GENERAL NOTES

An Erroneous Report for Sula dactylatra melanops.—In view of the wide distribution of the National Geographic Magazine it is desirable for the benefit of ornithologists to note a correction in the identification of a photograph of a group of boobies printed in the number for November 1959, p. 688. Through a misunderstanding on the part of one of the staff's advisers, what is obviously a group of Redfooted Boobies, Sula sula rubripes, on their nests built in the tops of low mangroves on the Cosmoledo Islands north of Madagascar, was labelled Masked Booby, Sula dactylatra melanops. The latter species places its eggs on the sand in low islands or on bare rock ledges in other environments. I noted the error in an early run copy of the magazine, and the presses were stopped to make the correction. This change, however, appeared only in the latter part of the edition.—Alexander Wetmore, Smithsonian Institution, Washington, D.C.

On the Genus "Chamaethlypis" and Its Supposed Relationship to Icteria.— Chamaethlypis is a monotypic Middle American genus of wood-warblers, ranging from southern Texas to western Panama. Several races are recognized, but all are now included in a single species, C. poliocephala, designated Ground-chat in the A.O.U. Check-list of North American Birds (5th ed., 1957), but called Gray-crowned Yellowthroat by Blake (Birds of Mexico, 1953) and many other recent writers. Those who have reported on this bird on the basis of field experience have remarked on its close resemblance, both in appearance and behavior, to the yellowthroats of the genus Geothlypis (see Dickey and van Rossem, Field Mus. Nat. Hist., Zool. Ser., 23: 501, 1934; Wetmore, Proc. U.S. Natl. Mus., 93: 316, 1943; Skutch, in The Warblers of America, p. 221, Devin-Adair Co., 1957). Prior to 1902 this species was included in Geothlypis, and the northern subspecies was called Rio Grande Yellow-throat in the first and second editions of the A.O.U. Check-list. In 1887 Ridgway (Man. N. Amer. Birds, p. 525) proposed Chamaethlypis as a subgenus on the basis of its thicker bill and distinctly curved culmen. In 1902 Ridgway in his great work The Birds of North and Middle America (U.S. Natl. Mus. Bull., 50, pt. 2: 686) raised Chamaethlypis to full generic rank, stating that though it was very much like Geothlypis in general appearance, it was "quite distinct structurally, in which respect it comes much nearer to Icteria." To emphasize this alleged relationship to the Yellow-breasted Chat, Ridgway adopted the new English name "Ground-chat." The 1910 and subsequent editions of the A.O.U. Check-list have followed Ridgway both as to generic and vernacular names.

W. deW. Miller (Auk, 36: 290-291, 1919) demonstrated that the characters relied upon by Ridgway to distinguish Chamaethlypis from Geothlypis were bridged over by several Geothlypis species. But the custom of that period favored the recognition of genera based on minor structural differences. Hellmayr (Field Mus. Nat. Hist., Zool. Ser., 13, pt. 8: 443, 1935) commented that Chamaethlypis was "a very unsatisfactory genus hardly worthy of recognition." Paynter (Peabody Mus. Nat. Hist., Yale Univ., Bull., 9: 256, 1955) sank it, merely citing Miller's cogent paper (op. cit.). The late Ludlow Griscom wrote me that although Chamaethlypis was kept as a genus in The Warblers of America (Devin-Adair Co., 1957), he personally preferred to reduce it to subgeneric status.

As the A.O.U. Check-list (5th ed. p. 514, 1957) preserves Chamaethlypis, it seems worthwhile to review the question based on the information presently available, even though some of it was pointed out long ago by W. deW. Miller (op. cit.).

Ridgway (op. cit., 686, 1902) lists the "structural" characters distinguishing the

genus of Chamaethlypis from Geothlypis. As indicated by W. deW. Miller, they are all bridged over by species of Geothlypis. "Tail longer than wing, graduated." Many Geothlypis also have graduated tails (e.g., G. aequinoctialis); and G. nelsoni has the tail distinctly longer than the wing (as Ridgway himself observed, op. cit., 653, 1902). "Tarsus nearly half as long as wing, or at least much nearer one half than one third." Ridgway's own measurements show that the tarsus is relatively as long in certain species of Geothlypis; e.g., cf. measurements of males: Chamaethlypis p. poliocephala (wing 55-62 [58.2] mm., tarsus 20-23 [21.6] mm.); Geothlypis n. nelsoni (wing 56-57 [56.5], tarsus 20-20.5 [20.2]); Geothlypis flavovelata (wing 53, 53.5, tarsus 21); Geothlypis semiflava bairdi (wing 58-60.5 [58.9], tarsus 21-23 [21.5]). "No black on forehead nor auriculars in adult males." Adult males of the southern subspecies, Chamaethlypis p. ridgwayi and C. p. caninucha, do have black on the forehead and in some individuals of caninucha the black extends over the anterior auriculars. In fact many males of C. p. caninucha show about as much black on the head as the South American Geothlypis aequinoctialis peruvianus, and almost as much as G. ae. auricularis. The male color pattern of these Peruvian yellowthroats is essentially the same as that of Chamaethlypis. "Sexes alike, or at least not very different in color." As adult males of Chamaethlypis have less black on the head than any other North American yellowthroats, sexual dimorphism is less striking, but the females differ as do most Geothlypis in being more buffy brownish on abdomen and flanks, and usually in lacking black on the head and in having a duller loral area. Similarly reduced sexual dimorphism occurs in Geothlypis aequinoctialis auricularis of southern Ecuador and northern Peru; of 10 apparently adult birds sexed as females, three had about as much black on lores as adult males. (I have not seen a female of G. ae. peruvianus.) "Bill very stout, with culmen strongly curved." Compared with the northern G. trichas the bill of Chamaethlypis is certainly much thicker and more curved, but these differences are bridged over by the bills of the South American G. semiflava, G. aequinoctialis aequinoctialis, G. ae. auricularis, and G. ae. peruvianus. So obviously intermediate in "structural" characters are the members of the G. aequinoctialis group, that Sharpe (Hand-list of Genera and Species of Birds, 5: 117, 1909) allocated them to Chamaethlypis, although mentioning that H. Oberholser considered them to belong in Geothlypis.

My personal experience in western Panama confirms that of other observers that in general behavior and posture "Chamaethlypis" is simply a yellowthroat of the drier or more sterile uplands, as distinct from the marshes or borders of wet places preferred by other yellowthroats. The drier niche, with consequent differences in diet, doubtless accounts for the heavier bill, which is presumably useful in feeding on harder-bodied or larger insects (and possibly on seeds) than are normally taken by the yellowthroats of water edges, which have more soft-bodied larval forms available. The reduction of the black mask also seems correlated with a drier environment. Thus the yellowthroats of the west slope of Peru (G. aequinoctialis auricularis and G. ae. peruvianus), with a similarly reduced black facial area, are birds of a much more arid climate than their close ally G. ae. aequinoctialis, which has a welldeveloped mask. The song of "Chamaethlypis," while different from and distinctly superior to that of G. trichas, resembles (according to Miller, op. cit.) that of G. semiflava bairdi, which is also a superior vocalization (see Skutch, op. cit.). Van Rossem (Dickey and van Rossem, op. cit.) noted that the chip of "Chamaethlypis" was like that of G. trichas. The nests of the two are similar (Skutch, op. cit.).

Ridgway's chief reason for raising Chamaethlypis to generic status seems to have been his belief that it was allied with the aberrant Icteria, whose status as a wood-

warbler had been questioned. Thus Ridgway (op. cit., 426, 1902) wrote "however unlike other North American Mniotiltidae [= Parulidae] Icteria may seem, the extra-limital genera Chamaethlypis and Granatellus distinctly connect it with the more typical forms, the former being, indeed, a very close relative. . . ." Yet aside from having rather thick bills with curved culmen, a comparison of the generic diagnoses supplied by Ridgway himself (op. cit., 653, 686, 691, 1902) shows that Chamaethlypis differs from Icteria in every external structural character in which Geothlypis differs from Icteria: i.e., subterminal notch on bill (on maxillary tomium), long tarsus (distinctly more than one third of wing), tail graduated or strongly rounded with subacuminate tips to rectrices, obsolete rictal bristles, longitudinally oval nostrils—not to mention plumage pattern.

Recent anatomical studies strongly suggest that Icteria is probably out of place in the wood-warblers. Dr. W. J. Beecher has informed me (in litt.) that, although he listed Icteria as a Parulid in his phylogenetic review of oscinine jaw musculature (Auk, 70: 307, 1953), reexamination of his notes shows that, unlike the other wood-warblers listed in that paper, Icteria lacks the pinnate M7b (M. adductor mandibulae externus medialis), and on this criterion "could be a tanager," although definite family allocation would require further investigation. Dr. William George, who has examined the hyoidean structures of all continental genera traditionally included in the Parulidae, as well as of numerous genera of tanagers and other Oscines, informs me (in litt.) that most genera of the New World nine-primaried assemblage (including Geothlypis, Chamaethlypis and Granatellus) are alike in these structures. In contrast, Icteria, although its basihyale bone is laterally compressed as in almost all genera of this assemblage, differs markedly from all other genera studied in certain aspects of the hyoidean musculature. M. stylohyoideus, instead of attaching to the basihyale as an undivided band, gives off a conspicuous ventral slip that inserts in the connective tissue beneath the tip of the paraglossale. M. thyreohyoideus and M. trachaeohyoideus, instead of being closely contiguous undivided bands inserting on the basihyale, are widely separated in their origins, and M. thyreohyoideus does not insert on the basihyale but divides into two components inserting on the head and on the lateral surface of the ceratobranchiale.

Dr. C. G. Sibley has recently advised me (in litt.) that the electrophoretic patterns of egg-white proteins of *Chamaethlypis* are, on present techniques, indistinguishable from those of *Geothlypis* (as well as from other "typical" warblers and tanagers examined); while the patterns of *Icteria* are strikingly different.

All this confirms, what external morphological and behavioral evidence indicated, that the genus Chamaethlypis cannot be maintained on the theory that it is a connecting link towards the aberrant Icteria. The only "structural" difference between poliocephala and the species currently included in Geothlypis is the stouter bill. Considering the close resemblance in pattern, color, and habits, and the intermediate bill shape of the G. aequatorialis group, generic separation seems unwarranted. I suggest that "Chamaethlypis" be merged in Geothlypis, and the species be designated Geothlypis poliocephala.

To Drs. Beecher, George, and Sibley I am greatly indebted for the information respectively supplied by them.—E. EISENMANN, American Museum of Natural History, New York 24, New York.

Nomenclature of Quaternary Coots from Oceanic Islands.—Forbes (1892) described Fulica chathamensis from Quaternary deposits on the Chatham Islands, but later (1893) synonymized this species with Fulica newtoni Milne-Edwards (1868) from the Quaternary of Mauritius. At that time he separated these birds from Fulica