

the Wisconsin Conservation Commission and Dr. Gross with his long experience with the Heath Hen was an admirable selection for the task.

The subject is approached from every angle and details are presented on factors controlling Wisconsin Grouse, the climate, soil, and vegetation of the state, distribution and abundance of the bird, laws pertaining to it, migration, parasites and disease, food, and a complete life history.

Attention is called to the cycle of abundance that seems to exist in which this and other upland game birds, notably the Ruffed Grouse, abound one year and are very scarce the next, the reason for this condition being still unexplained. Refuges are urged as an important factor in increasing the birds but the need of restoring the marsh lands in order to improve Grouse conditions and reduce fire hazards is most urgent. As to predators Dr. Gross wisely says "The indiscriminate wholesale destruction of all predators is to be rigidly avoided as such a procedure is destined to upset the balance of nature in such a way as to act as a boomerang to the objective. The shortening of the hunting season is also urged as a necessity and in this connection Dr. Gross says: "Too often we may think of game birds as just so many birds to kill and overlook the interests of other citizens who value the birds in a different way. The farmer who protects and feeds the Prairie Chickens because he likes to see them on his farm has rights which we should all respect." If the two quotations above noted were taken to heart by our game commissions and game breeders many of our wild birds would be better off and we should not be in danger of having to reap the whirlwind that will follow the present destruction of nature's balance.

Dr. Gross has given us an admirable report and we hope that the Wisconsin authorities will follow the advice that he has laid down and that ornithologists and others in Wisconsin will cooperate in gathering the detailed data that is necessary to properly carry out the salvation of this valuable and interesting bird.—W. S.

Koslova on Birds of Trans-Baikalia and Mongolia.—In a paper¹ of 396 pages entirely in Russian E. V. Koslova describes the birds of the Trans-Baikal country, northern Mongolia and central Gobi. The annotations are very full and there are lists of the specimens obtained on explorations which were made in 1924 and 1926. A number of half-tone reproductions of photographs illustrate the character of the country as well as skins of several species of birds.—W. S.

Annals of the Zoological Museum of the Academy of Sciences U.S.S.R. 1928.—This volume entirely devoted to ornithology and wholly in Russian opens with a memoir of the late Peter P. Sushkin with a portrait and bibliography. Other papers are 'The Bluethroats of the Eastern

¹ Acad. Sci. U.S.S.R. Materials of the Commission for the Investigation of the Mongoliana and Tuvinsk Peoples' Republics and the Buriat-Mongolian Autonomous S.S.R. No. 12.

Palaearctic,' by A. Tugarinow, in which four new subspecies of *Cyanosylvia suecica* are described; 'Supplementary Notes on the Birds of Altai,' by L. A. Sulpin; 'Materials for a study of the Ornithology of Southern Tzaritzin,' by A. Argipulo; 'Reciprocal Relations between the races of *Emberiza schoenicla* and *E. pallasi*,' by L. A. Portenko, with descriptions of several new forms; 'The Birds of Southeastern Transbaikalia,' by B. Stegman, an extensive paper with an annotated list of 303 species and subspecies; 'The Races of *Emberiza aureola*,' by V. Stancinskij, with descriptions of new forms; 'New Birds from Northern Mongolia,' by A. Tungari-now; 'Contributions to the Ornithology of Central Asia,' by E. Koslova; 'The Siberian Field Larks,' by A. Ivanov, with description of a new race; 'Contributions to a Knowledge of the Ornitho-geography of Southwestern Asia,' by P. V. Serebrovskij.—W. S.

Ognev and Worobiev on the Vertebrate Fauna of Woronesh.—This paper entirely in Russian treats of the mammals, birds and reptiles of the Woronesh Government, Russia, and their distribution. New forms of the first group are described.—W. S.

The Illinois Audubon Bulletin.—This admirable report¹ contains as usual much of general interest to the ornithologist as well as to the conservationist. Dr. Gross has a plea for saving the Prairie Chicken, and W. I. Lyon an account of the white Heron invasion of the past summer while Jesse L. Smith reports a meeting of mosquito exterminators and bird protectors which to our mind is the most important feature of the report. The draining of marsh land along the Atlantic coast in the interest of mosquito extermination has been carried on with such a lack of knowledge of the factors involved that any move to hold this work in check elsewhere should receive the hearty approval of every lover of nature. Over large areas in New Jersey where no mosquitos bred the native flora, thousands of birds which fed on the insects, and the entire population of toads which are also insect eaters have been exterminated. Let us hope that Illinois may succeed in saving her marsh lands! Mr. A. M. Baily has a short paper in which the same matter is incidentally discussed while his excellent photographs adorn the report.—W. S.

Williams's 'The Migration of Butterflies.'—This important work,² while appealing more directly to the entomologist, is well worthy of the attention of the student of bird migration since it brings up many problems which concern birds as well as butterflies, while the author in his concluding chapters discusses the resemblance in migration in the two groups. It is pretty conclusively shown that migration in butterflies is voluntary and

¹ The Audubon Bulletin Published by the Illinois Audubon Society. No. 21 1931. Pp. 1-39.

² The Migration of Butterflies. By C. B. Williams. Oliver and Boyd. Edinburgh: Tweddale Court, London, 33 Paternoster Row, E. C. 1930. Pp. 1-xi + 1-473. Price 21 shillings net.