

The Fifty-second Annual Meeting of the American Ornithologists Union was held at the Museum of Vertebrate Zoology, University of California, Berkeley and at the California Academy of Sciences at San Francisco, California, June 19-24, 1939, with a registered attendance of 248. A total of 30 scientific papers were read—many illustrated by colour slides or films. The three days of sessions included a like number of evening entertainments—Open House at the Museum, the Annual Dinner, and business meetings of various sections. On Friday, 108 ornithologists in attendance visited Point Reyes to study nesting colonies of aquatic birds on rocky islands along the Pacific Coast. On Saturday and Sunday 42 visitors travelled to Point Lobos and the Hastings Research Area.

Officers elected for the new year were as follows: President, Dr. James P. Chapin, New York City; Vice-Presidents, George Willett, Los Angeles, and Dr. J. L. Peters, Cambridge, Massachusetts; Secretary, Dr. Lawrence E. Hicks, Columbus, Ohio; Treasurer, Rudyerd Boulton, Chicago, Illinois; Council: P. A. Taverner, Ottawa, Canada; Ludlow Griscom, Cambridge, Massachusetts; and Dr. Alden H. Miller, Berkeley, California.

The Brewster Medal Award was awarded posthumously to Dr. Witmer Stone for his two volumes on *The Birds of Old Cape May*. Two Fellows, Dr. Alden H. Miller, Berkeley, California, and George Willett, Los Angeles, California; one Honorary Fellow, Oskar Heinroth, Berlin, Germany; and two Corresponding Fellows, G. C. A. Junge, Leyden, Netherlands, and David Lack, London, England, were elected.

The 1940 meeting will be held in Boston in October and the 1941 meeting in Denver. The 1942 meeting has already been set for a joint meeting in May at Philadelphia with the 11th International Ornithological Congress.

---

## Reviews

**Birds of Malay.**—Volume IV of *The Birds of the Malay Peninsula*, by Frederick N. Chasen (H. F. & G. Witherby Ltd., London, 1939), is devoted to the birds of the low-country and jungle areas and scrub. The author defends the "artificial division" into which his predecessor, the late H. C. Robinson, led him, and is convinced that the original scheme was wise. But in order to overcome apparent gaps all species occurring in Malayan lowlands have been included in this volume, so that there is some duplication of birds appearing in earlier volumes. Detailed notice of such forms is omitted, however, and reference to their prior appearance given. A compliment to Robinson's first volume follows from the large number of correspondents that its production secured. Some of these observers have proved valuable workers in the field and much detail, particularly of nidification, has resulted.

Included in the volume are some groups having wide representation in Malaya, such as Woodpeckers, Bulbuls, Sunbirds and allied

forms, and Babblers. More than thirty species of this last group—that “carpet bag” of the early ornithologists, the Timaliidae, “a large heterogeneous assembly of birds”—occur. Congeners of Australian forms appear in *Pomatorhinus montanus occidentalis* and *P. olivaceus fastidiosus*, but birds greatly different in appearance as the Fluffy-backed Babbler (*Macronus ptilosus*), show the range in the family. Interesting accounts are contained of the edible birds’-nest industry, several species of the Swiftlets (*Collocalia*) occurring on the Malay Peninsula. *Chalcites basalis* is recorded as a “migrant from the south,” breeding in South Australia, which should obviously be “southern Australia.”

The volume contains 487 pages and 25 artistic plates, many of brightly-plumaged forms.—C.E.B.

**Controlling a Fish-eating Duck.**—Mergansers or Goosanders (*Mergus* spp.) are mostly northern hemisphere ducks, the fish-eating habits of which exercise the minds of anglers in Europe and North America in much the same way as those of cormorants do out here. Most investigations have acquitted the birds of being serious predators on valuable fish but a recent inquiry by J. C. Salyer and K. F. Lagler (“The Merganser—Trout Fancier,” *The Progressive Fish Culturist*, no. 44, March-April, 1939, pp. 43-45, reprinted from *American Wildlife*, Jan.-Feb., 1939) finds some charges proved. The work was sponsored by several organisations, including the University of Michigan, and 157 specimens of the American form of the Common Merganser (*Mergus merganser americanus*) were examined. It was found that, in the particular local circumstances, the winter concentrations of these ducks may be really harmful. In the 157 stomachs were found 327 trout, of an average length of 5.8 in., about 2½ trout per bird. The danger was found to lie in occasional concentrations of large parties on a trout stream, and, as a control, these investigators suggest patrols to break up the large parties and drive the birds downstream to lower waters “where trout are usually fewer in proportion to other fish and damages by the fish duck are less extensive and less significant.” One statement in the report is remarkable: “A fair estimate of the daily food requirements per bird, based on field observations and stomach analyses, is considered to be about 1.5 pounds or about  $\frac{1}{2}$  to  $\frac{3}{4}$  of the body weight.” We should like to hear more about the method by which this difficult estimation was arrived at, as the result given is so much greater than the ratio of daily food requirement to body weight, as known for other birds, that it may be questioned.—D.L.S.

**A Study in Dimorphism.**—A solid contribution to the problem of dimorphism, where two phases occur in a species (such as the white-breasted and wholly dark Arctic Skuas, etc.) is now being undertaken in England, and an interim report by H. N. Southern recently appeared, “The Status and Problem of the Bridled Guillemot,” *Proc. Zool. Soc. London*, vol. 109, Ser. A, pt. 1, 1939, pp. 31-41. The Common Guillemot (*Uria aalge*) exists in two forms, one of which is distinguished by the presence of a white eye ring and a white facial line (“bridled” condition) and the proportions of the two phases vary in different colonies. A team of observers has been making careful counts of the two forms at nesting places around the British Isles. It was found that there was more or less a regular “stepping-up” in the proportion of bridled to non-bridled forms as one went north. Thus there were less than 1% of bridled birds in the south of England and the ratio increased to 26% in Shetland. Farther north, at the Farøes, 34% of the birds were bridled, whilst in Iceland there were 75-80%. A very illuminating map illustrates this geographical variation (originally published in *Nature*, vol. 142, Nov. 26, 1938, p. 951). Inter-breeding occurs freely and as there seem to be no intermediate phases, it appears that one gene controls

the condition, but it is not possible yet to state whether it behaves as a recessive or dominant, and perhaps linkage may be involved. The author discusses the investigation in the light of Julian Huxley's conception of "clines" ("Clines; an auxiliary taxonomic principle," *Nature*, vol. 142, July 30, 1938, pp. 219-226), and its bearings on racial differentiation. Huxley invented the term cline to obviate some of the disadvantages in the use of sub-species, the employment of which "focuses undue attention on named forms as against those which remain unnamed, even when the degree of distinctness is only slightly less in the latter." The cline was proposed as "meaning a gradation in measurable characters." The concept is particularly well illustrated, in colour gradation, by the races of the Australian Thornbills (cf. more particularly the *pusilla* series, *The Emu*, vol. xxxviii, 1938, p. 257). The bridled character in the Guillemot is a cline in a dimorphic ratio.—D.L.S.

**Wildlife Census Methods.**—A very useful compilation of the various methods, in use and suggested, for enumerating populations of wild birds and mammals, has been issued by the National Park Service of the U.S. Department of the Interior ("Wildlife Census Methods applicable to National Parks and Monuments," by Student Technician Bray, 1938, mimeographed, 20 pp.). The data in it does not include methods depending on kill figures, nor is the English and European literature at all adequately treated, but as it usefully summarizes information published in a wide variety of American journals, many inaccessible in Australia, its value cannot be minimized.—D.L.S.

**Seeing in the Dark.**—L. Harrison Matthews and B. H. C. Matthews (*Nature*, vol. 143, June 10, 1939, p. 983) describe an experiment which lends no support to the view, published recently, that the Tawny Owl (*Strix aluco*) "is able to perceive infra-red rays visually, and thus to see in total darkness the small animals on which it preys."—D.L.S.

**The Handbook of British Birds.**—Another part of this work (H. F. Witherby, Editor; F. C. R. Jourdain, N. F. Ticehurst and B. W. Tucker, vol. III—Hawks to Ducks, London, 1939, H. F. and G. Witherby Ltd. Pp. 1-387 + i-x, price, 25/- stg.) includes the Orders Falconiformes (Falconidae, Accipitridae, Pandionidae), Ciconiiformes (Ciconiidae, Threskiornithidae, Ardeidae, Phoenicopteridae) and Anseriformes (Anatidae). More than half the volume is devoted to the Anseriformes, the species of that order being dealt with so extensively as to make obvious the statement of the Editor in the foreword that: "Owing to the peculiar fascination of ducks for ornithologists, aviculturists and sportsmen alike, these birds have been very fully studied and monographed. . . ."

The day has passed when a primary consideration of a hand-book or field-book of ornithology was to have it portable at the expense of desirable information. Modern bird-watching demands more precise data on every aspect of life-histories. For British field-workers, such a need is met by the *Handbook*. The species included are dealt with in the thorough fashion which characterizes the preceding volumes. No efforts are spared to aid identification of "the bird alive." Beautifully-executed colour plates, including a special series of Geese expressly painted by Mr. Peter Scott, picture all species of the Orders dealt with. Perhaps of even greater use to students of Hawks and Ducks, however, are half-tone plates showing plumage patterns of these birds in flight.

Accurate identification is further aided by careful statement of field-characteristics and general habits of each species, with judicious stressing of main characters and differences from similar species. Extensive plumage descriptions are given, covering every phase of seasonal plumage; descriptions are often supplemented by text drawings. A useful section outlines allied forms elsewhere in the world, and other portions cover Voice, Display and Posturing, Breeding, Food, British Distribution, Distribution Abroad, and Migration.

Twenty-eight colour plates depict eighty-eight species. Other colour plates feature feathers from nests of Ducks, and one fine plate shows wing-specula of several Ducks. In addition to half-tone plates of plumage pattern, and one plate showing pellets of Hawks, are maps showing breeding range in Britain of several species, and of migration records.

A number of species recorded in this volume are vagrants to Britain, some very rare, others more or less frequent. Noteworthy is the number of North American species wandering there, such as the American Goshawk, American Bittern, Blue-winged and Green-winged Teals, American Widgeon, Buffle-headed Duck and Hooded Merganser. Records during late years of water-fowl are examined with care, because of numerous species being introduced and their young being allowed to fly.

In these days of conservation, when predators are viewed in a more enlightened way, the numerical status in Britain of many Hawks and particularly that of the Kite (*Milvus milvus milvus*), as follows, makes thoughtful reading:—

"Distribution.—Great Britain: Resident. Formerly abundant, now confined to mid-Wales, where only five birds known in 1905, but by 1910 increased to about ten pairs, and ten to twelve pairs up to 1920 when much reduced, and in 1928 only seven pairs located . . . in 1938 fifteen birds in all known, twelve of which paired and three young reared. . . ." However, it is pleasing to note that the common Buzzard (*Buteo buteo buteo*) is increasing its breeding range in Britain. A rare vagrant record (three occasions) is the Black Kite (*Milvus migrans migrans*), which is distinguished from the Kite by its tail being much less deeply forked, almost straight-edged when spread. It is interesting to note that the Australian sub-species of the Black Kite (*M. m. affinis*) is in Australia called the Fork-tailed Kite in order to distinguish it from the Square-tailed Kite (*Lophoictinia isura*).

The thorough methods of field-ornithologists in Great Britain are reflected throughout the entire *Handbook*, but particularly so with the Heron (*Ardea cinerea cinerea*). It is accurately estimated that the breeding population in England and Wales "during 1928-38 remained remarkably steady at about 4,000 pairs every year." It is pleasing to note that the Bittern is gradually increasing in breeding numbers and territory in Britain, and also that a good many of the Ducks are widening their range. Here it may be stated that from a conservationist's viewpoint, it would have made for more clarity if the past and present status of most of the species had been elaborated in a separate section rather than the referring to it here and there under Distribution and Breeding, etc.

No review could do justice to the vast amount of data set out under the Order Anseriformes. Whether he be novice or specialist, the field-worker should find answered therein most of his problems. One notable feature, among many, is that ringing is proving several species of Ducks to be mostly sedentary in suitable habitats.—J.J.

**An Australian Bird Book.**—The new edition of "Leach" (*An Australian Bird Book*, by J. A. Leach, 8th edn., edited by Charles Barrett. Whitcombe & Tombs Ltd. Pp. 1-200, illus., price 8/6) is largely a re-arrangement. Thus the lecture, included in the author's own form, with a few footnotes, has been gathered together at the end of the volume, and the birds of the Supplement (forms not occurring in Victoria) fitted into their correct places in the first section of the work. That is by far the most important part of the "revision." New material includes a 6-page memoir of Dr. Leach and a photograph of him, and some bird pictures.

More than ten years have elapsed since publication of the former edition. In view of the progress in ornithology in that decade a

much more searching examination and detailed revision was called for. Leach always endeavoured to keep pace with research work in ornithology, here and abroad, and was most desirous of including the results in any undertaking. In deference to his ideals and to conform to present standards the details of classification, the fitting in of our own birds in their proper places amongst the world's avifauna, and the particulars of Australian as compared with extra-limital representation of each genus included, should have been studied. This last, covered, in some cases, by sets of figures at the left of the pages, would have been better omitted, for often figures cannot be reconciled with the number of species shown, e.g., *Procellaria*, *Pterodroma*, *Diomedea*, *Gallinago*, *Hirundo*, *Petroica*, and many others. The differences in classification between the book and the *Checklist* are summarized, but such a comparison should have been with Wetmore's 1934 classification.

Opinions will vary as to the substitution of photographs for the half-tone illustrations appearing in earlier editions. It is understood that the original blocks were worn, and possibly the lumping of the two groups—original and supplement—may have made the juxtaposition of the pictures and the corresponding descriptions a little difficult to arrange, although it would not appear insurmountable, nevertheless the book is essentially a "guide to identification" and the jettisoning of the illustrations must detract from that aspect. With the exception of a small number, the substituted photos. are of young birds and nests and therefore are of little recompense for the particular purpose.

This review is limited to the "revision," the original contents having been hitherto favourably reviewed on many occasions, and requiring no further encomium.—C.E.B.

**A New Interpretation of Instinct.**—A brief account of a new explanation of the phenomena lumped under the term "instinctive behaviour" is given by Dr. J. A. Loeser, formerly Professor of Psychology at the University of Berlin, in *Nature*, vol. CXLIII, May 27, 1939, pp. 880-83. He denies the existence of instinct, ordinarily understood as "unconscious purposive activity," whereby "the animal finds the right thing to do because it was born with a mysterious instinct, which is inherited from the experience gained by its ancestors in primeval times." In the place of this interpretation he sets up the hypothesis that animals do what they do because the action provides a sensual satisfaction. The decisive factor is *sensation*, and "every living creature acts in a given situation so far as possible under the impulse of pleasure or pain." He gives an illustration of a hen brooding eggs for the first time. She knows nothing of the why or wherefore of what she is about, and does it because she obtains pleasurable relief from the cold rounded eggs on the so-called "hatching spot" which has developed on her breast. This "hatching irritation" can be soothed in many other ways, such as by holding the animal's breast in cold water. There are thus direct, personal motives for sitting, though not biological ones, but "usually, however, this subjective conduct on the part of the bird serves a purpose, for the consequence generally is that the eggs are hatched. The hen turns the eggs so that she may sit on the cool parts, and without meaning to do so she thus causes all parts of the egg to be equally warmed." That is explanatory, however, only of the end stages of what must be a complex physiological set-up, with which Dr. Loeser does not deal, and therefore he cannot be said to offer any real solution of the fundamentals of the instinct problem. Nevertheless he undoubtedly opens up a profitable line of thought and investigation, even though his generalization is stretched to cover too wide a field. He gives, in support, various other illustrations from ornithology, not all of which are happily chosen, possibly because (as the reader may already have inferred from his ideas of the need for egg-turning)

his zoological knowledge is restricted. Thus the attempt to include migration phenomena and the problem of the coloration of the Cuckoo's egg within the range of the new theory will not satisfy many ornithologists.—D.L.S.

**Bird Flocks and the Breeding Cycle.**—The readable little book of this title (by F. Fraser Darling, Cambridge University Press, 1939; 124 pp., 1 pl., 1 text fig.), in addition to the matter of its main thesis, will serve as an admirable first introduction to the modern studies of sexual periodicity in animals, the bird investigations of which have recently been developed most conspicuously by Rowan and Bissonnette. It has been shown that the periodic waxing and waning of the breeding organs in birds, and other animals which have definite breeding seasons, is controlled by a hormone secreted by the anterior lobe of the pituitary gland. The activity of the gland itself is adjusted to the environmental conditions which will favour nesting and provide abundant food for the young, by various external timing factors, of which the most generally operating are the increasing daily periods of sunlight in the spring, acting through the medium of the eye, or, alternatively, the increasing periods of wakefulness so induced, and then by nerve stimulus to the gland. Male birds are usually brought to the sexual state first, and the female is slower, the later stages needing the psychological stimulus of special behaviour by the male to bring it to a corresponding state where mating becomes possible. This so-called "courtship" behaviour, or sexual display and posturing, is the external stimulus to the series of internal reactions which starts ovulation and the nesting behaviour consequent on it. Thus Darwin's interpretation of display as sexual selection is quite altered, and the behaviour comes to have even greater biological significance for without it there can be no "synchronization between the sexual processes of the male and female birds." The stimulus is normally provided by the presence of the mate, sometimes merely by that of a companion of the same sex, or even a bird of a similar species.

Dr. Darling in this book shows, from a study of various Gulls and other sea-birds which nest in social groups, that in their case the numbers of birds in a breeding flock and their joint and collective display are necessary to provide this stimulation. He demonstrates that in large flocks of Gulls not only does egg-laying begin earlier but that the time taken by the whole colony in nesting duties is not so drawn out as in smaller colonies, and suggests that the reason lies in the "total value of the visual (and) auditory stimulation for each pair in the larger flocks, compared with the total amount of such stimulation in the smaller flocks." There appears to be a threshold value of minimum number in a flock below which the communal stimulation is insufficient to complete the breeding cycle. Thus a colony of four Herring Gulls made nests but they did not lay eggs. Similar instances in other birds are cited, including the opinion of a zoo. director that "three pairs of that social bird the Budgerigar will breed better than one pair." Darling gives evidence of an ecological advantage of the shortening of the nesting period in that the percentage of nestlings taken by predators is less than in the case of a colony in which nesting is prolonged—where the predation is constant, (and not proportional to the number of nestlings available), the longer it is allowed to continue the more young are lost through it. Further references to the general problem will be found in the following: F. H. A. Marshall, "Sexual Periodicity and the Causes which Determine it," *Phil. Trans. Roy. Soc., London*, ser. B, vol. ccxxvi, 1936; T. H. Bissonnette, "Photoperiodicity in Birds," *Wilson Bull.*, vol. XLIX, 1937, pp. 241-270; William Rowan, "Light and Seasonal Reproduction in Animals," *Biological Reviews*, vol. XIII, 1938, pp. 374-402.—D.L.S.

**A Method of Bird Survey Work.**—A fine example of how to set about a survey of local birdlife is provided by D. Lack and L. S. V. Venables in the report of one of the projects of the British Trust for Ornithology ("The Habitat Distribution of British Woodland Birds," *Journ. Animal Ecology*, vol. 8, No. 1, 1939, pp. 39-71). Next to the census of local forms furnished by a bird list this kind of information is what should naturally follow when a region is being worked by field ornithologists, but there are very few examples of its being done. The authors follow the studies of the Finnish ornithologist, P. Palmgren, and describe how best to obtain a comparative index of the abundance of each species in the different types of woods. The results are given in detail but the methods and procedure will be of most interest to Australian readers at the present juncture. In a brief discussion of the factors influencing habitat distribution Lack and Venables refer to the difficulty of interpreting many of the observed habitat restrictions and hint that in some cases psychological rather than structural adaptation may be the explanation. That view had been earlier put forward by Lack, "The Psychological Factor in Bird Distribution," *British Birds*, vol. 31, 1937, pp. 130-6. The authors point out that exceptions to general rules of habitat distribution are so frequent (e.g., the Goldcrest, though typical of conifers, occasionally breeds in other wood types), that "the existence of such exceptions is much easier to account for if the restrictions are primarily due to habit and not to structural adaptation." Structural adaptations, if present, would be evolved subsequently to the habit.—D.L.S.

**Sex Ratio in Wild Birds.**—Dr. Ernst Mayr (*Amer. Nat.*, vol. LXXIII, pp. 156-179) deals with "the generally known but never sufficiently emphasized" amazing number of exceptions to an expected sex ratio of 50%♂ and 50%♀. Primary sex ratio relates to the proportion of the sexes at fertilization, secondary at birth and tertiary during adult life. The primary ratio and the secondary coincide, of course, if complete clutches hatch, but there is little of recorded data. Although definite variation exists the extent in most cases is probably not more than from 10 to 20%. There is probably a high proportion of males among passerine birds. A source of error lies in sexual dimorphism and research based on collections is misleading as conspicuous males figure largely even in female-preponderant forms. Some of the most remarkable disparities occur in the Meliphagidæ. In collections of *Myzomela* percentages of from 65 to 93% males (averaging about 75%+) were usual. A large preponderance of males occurs also in many of the Anatidæ. Evidence points to the existence of this unbalanced condition already in the primary ratio, although various factors may modify it during pre-natal and post-natal life. Nearly all cases are found to be correlated with peculiarities in the life history of the birds.—C.E.B.

**Breeding of Bee-eaters.**—There are records of a scatophagous insect dwelling commensally with a northern Parrot—see White, *Emu*, vol. XXII, p. 98; also Thomson, *Birds of Cape York Peninsula*, p. 45. But J. E. Ward ("The Curious Australian Bee-eaters," *Bull. New York Zool. Soc.*, XL1 (5), p. 157), in describing a communal occupation—by young Bee-eaters and "flies" and their "chrysalides and pupae"—of the nesting burrows of the birds, appears to have been inspired by assumption as to the reason for the association. He declares that the adults came rarely to the nest and that on opening up a tunnel and chamber he discovered young birds on a mass of refuse from which flies were constantly emerging, to be snapped up immediately by the fledglings. "This very remarkable phase of bird-life . . . [is] perhaps . . . one of those marvellous and unaccountable understandings between creatures of insect and animal life . . . which help to preserve the balance of Nature."

The theory is that the old birds constantly foul the nest with

excreta. The strong odour attracts flies which lay their eggs in the refuse. Soon a "seething mass of maggots" under the refuse creates a great heat and so the parents are relieved from the onus of sitting. Then from this conglomeration of "pupae of flies in all stages" the insects begin to emerge, the young birds accepting the provender with avidity.

Actually Bee-eaters normally feed their young as often as most other birds. The facts given are doubtless correct but we would require more tangible evidence as to the incidence of those facts before accepting the explanation given.

In vol. XLII (3) of the same journal another article by Ward—"In the Haunts of the Lyre-bird"—states that "foxes and feral cats and egg-collectors are bringing a famous Australian bird in danger of extinction." The article is an account of a ramble around Kuring-gai and contains nothing novel, but it is charged with that widely-held idea that the Lyrebird is, as the writer says, "nearly a thing of the past." Despite the appalling fires in Lyrebird country early this year, the species is common in alpine and heavy forest country in Victoria. Whilst it is laudable to urge every consideration for protection it is to be regretted that the status of the bird is so often assessed on the remarks of observers who know it only from a few "close-in" areas.—C.E.B.

**Recollections of an Oologist.**—*The Oologists' Record*, vol. XIX, nos. 1 and 2, contain "Reminiscences of a Bird Lover." Although not indicated the author is Sir Charles Belcher and much of the same atmosphere that we know so well in his *Birds of Geelong* is incorporated in these first experiences. The late T. P. Austin was a contemporary at school at Geelong and there each formed the nucleus of an egg collection that became a life-time interest. Some of the lads apparently exceeded the ethics of even youthful collectors, one "good nester" exterminating, with a catapult, a visiting party of Crested Pigeons (*Ocyphaps lophotes*) which species was "never thereafter known again in the district." The complete account of Sir Charles' experiences should prove interesting.—C.E.B.

**Nearctic Limicolines.**—A short article in *The Ibis*, vol. III (14th ser.), no. 3, p. 450—"The Downy Young of Some Nearctic Limicolines," by Allan Brooks—deals with the young of *Tryngites subruficollis*, *Pisobia melanotos* and *Limnodromas griseus scolopaceus*. Attention must be drawn to the remarkably fine plate accompanying the paper. Major Brooks comments on the characteristic snow-white carpal in downy Limicolines, which has no correlation with the colouring of the adults. When alarmed or lost the chicks hold the wings high and outspread. Maybe the object is directive and constitutes more than a mere balancing action.—C.E.B.

**New Emu.**—In the *Monthly Notes* of the Bird Observers' Club, Melbourne, of June 13, 1939, A. G. Campbell describes a new subspecies of Emu—*Dromaius novae-hollandiae montanus*. No type is in existence but the account states that the form—from the Grampians, Vic., above 1,000 feet—is smaller and darker than the common Emu. The metatarsus is about 12 inches in length and stout. Distinction is founded chiefly, however, on the eggs. These are smaller and, with reputed eggs of the extinct Tasmanian Emu, have a common feature—the relatively short measure of the larger axis compared with the typical form. It is suggested that the Grampians, an area of great age, constitutes the stumps of a once-great plateau, the life of which is connected with the pre-Bassian quota found in Tasmania, the "Mountain Emu" being a remnant surviving the encroachment of the common Emu from the north. The basis for distinction appears to us inadequate and it may be doubted if there is a sufficient "summary of characters" as required by the 1927 amendment of Article 25 of the Rules of Zoological Nomenclature.—C.E.B.