

## WILDLIFE CONSERVATION

## WHERE ARE ALL THE DUCKS?

Waterfowl are in trouble again. The splendid upward trend of the early forties has been reversed: wildfowl are on the downgrade. Drought and overshooting appear to be the main causes.

Harsh words? They fit the situation—a situation which has been beclouded by accounts of a waterfowl “comeback,” of “record crops” winging south, of “drought proof nesting grounds,” and by demands for the return of baiting and live decoys. It is discussed in some detail in “Hearings before the Select Committee on Conservation of Wildlife Resources, House of Representatives, Seventy-ninth Congress, Second Session” (Govt. Printing Office, Washington, D.C., 1946: iii + 340 pp.). At these hearings the Fish and Wildlife Service pointed out that between January 1944 and January 1946 the wildlife population decreased 36 per cent, while the number of wildfowl hunters (as measured by duck stamp sales) increased 44 per cent; that we are in the second or third year of a new drought, which already extends to the Peace River district—much farther north than the last great drought; that, as a result, probably not more than 50 per cent of the breeding grounds are in normal condition; that the volume of successful nesting has been going down; and that, while a breeding stock of at least 150,000,000 waterfowl is needed to balance the present hunting demand, there were this January only about 80,000,000. And “we have overshoot our annual increase during the past two hunting seasons” [i.e., 1944 and 1945], according to Albert M. Day (Mimeo. release, “The Problem of Increased Hunting Pressure on Waterfowl,” address given at the 11th N. Amer. Wildl. Conf., N.Y., 12 March 1946).

Granted that the Fish and Wildlife Service figures are not everywhere agreed with, there is additional evidence. The National Audubon Society, in a news release dated 25 March 1946, says: “There was overwhelming testimony presented at the recent North American Wildlife Conference in New York City to the effect that the continental waterfowl supply is substantially less than it was a year ago. . . . The recent cycle of rising waterfowl population appears to have quite definitely passed and a cycle of declining waterfowl supply appears to be well underway.” Carl D. Shoemaker, Washington correspondent for the National Wildlife Federation, writes (*Conservation News*, 1 June 1946): “The outlook is dismal for ducks this year. Even though the breeding season is highly favorable it is not believed that anywhere near the number of birds will start south as did last year. . . . We are up against a condition, not a theory. . . .” State game officials, in a survey conducted by *Sports Afield* (March, 1946, p. 28) reported that there were fewer ducks in 1945 than in 1944 in 26 states, more in 17, and the same number in 5. Ducks Unlimited has repeatedly headlined the idea that the poorer hunting of the past several years has been due to “freak weather,” “the vagaries of migration,” and the like (*D. U. Quart.*, for example, the issue for Spring, 1946, p. 1; and *The Duckological*); the organization claims that the fall population in Canada in 1945 reached “about the same number as in 1944,” despite the fact that its own observers reported a markedly lessened flight through the United States in the fall of 1945 (*The Duckological*, 15 March 1946).

In short, reproduction is not keeping pace with destruction. In outline, the situation is this:

1. Given an adequate breeding stock, water is the most important single factor governing breeding success. The waterfowl population dropped to its lowest recorded level during the last major drought. From January 1935 until January 1944, during a wet period, it increased from less than 30,000,000 to about 125,-

000,000 (145,000,000 before the 1943 hunting season), according to Fish and Wildlife Service estimates. A new drought has begun. Despite the extensive water restoration program of the Canadian government and the smaller one of Ducks Unlimited, last winter the population was estimated at 80,000,000 at the close of the hunting season. And the drought has not yet been broken.

2. It is estimated that 70 to 80 per cent of the ducks and geese breed north of the United States. It follows that waterfowl management here cannot quickly improve breeding success to any marked degree. It can, and must, influence the factors causing destruction. The restoration of feeding and resting areas along the several migration routes, and of wintering grounds, are essential parts of this program. Although the northern breeding grounds offer a more spectacular problem, their complete restoration could not save a population which had no place in which to winter.

3. The hunters' kill must be governed by the size of the waterfowl population. With a reasonably large breeding stock to start with, if breeding success can be raised or migration- and wintering-losses lowered, the hunters' kill can safely be increased: such was the case between 1935 and 1944. Breeding success has been hard hit by drought. It is the *total* of all losses that determines how many will return to breed next year: of these, the hunters' kill can be lowered most quickly and surely. Hunting restrictions were increased this year.

4. When the rains come again, there must be breeding stock enough to make use of the improved circumstances. It takes ducks to produce ducks.

Some may argue that since drought has reduced the continental carrying capacity for waterfowl, there is a large surplus of doomed birds which may as well be harvested; or that, on the theory of flyway segregation, certain states should be permitted much larger kills than others. Waterfowl ecology is still too little understood to allow such proposals to be taken seriously. Local concentrations—"Plenty of ducks on my old hunting ground; what's all this talk of a shortage?"—may confuse the issue. During the next few years there will be no easy way to an understanding of the situation, and no simple remedy for it. The conservative course will be to work harder than ever on the known ways of increasing the population, to try harder than ever to find new ones, and to make certain that there will be enough breeding stock when the marshes are filled again.

These are the hard facts of the situation. If they are lost sight of, waterfowl may fall back to the low of 1934. They are about half way there already.—F.N.H.

WILDLIFE CONSERVATION COMMITTEE

Frederick N. Hamerstrom, Jr., *Chairman*

#### WILSON ORNITHOLOGICAL CLUB LIBRARY

The following gifts have been recently received. From:

Rev. J. W. Baechle—11 reprints and bulletins	Ernst Mayr—1 reprint
Ralph Beebe—5 pamphlets	Harold Michener—16 reprints
William H. Behle—11 reprints and pamphlets	Margaret M. Nice—7 reprints and bulletins
Victor H. Cahalane—4 reprints	R. A. O'Reilly, Jr.—1 reprint
W. M. Davidson—1 book	Frank A. Pitelka—23 reprints and bulletins
Walter P. Hill Estate—20 books, 90 journals	Hustace H. Poor—1 reprint
Verna R. Johnston—2 reprints	Thomas L. Quay—2 journals
Leon Kelso—1 leaflet	Alexander F. Skutch—19 reprints
	Josselyn Van Tyne—5 reprints