

BIRDS FALL VICTIMS OF THE MILD WINTER

In a summary of early Winter bird movements in New England, Edward Howe Forbush, director of the Division of Ornithology of the Massachusetts State Department of Agriculture, says:

"The Summer and Fall were so remarkably dry that many fruits and seeds failed to develop, and there is a widespread dearth of food for birds in the north. All through Northern New England and much of the inhabited part of the Eastern Provinces of Canada there are few acorns or nuts and comparatively little wild fruit.

"There was so little rainfall in the breeding season that there was no water in the swamps, and many of the trout brooks ran dry. Shallow ponds where ducks feed dried up. Low water about the shallow margins of larger ponds decreased the supply of food for fresh water fowl, so that comparatively few young ducks were raised.

"The season has been so mild that very little has been heard of the Arctic gulls. Ducks and geese have remained in the north longer than usual. Whenever a sudden frost has closed the small ponds many ducks and geese instead of going south, have gone to the open waters along the coast of Labrador, the Gulf of St. Lawrence, the St. Lawrence River and Lake Champlain, coming back to the ponds again when milder weather melted the ice. The greatest goose migration of the season came along the Massachusetts coast in Christmas week.

"Chickadees seem to be the most common and widely distributed birds of the month. A few remain as far north as Vilmontel, Quebec, only 150 miles from James Bay. Land birds generally are scarce this Winter, as there is not food enough to hold them."—*New York Times*, Jan. 20, 1924.

It was reported today by farmers who own large orchards in northern Worcester County, (Mass.), that the recent snow fall has driven out of the woods pheasants and partridges, and they are doing much damage to trees by eating the buds, a further evidence of the lack of food for wild game.—*Worcester Telegram*, Feb. 10, 1924.

CO-OPERATIVE OBSERVERS' DEPARTMENT

I would strongly urge all Co-operative Observers to obtain at least one self-recording instrument. For several years I have had a thermograph in the shelter and it had greatly increased the interest in the rise and fall of temperature. I have also had a barograph in use for twelve years, and I can assure those who have had no experience with such instruments that they will add a new interest to the daily meteorological round.

It is impossible to ascertain the tendency of the temperature, whether it is rising or falling or steady, from the mercurial thermometer, and the same applies to the barograph compared with the mercurial barometer.

To be sure these instruments are somewhat costly, but with normal care they will last a long time. Charts can be procured from the Weather Bureau at Washington for a nominal charge.

Self-recording instruments are not as accurate as mercurial. From time to time they require slight adjustments. For 1922 the difference between my thermograph and mercurial thermometer was 1.2 degrees. Each week I check off the readings of the thermograph chart with those of the maximum and minimum thermometers and keep a record of them in a separate book.—*Charles Decker*, Co-operative Observer, Narberth, Pa.