

The present paper is in Russian and German the latter text being much condensed.—W. S.

Food of Ring-necked Pheasant in Nebraska.—Prof. M. H. Swenk has published¹ upon a study of the analyses of 100 crop and gizzard contents of Pheasants collected throughout the year in Valley County, Nebraska. About nine-tenths of the food was vegetable, chiefly cultivated grains with corn alone forming two-thirds of the total. The animal food was of great variety, no item being very outstanding in quantity. Professor Swenk's conclusion is: "If the pheasant population is permitted to increase unrestrictedly in Nebraska, there will no doubt be increased injury to crops, and consequently augmented complaints by farmers; but if the birds are held down to reasonable numbers they will probably on most farms render a sufficient service by destroying injurious beetles, cutworms, grasshoppers, and other noxious insects as on the whole to balance, approximately, the harm they do to crops."

The author has done a service in summarizing the results of previous writings on the food of Ring-necked Pheasants in the United States.—W. L. M.

Systematic Bird Conservation in German Forests.²—Highly developed, but not widely known, is the system of bird conservation adopted by the Germans as a part of their famous silvicultural methods. The present article is a rather detailed exposition of the methods in use in the Hardt mountains, which form the northern part of the Vosges. In all essential respects the methods are those worked out by Baron von Berlepsch.

The present author, Freiburger, a former forest ranger of Germany, considers the various species of Titmice as the most important birds in relation to the welfare of the forest. Artificial nesting-boxes for this group are provided, the ultimate goal being four boxes per hectare (2.47 acres), attainable by placing a box at each corner of 50-meter quadrats. Four pairs of Titmice per hectare is regarded by the author as insurance against any outbreak of insects. The von Berlepsch imitation of Woodpecker holes is lauded to the total exclusion of any other type of bird-house. In the matter of winter feeding-shelters, the same praise is given to the von Berlepsch creation. Winter feeding is found to carry the species through in greater abundance, as well as to induce many to nest in the vicinity of the shelter. Depletion of the birds due to hard winters is almost entirely made up for at the end of the next breeding period, on account of the great fecundity of the species.

At the beginning of the war there were in the Hardt range 570 hectares (c. 1407 acres) of evergreen and 30 h. of deciduous forest under a system of

¹The Food Habits of the Ring-necked Pheasant in Central Nebraska, Research Bul. 50, Nebr. Agr. Exp. Sta., 33 pp., 4 figs., Nov. 1930.

²Freiburger, Wilhelm, Die Einrichtungen des planmassigen Vogelschutzes, Allgemeine Forst- und Jagd-Zeitung, v. 103, pp. 232-246, figs. 1-4. June, 1927.

intensive bird conservation. Fifteen winter feeding-stations were established on 800 hectares (c. 2000 A.), a ratio almost twice as great as the one recommended.

The most outstanding feature of the system is perhaps the large-scale method of providing water for the birds. After finding the method of deepening the already existing "sloughs" to be a failure, numerous shallow wells were driven, each with a trough, into which water was pumped by a light, movable pump. As early as 1900, this system was in use by the city of Mannheim, and was started by Heidelberg in 1909, installed chiefly for the sake of the Pheasants. The preserve in the Hardt range was provided with one such bath per 30 hectares, at the beginning of the war; eventually it is planned to have from 25 to 36 per hectare. Altogether some twenty paragraphs are devoted to the detailed description of the water-supply system.

The abolition of "vermin" (without a definition), of stray cats, and the poisoning of mice are practiced. Careful planting of trees and shrubs for shelter and food is treated, together with the names of the most important food-bearing shrubs.

For the practical mind, the cost of adequately equipping and maintaining an area of 1000 hectares as a bird sanctuary is carefully itemized. Establishment costs total 13,000 marks (about \$3,250), and maintenance 1300 marks annually.

One gathers from the article that Germans are alive to the value of birds in forest conservation and are bringing the full force of German efficiency to bear upon adequately preserving and protecting these allies.—A. SIDNEY HYDE.

The Ornithological Journals.

Bird-Lore. XXXII, No. 5. September-October, 1930.

The Dickcissel's Secret. By Dr. Frank N. Wilson.—Account of nesting in southern Michigan with excellent photographs.

Mourning Dove Behaviour. By W. H. Bergtold.—Actions of a tame bird.

Chumming with a Blue Jay. By Walter Hopkins.—Another tame bird. 'Casey'—A Herring Gull.—Still another! By J. N. Reddin.

The Blue-Wings. By William A. Paff.—Nesting at Easton, Pa.

The Glare of the Headlight. By E. D. Nauman.—A number of birds nesting from nine to twenty-five feet from the railroad rails.

In the Audubon Department Dr. A. A. Allen has another of his admirable bird biographies treating this time of the Pied-billed Grebe with excellent illustrations from his camera.

The colored plate represents the Ring-necked Pheasant.

Bird-Lore. XXXII, No. 6. November-December, 1930.

Birdcraft Sanctuary after Sixteen Years. By Mabel Osgood Wright.