

This report contains a review of previous work on the subject, a complete list of the contents of each crop, annotated systematic lists of animal and vegetable food items, and a summary by groups with percentage averages of items.

The chicks were divided into five groups according to weight: Group 1, from hatching to 25 grams (up to three days old); group 2, 26 to 50 grams (4 to 9 days); group 3, 51 to 100 grams (10 to 20 days); group 4, 101 to 200 grams (20 to 30 days); and group 5, 201 to 400 grams (more than 30 days).

As the young grow, vegetable matter increases, 47.50, 51.69, 68.11, 64.89, and 94.64 percent, while insect matter decreases, 52.50, 48.31, 31.89, 35.11, 5.36 percent—in groups 1 to 5 respectively. Forty-nine items of plant life and forty of insect life are recorded, the former in all but five cases being identified to species, the latter, in all but one instance, to the family only.

Ecological notes accompanying the annotated lists indicate which plants support desirable insect food for the chicks.

The percentages of foods are computed by weight, while wet, instead of by bulk, thus differing radically from the American method. Gizzard contents are not considered on the ground that the insect matter is too finely ground for determination.

This is the most thorough piece of work in existence on the food of Ptarmigan chicks and one of the best on the food of young of any gallinaceous bird.—LEON KELSO.

Lockley's 'Island Days.'—This delightful account¹ of an ornithologist's life on his little mile-long island off the Welsh coast will be especially interesting to American ornithologist because some of his breeding birds are of holarctic distribution, while others are very closely related to species found in North America. It gives us, for instance, intimate views of Manx Shearwaters, Storm Petrels, Oyster-catchers, Great Black-backed Gulls, Kittiwakes, Razor-billed Auks, Atlantic Murres, Puffins, and Ravens, besides casual glimpses of many other birds more or less familiar, by name at least, to Americans. Mr. Lockley's total bird-list for his island numbers 120 species, including migrants and casuals, which seems not bad for a small island boasting only one tree, and that a creeping willow, and lying two miles from the mainland. His Puffins have increased under protection to a population of more than forty thousand. He finds that the old Puffins desert their young after feeding them to the proper size, and that the young live on their own fat for four or five days and then leave their burrows at night and walk along the cliffs till they come to a favorable place to take off for their maiden flight to the sea. In the water they are never found in company with their parents but escape the Great Black-backed Gulls and other enemies by spending about half their time under water. Mr. Lockley keeps on the watch for breaches of the Oil Pollution Act, and one

¹ *Island Days: A sequel to 'Dream Island.'* By R. M. Lockley. With sketches by Doris Lockley and fourteen plates from photographs. London, H. F. & G Witherby. 1934. Pp. 1-120.

of his reports resulted in a conviction and fine of £25 and costs. For the control of predatory Gulls he advocates the sterilization of their eggs as soon as laid. He has proved by experiment that after sitting five weeks on sterilized eggs a Gull loses her power to lay again in the same year. The little book is by no means confined to bird matters but it makes pleasant as well as profitable reading for the ornithologist.—F. H. A.

Other Ornithological Publications.

Brodkorb, Pierce.—A New Pitta from Palawan, Philippine Islands. (Occas. Papers Mus. Zool. Univ. Michigan, No. 279, March 23, 1934.)—*Pitta persola* (p. 1) belonging to the *P. bonapartene-sordida* group.

Brodkorb, Pierce.—Geographical Variation in *Belonopterus chilensis* (Molina). (Occas. Papers Mus. Zool. Univ. Michigan, No. 293, June 29, 1934.)—Four races are recognized of which *B. chilensis fretensis* (p. 12) from Magellanes, Chile, is described as new.

Burkill, H. J.—The Great Skua (Scottish Naturalist, July–August, 1934.)—Discussion of its activities in killing sheep.

Clarke, C. H. D.—Cause of Mortality of Young Grouse. (Science, No. 2071, September 7, 1934.)—Accompanied with a very high occurrence of a Leucocytozoon.

Dale, E. M. S.—Some 1931 Bird Notes from London, Ontario. (Canadian Field Naturalist, September, 1934.)

Elliott, Charles N.—Deep South Ravens. (American Forests, August, 1934.)—Account of their nesting in the Georgia mountains.

Horlacher, W. R.—Studies on Inheritance in Pigeons. VII. Inheritance of Red and Black Color Patterns. (Genetics, July, 1930).

Johansson, Ivar.—Studies on Inheritance in Pigeons. VI. Number of Tail Feathers and Uropygial Gland. (Genetics, March, 1927.)—Variations from the normal 12 feathered tail to 13 and 14 occurred and some birds lacked the uropygial gland, and in both cases this variation seemed due to an inherited tendency.

Lewis, Harrison F.—Notes on Birds of the Labrador Peninsula in 1931, 1932, and 1933. (Canadian Field Naturalist, September, 1934.)

Linsdale, Jean M. and Sumner, E. L., Sr.—Variability in Weight in the Golden-crowned Sparrow. (Univ. Calif. Publ. in Zool., XL, No. 5, February 2, 1934.)—On the basis of 464 records females in winter are lighter than males; preceding spring migration there is an increase in weight of individuals; there seems to be little daily variation due to digestion; the greatest weight is reached in late afternoon or midday; heat in excess causes loss of weight. "There is a suggestion that weight measurement offers a means of gauging response of birds to heat and of determining possible relation of this factor to delimitation of range or to initiation of migration in spring."

Longstreet, R. J.—Wilson's Plover. (Florida Naturalist, July, 1934.)—Based mainly on the author's observations in Florida.