

Upward Currents Not Required for Soaring Flight.—Some recent papers in the WILSON BULLETIN have borne on the soaring flight and its mechanics, either advancing the theory that upward currents are necessary, or tacitly agreeing that this is so. I refer particularly to "Soaring of Raptorial Birds", by Palmer (March, 1931, pp. 18-24) and to Taber's "Curvature of Wing and Soaring Flight" (March, 1932, pp. 19-22). The subject is an old one, I know, and without the least desire of becoming controversial, in the interests of accuracy some further comments seem to be indicated.

Not having space for any lengthy discussion of methods, the time, or the place, I will make only one important statement. *My observations show that the Herring Gull (Larus a. smithsonianus) can soar (i. e., fly without flapping its wings) in a level current of air of twenty miles per hour velocity, and (a) remain practically motionless, (b) move forward, (c) move backward, (d) move on an upward incline, or (e) move on a downward incline.* It is fairly obvious that if one species can do this, another of the same relative wing and tail area and contour, and flight control, can do the same. Actually, I have seen the Eastern Red-tailed Hawk (*Buteo b. borealis*), Turkey Vulture (*Cathartes a. septentrionalis*), Southern Bald Eagle (*Haliaeetus l. leucocephalus*), Ring-billed Gull (*Larus delawarensis*), and Bonaparte's Gull (*Larus philadelphia*) in the same level soaring flight, under conditions that seemed to preclude any considerable upward movements of air currents.

The thoughtful paper of Brewster (*Auk*, January, 1912, pp. 85-92) discusses in a non-technical way this flight of the Herring Gull, while both Finley and Dawson, quoted by Bent (*Bull. 113, U. S. Nat. Mus.*, p. 130), have written similarly of the California Gull (*Larus californicus*), and Poole (*Auk*, April, 1925, pp. 209-216) seems to have observed various small birds in rising flight with set wings.

It therefore seems that the explanation of soaring flight must involve level air currents of some velocity, not entirely ascending air currents. That some species may take advantage of rising air streams, does not solve the problem, and only postpones the answer.—IVAN R. TOMKINS, *U. S. Dredge Morgan, Savannah, Ga.*

More About the Blue-gray Gnatcatcher in Indiana.—Some time ago an article of mine on the Blue-gray Gnatcatcher near this place was published in the WILSON BULLETIN, and there have been several comments about it. In the March, 1933, issue of the BULLETIN, Lyndon L. Hargrave of Flagstaff, Arizona, writes about the "Western Gnatcatcher Moves Its Nest". He says that he believes the bird sometimes moves the nest before the eggs are laid. In the case of the birds that we found, I may not have written all of the facts observed, but in this instance we first were attracted to the nest by hearing a commotion in the tree made by the parent birds when they were disturbed by a Hairy Woodpecker that was in the same tree. One parent bird made a terrible fuss as he or she arrived with a flying ant or winged insect in its mouth, so we knew that there were young near. As we watched, the bird went to the nest and fed the young. In that way we located it on the lower section of a forked branch with one fork beneath the other, the upper one being a sort of protection for the nest beneath it.

The next visit to the place showed the young out of the nest and flying about the tree, with the distracted parents following and rounding them up with protests and scoldings. We decided to return later for the nest, which we did,