Review

A Revision of the Family Laridae.—In a paper with the foregoing title Martin Moynihan (*Amer. Mus. Novit.*, no. 1928, pp. 1-42, figs. 1-5) presents a revised classification of the skuas, gulls, skimmers and terns, each group of which in the past has been given separate family status. Following the modern trend in taxonomic procedure, the author has combined them in a single family with two subfamilies—the Stercorariinae (skuas) and Larinae (with three tribes, Larini or gulls, Rynchopini or skimmers, and Sternini or terns).

Sweeping generic changes have been made for the purpose of uniting closely-related species. *Catharacta* is merged with *Stercorarius*, a procedure advocated by Witherby *et al.* (1949) who pointed out that the main differences in the skuas are in the lengths of the middle rectrices and that if more than one genus is admitted "then each of the four species might well be made the representative of a distinct genus". Behavioural and other characters suggest that the skuas are the most 'primitive' of the Laridae.

Moynihan unites all the gulls under one genus *Larus*, mainly on the ground that all species "are very similar to one another in fundamental morphological features". Various genera have been recognized by previous workers on the basis of such characters as bill shape (*e.g.* '*Gabianus*'), tail shape (*e.g.* the forked tail of '*Xema*'), and development of the hind toe (vestigial in '*Rissa*'), all of which, according to Moynihan, "are obviously immediate or special superficial adaptations to particular modes of life, such as different feeding habits or ways of flying". He believes that such characters should not be given more than 'specific valence'.

Of course, the genus *Larus*, under the new arrangement, has become a very large and varied one, and it has been necessary to arrange the species in 10 or 11 groups of natural units, which can be classed formally, if desired, in three subgenera—*Xema*, *Pagophila* and *Larus*. The Australian *novæ-hollandiæ* is to be assigned to the 'masked gull' group in the subgenus *Xema*, and the two large species *pacificus* and *dominicanus* are treated as members of the 'typical large white-headed' group in the subgenus *Larus*.

The tribe Sterninae includes the noddies (one genus *Anous*), the noddy-like Inca tern of South America (*Larosterna*), and the true terns (genus *Sterna*, with six groups). No subgenera are admitted in *Sterna*, and the familiar names *Gelochelidon*, *Chlidanias*, *Hydroprogne* and *Thalasseus* are suppressed. The author mentions the probable derivation of the terns from a primitive gull-like form and the 'probably ancient' separation of the noddies from the true terns.

Certain aspects of adaptive radiation within this most successful family of birds are discussed, and attention is drawn to the correlation between morphological and ethological characters and feeding and nesting habits. The new taxonomic proposals appear to be sound and completely in accord with modern practice. Moynihan claims that his work "is based largely on comparative analysis of behaviour" and the paper should, therefore, make an instant appeal to field workers.—H.T.C.

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