

just outside the large plate window of the dining room where breakfast was served to the human guests was continually patronized by numerous avian visitors. These latter represented some ten or more species—thrashers, thrushes, wren-tits, towhees, etc.—all wild birds, behaving normally. The differential lighting on the two sides of the window, darker within than without, doubtless in part accounted for the charming obliviousness of the birds. Within, the considerable company of people was able to observe the birds closely under most comfortable conditions, even to comment upon them freely in ordinary conversational pitch of voice, without alarming or distracting the principals in the nature play being acted outside."

As an outgrowth of observations made at this window, Mrs. Allen began to band birds with bands received in May 1918 from H. H. Cleaves. She then became the first bander in California. Her own account of this early banding, as published in 1922 (*Univ. Calif. Chronicle*, p. 102) included the following information. "The first bird to be marked in this way was a Brown Towhee, which was accidentally caught February 11, 1919. Since that time his mark of identification is easily seen as he feeds on the table, and he is never missing. The next bird to be banded was a Fox Sparrow which was caught in a basement room, March 29, 1919. He migrated with his kind to Alaska soon after, but returned to his winter boarding place November 3, 1919. On April 24, 1920, he started on his second summer trip to Alaska and returned safely again on November 7, 1920. Two Golden-crowned Sparrows were likewise banded March 3, 1920, made their summer journeys to Alaska, where they raise their young, and returned, one on October 23, the other November 15, 1920, and one again on October 25, 1921." It is no wonder that she concluded that "surprises are certainly in store for those who undertake to do the trapping and banding."

The field course in natural history given at the University by Dr. Harold C. Bryant was attended by Mrs. Allen in 1913, and like others she received new inspiration from it. Later she conducted field groups of her own and these were joined by women whose concern with birds soon grew beyond the casual stage. Her first trip by special aptitude for detecting and analyzing bird sounds was employed to instill permanent interest. Her first trip by automobile was made in May, 1916. This brought many new localities within range of study, but her chief interest remained in the home surroundings. After 1919 she made trips and longer visits to Boulder Creek, in the Santa Cruz Mountains, an important secondary base for study. The next year Mrs. Allen began to prepare the Season Report on the San

Francisco Region for Bird-Lore. Through 1936 she assembled eight-two of these reports and she continued to supply information for subsequent ones through the remainder of her life. This work gave her a thorough acquaintance with the status of every species in the area.

The Cooper Club History written by Swarth traces the record of Mrs. Allen in the club, as follows: "Early in the history of the Northern Division one or two women were elected to membership at different times. On rare occasions they attended meetings, but the atmosphere was evidently not congenial and feminine memberships at that period did not last long. But times have changed! Mrs. Amelia S. Allen was elected to membership in 1913, and was elected secretary of the Northern Division in 1916. For eight years she remained in this arduous and thankless position, giving such secretarial service as the Northern Division had never had before. No wonder that the termination of this period called for a year of rest abroad! Upon her return in 1925, Mrs. Allen was elected vice-president, and in 1926, president, in recognition of her notable contribution to the Club's welfare, the first woman to hold such office in either Division."

In the minutes of the Northern Division meeting on January 24, 1924, at the termination of her long term as secretary, it is recorded that Mr. Swarth called attention to that service and remarked that "doubtless Mrs. Allen would be surprised to learn that the Cooper Club had for once carried through a piece of business without either her knowledge or her help." She was then presented with a pair of high-grade six-power binoculars and two books: Dresser's *Manual of Palaearctic Birds*, and Ramsay's *Guide to the Birds of Europe and North Africa*. These were for use in her contemplated year of bird study in the Old World. An extended report on these experiences was presented at the regular meeting for August, 1926. Three of these trips to Europe, in 1905-1906, 1924, and 1937, brought her many new experiences and an intimate acquaintance with birds of Europe, especially in the South.

Bird students in the San Francisco area have become accustomed to help and to be helped by others of like interests, but among them all none has contributed to the welfare of the group in so many ways and for so long a period as has Mrs. Allen. Her willingness to share knowledge and experience is not likely to be replaced soon.—
JEAN M. LINDSALE.

PUBLICATIONS REVIEWED

"The Family Anatidae," by Jean Delacour and Ernst Mayr (*Wilson Bull.*, 57, 1945:3-55), is a very timely review of the ducks of the world.

As it will have a great influence on the future arrangement of the families and species, a careful estimate of the changes proposed should be in order.

These changes are quite revolutionary and are based for the most part not on structure but on color patterns of adults and downies and especially on affinities in courtship and display. No one can be better qualified than the senior author in regard to the latter owing to his unrivaled opportunities with the many species which he has kept in captivity.

One structural character is regarded as fundamental, the scutellation or reticulation of the front of the tarsus. Mainly on this character the family is divided into two subfamilies, Anserinae and Anatinae; the former, besides the swans and true geese, includes the Dendrocygnini, the latter all the rest of the ducks plus many "geese" formerly classed with the Anserinae, such as *Chloëphaga*, *Cyanochen*, and *Alopchen*.

This seems a sound arrangement; the "patterned" downies of these genera are very different from the plain downies of true geese and swans. On the other hand, the just as distinctly patterned downies of *Dendrocygna* are taken from the ducks and placed with the geese and swans.

One biological trait which the authors place a great value on is the carrying of the young on the back of the parents; this is regarded as being peculiar to the swans, but many ducks have the same habit. Many observers must have seen a merganser with two or three downies on her back while the rest of her brood were streamling in a tail behind.

Genera are murdered in good, hearty fashion. In regard to the surface-feeding "tribe," Anatinae, everything is included under *Anas* except *Hymenolaimus*, *Malacorhynchus*, *Stictonetta*, and *Rhodonessa*. This "all or none" treatment is warrantable and the close relationships of the blue-winged group, the Cinnamon, Garganey, and Blue-winged teals, with the Shovellers are correctly interpreted.

But the authors cannot have seen the Blue-duck, *Hymenolaimus*, with its unique, forward-looking eyes and peculiar habits in life; nor are the spherical eggs of *Rhodonessa* taken into consideration.

The subfamily Anatinae is divided into "tribes." These are not in accordance with any previous arrangement.

Tribe 1. Tardorni. Sheldrakes. Besides the sheldrakes, the Egyptian, Orinoco, Abyssinian and South American "geese" are included; also the Crested Duck formerly included in the restricted genus *Anas*. The Cape Barren Goose and steamer ducks are added as "aberrant species."

Tribe 2. Anatinae. River ducks.

Tribe 3. Aythyini. Pochards. This is a natural

group and nearly all will concur with the reduction of genera to two, *Netta* and *Aythya*. The inclusion of the Rosy-billed Duck and the Southern Pochard in *Netta* may be objected to by some; the females of these are far more like *Aythya* than *Netta* in life. The statement that the Ring-necked Duck and the Tufted Duck are closely related is undoubtedly based on the superficial resemblance of the males; the females are very different, while the downies are so different that they must be placed definitely at opposite ends of the genus.

Tribe 4. Carinini. Perching ducks. This is a new group and probably a sound one. It includes genera that formerly had no acknowledged relationships, *Chenonetta*, *Aix*, *Nettapus*, *Sarkidornis*, *Plectropterus* and *Carina*, the last including *Pteronetta* and *Asarcornis*. The Brazilian Teal is removed from the Anatinae and included here in the revived genus *Amazonetta*.

Tribe 5. Mergini. Sea ducks. This includes, besides the mergansers, the genera *Somateria*, *Melanitta*, *Histrionicus*, *Clangula*, and *Bucephala*, all of which have undoubted affinities. A strong point is that all take two years to mature; another is that mergansers and golden-eyes readily hybridize. But exception should be taken to the claim that none of these have speculums; these are present in both the Harlequin and Steller eiders; conversely, the Anatinae are described as always possessing speculums; the gadwalls have none. In the opinion of this reviewer the scoters are not a "very compact group"; the Old World Black Scoter and the American Scoter are distinctly different from the others in life and courting actions; the tracheas and voices are also widely divergent. The downy of the Hooded Merganser does not resemble those of the others of the group; the eggs are also different from the others, including those of the Smew.

Tribe 6. Oxyurini. Stiff-tailed ducks. These ducks form a very distinct and homogeneous group and should be placed in a separate subfamily.

Tribe 7. Merganettini. Torrent ducks. More investigation is required to place these curious ducks.

In the summary at the end of the paper many questions are discussed. Not much stress is placed on the eclipse of males and no mention at all is made of the eclipse of females. Interesting facts are recorded regarding fertility and sterility of hybrids; and the final note is a plea for further research both in the biology of the family and their anatomy, to which we can all subscribe.—
ALLAN BROOKS.

David Lack's study of "The Galapagos Finches (Geospizinae)" (Calif. Acad. Sci. Occ. Paper no. 21, 1945:viii + 158 pp., 1 map, 26 figs., 4 pls.)

contributes importantly to the fields of breeding behavior, ecology, and speciation. Since the time of Darwin, who discovered them, this group of finches, endemic to the Galapagos Archipelago off the coast of Ecuador, has been investigated by a series of distinguished students—Ridgway, Rothschild and Hartert, Snodgrass and Heller, Gifford, Lowe, Sushkin, Swarth, and others. But a modern interpretation of the specific relationships of the Geospizinae, stressing biology rather than taxonomy, has been needed.

New data offered by Lack are based, first, on field studies on four of the Galapagos Islands, but mainly Indefatigable, from mid-December, 1938, to early April, 1939, and second, on statistical studies of extensive collections of geospizids in American and British museums. The latest comprehensive systematic review, that of Swarth, is followed by Lack; most of the taxonomic changes made by the latter author are simplifications. The group Geospizinae consists of thirteen species and six genera; one monotypic genus, *Pinaroloxias*, occurs on Cocos Island, about 500 miles northeast of the Galapagos.

The main chapters deal with breeding behavior, ecology, coloration, variations in bill and wing, and general evolutionary problems. Indifference of the finches to human presence and individual differences in plumage, bill, and song enabled the author and his aid, W. H. Thompson, to observe the birds closely. "The breeding cycle follows a typical territorial passerine pattern" (p. 20). "Breeding habits of the different genera and species . . . are extremely similar" (p. 37). "Breeding habits have been far more conservative than food habits in the evolution of the Geospizinae" (p. 133). "Plumage characters have been much more conservative in evolution than size and shape of bill" (p. 134). But "many bill differences, especially those between closely related species, cannot be correlated with food differences" (p. 133). "Birds have not reached the Galapagos Islands via a land bridge. . . . The species of Geospizinae are not as sharply defined as in mainland birds, but they do not show the degree of overlapping or of hybridization sometimes claimed for them, and there is no need to assume for them some quite exceptional method of evolution" (p. 135).

Lack's efforts, and those of the editors, necessitated by wartime circumstances, in preparing the manuscript for publication, have resulted in a major contribution meriting careful study. A number of problems and questions are posed by Lack's stimulating discussions of this unusual group of birds; the exceptional opportunities which they afford would more than compensate for another extended period of field study. "Further collecting is needed to establish the position of some forms" (p. 6). "Attempts to cross-breed

the birds in aviaries on the Galapagos failed" (p. 1). Since Lack's "visit did not cover the non-breeding period," more observations, especially on feeding and flocking, are needed. The same applies to the biology of species claimed to have identical or similar ecological requirements.—FRANK A. PITELKA.

MINUTES OF COOPER CLUB MEETINGS

NORTHERN DIVISION

JUNE-JULY.—A combined June-July meeting of the Northern Division of the Cooper Ornithological Club was held on Thursday, July 5, 1945, at 8:00 p.m. in Room 2503, Life Sciences Building, University of California, Berkeley, with President W. I. Follett in the chair. The minutes for May were read and approved.

Five proposals for membership were read: Fredonia Buell, 2325 McKinley Ave., Berkeley, California, proposed by Hilda W. Grinnell; Chapman Grant, 2970 6th Ave., San Diego 3, California, proposed by Alden H. Miller; Mrs. M. Vincent Mowbray, 350 Congress Ave., New Haven 11, Connecticut, proposed by M. Vincent Mowbray; Betty Ruth Schuck, Department of Zoology, University of California, Life Sciences Building, Berkeley 4, California, proposed by Jean M. Linsdale; and Clarence Andrew Sooter, Soil Conservation Service, P. O. Box 1460, Alice, Texas, proposed by Alden H. Miller.

President Follett reported the signing by Governor Earl Warren of two bills opposed by the Club: Assembly Bill 89 provides for the payment of bounties on crows; Assembly Bill 1239 creates the Mt. San Jacinto Winter Authority with power to construct a tramway for skiers in this State park.

Opening the field observations, Mrs. G. Earle Kelly reported that on July 4 shorebirds were again present in large numbers and variety in Alameda. A Song Sparrow in Alameda and another in Oakland in June were each feeding a young Cowbird. Commander W. A. Hicks saw a White-headed Woodpecker (female) in Ross on June 24. Dr. Alden H. Miller observed three colonies of murres in Marin County on July 1—one off Double Point, another near the mouth of Bear Valley, and the major colony of about a thousand young and adults one mile north of Bear Valley. Near this last location he also observed the flight under water of Pigeon Guillemots. On June 22, President Follett saw a pair of vultures near Belden, Plumas County, where observation since 1910 had not previously indicated their presence. A California Jay after some months has become tame enough to take peanuts from his fingers. Miss Amy Rinehart reported nesting of the Hooded Oriole in palm trees on Carrington St., near 40th Ave., Oakland, on June 28.