlands have already been cleared to provide agricultural land. The small acreage of such woodland remaining limits the available first-class nesting grounds. As yet it is not known whether the amazing density of breeding pairs in some of these colonies is an ancestral habit or whether the shrinkage in area of preferred nesting grounds in recent years has concentrated greatly the principal colonies. In northeastern Mexico where the subspecies has also been studied by the Fish and Wildlife Service no such densities of breeding White-winged Doves have been found, except in delta woodland near the Rio Grande.

The principal objectives of the conservation agencies cooperating in this investigation are to learn how a further decrease of White-winged Doves can be prevented, and how, if possible, the population can be increased. The acquisition of the several largest nesting areas, constituting less than 1,000 acres, would be a most timely move to prevent further depletion of the Texas population. Some management of these permanent refuges may be found practicable.

A closed season on White-winged Doves in Texas has been suggested by some conservationists; however, if the primary causes of decrease are directly and indirectly due to continued reduction in area of nesting grounds, a closed season would not solve the problem.

The recommended acquisition of the most important remaining nesting grounds of the Eastern White-winged Dove in Texas involves more than consideration of this one decreasing subspecies. It envisions the preservation of representative areas of delta woodland together with their rapidly disappearing biota. Unless these units are acquired for permanent protection as State or Federal refuges, it seems likely that they, too, will be cleared in the not far distant future.—E. G. Marsh, Jr. and George B. Saunders.

Ohio Fish Hatcheries

During the past decade conservation in America has made rapid and satisfactory progress. At present this progress is partially slowed down because of the war, and in some fields there is an increasing tendency toward destructive exploitation. Some of the temporary exploitation seems necessary; some, however, does not. Oft-times conservation policy can be drastically changed to meet war efforts demand and at the same time actually aid in putting some new or better practice into effect.

In the past, the Ohio Division of Conservation and Natural Resources has raised only one crop of fishes annually in its highly-specialized fish farms. Bass and other game fish have received first consideration, and only secondary consideration has been given such food fishes as the catfishes. Realizing the growing need of fishes as protein food for war needs, the State Conservation Commission recently announced that the fish farms will be used this year to produce two crops instead of one as heretofore. The first crop will be bass and the second food fishes. Instead of using 200 tons of carp to raise four- to eight-inch bass for fall liberation, a much larger number of bass fry will be hatched in the ponds and liberated at three weeks of age. The ponds will be stocked immediately with the adults or fry of food fishes, and these will be fed on middlings and meat scraps, which cannot be used directly for human consumption. In addition to the food fishes produced in the ponds, the 200 tons of carp will be saved for human use, thus adding still more to the nation's food supply.

The plan also keeps the hatcheries phase of fisheries work intact and in readiness for expansion at the end of the war.—M. B. Trautman.

Water Conservation

"There seems to a general idea now that something must be done about water conservation; something more than has ever been done in a state where the land policy has been to drain and develop more fields. There are conservationists who assert that Indiana has got a good start toward producing a dust bowl of its own, and that the water problem is the most serious and most fundamental of all the conservation problems facing the state. It is not merely a question of fish and game; it is becoming a question of alternate flood and drought; a question of good crops or poor; it is a question of food and prosperity." (*Outdoor Indiana*, 9 Feb., 1942: 19.)—F.N.H.

WILDLIFE CONSERVATION COMMITTEE,
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