

fully by all conservationists. Dr. Grinnell's key note is that "No amount of game laws will bring an improvement in the output of wild animal life unless there be provision for adequate food and shelter." If live stock are allowed to browse over national forests, eating up the food and tramping down the cover wild life will inevitably disappear. "You cannot" he goes on to say "make two things of the same biological predilections [like cattle and deer] occupy the same space at the same time."

We heartily agree with Dr. Grinnell but we sometimes fear that no amount of argument or laws will avail and that wild life in another generation or two will have become but a sad remnant of what it is today to say nothing of the past.

Birds are vitally affected by this condition which Dr. Grinnell deplors.
—W. S.

Murphy's Reports on the Whitney South Sea Expedition.—Dr. Murphy has recently written on interesting account¹ of the bird life of Polynesia illustrated by photographs taken by Rollo H. Beck leader of the Whitney South Sea Expedition. Some of the discoveries of the expedition are described, among which may be mentioned the finding of many of the little Sandpipers, (*Aechmorhynchus parvirostris*) on remote atolls of the Tuamotus, a species originally found by Peale on the U. S. Exploring Expedition and represented by not more than five or six specimens in all the museums of the world.

In a second paper² Dr. Murphy describes a new Kingfisher secured by the expedition on Niau Island *Todirhamphus gertrudae* (p. 1).—W. S.

Crosby on Bird Banding.—Mr. Maunsell S. Crosby has an interesting popular article³ on bird banding in a recent number of 'Natural History' illustrated by many photographs.

There are many quotations from the numerous published papers on the subject and an interesting series of Junco records giving dates of banding and recovery of a number of individuals by the author, at Rhinebeck, N. Y. One bird has been shown to have been present on four of the five winters during which the traps were in operation but only 8 to 15 per cent of the banded birds have been caught in a subsequent season the bulk of birds caught being new individuals each year.

The Illinois Audubon Bulletin.—The neatly printed Bulletin⁴ of the Illinois Audubon Society for Spring and Summer, 1924, is fully up to its predecessors in beauty of illustration and typography. The contribu-

¹ The Whitney South Sea Expedition. A Sketch of the Bird Life of Polynesia. By Robert Cushman Murphy. Natural History, September-October, 1924, XXIV, No. 5 pp. 539-553.

² American Museum Novitates No. 149. November 12, 1924, pp. 1-2.

³ Bird Banding. By Maunsell S. Crosby. Natural History, XXIV, No. 5, 1924, pp. 605-617.

⁴ Illinois Audubon Society, Chicago, Ill. Price———

tions are numerous and deal to some extent with wild flowers and general nature conservation as well as with birds which of course are the principal interest.

There are several papers in defence of the Crow and deploring the attempts at "extermination." An attractive account of 'Bird Haven' the home of Robert Ridgway, at Olney, Illinois, is marred by the consistent misspelling of the ornithologist's name.—W. S.

Quail Investigation in 1924.—The first report¹ of the Quail investigation conducted by the Biological Survey in cooperation with sportsmen of Thomasville, Ga., and Tallahassee, Fla., is before us, covering the period from March to September, 1924. The work has been under the direction of Mr. Herbert L. Stoddard. Over 100 Quail were caught and banded in order to ascertain the extent of their migration and investigation of their food habits was begun.

Some 81 nests were studied, the average number of eggs proving to be 14, and ranging from 8 to 24; incubating hens were found to leave the nest for food only once a day, usually in the afternoon. From 69 to 75 per cent of the nests were destroyed but as yet the chief destroyers have not been determined although evidence points to the cotton rats, house cats and opossums.

Investigations were also carried on regarding the artificial rearing of Quail, by visiting game farms in several localities in the United States.

This report is merely preliminary, but outlines the plans that will be carried out as the work proceeds.—W. S.

Report of the Chief of the Biological Survey. This closely printed much condensed report² is well worthy of careful reading so full is it of facts and data.

Under the heading of wild animal pests we learn that no less than 237 mountain lions were killed during the year making 1236 since the Government began the work of extermination in 1915, while 3448 bobcats and 59 Canada lynxes were killed in the past year alone.

Investigations of the food habits of birds show that many ducks on Chesapeake Bay died of phosphorus poisoning as a result of bombs dropping into the water from the Aberdeen Proving Grounds. Laughing Gulls are exonerated from the charges of destroying fish and crabs, but Blackbirds are found to be very destructive to the rice crop in Louisiana.

A biological survey was carried on in the isolated mountain ranges of southern Arizona. Chalacas and Ocellated Turkeys were introduced on Sapelo Island, Ga., where the former are reported to have bred but the latter died.

¹ Progress on Cooperative Quail Investigation, 1924. By Herbert L. Stoddard. 1925, pp. 1-22, numerous illustrations.

² Report of the Chief of Bureau of Biological Survey. By E. W. Nelson. December 2, 1924, pp. 1-39.