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,

but it had absolutely disappeared, and was not to be found after a close inspection of the ground beneath. This nest was finished when found, and a brood of three young birds, I think it was, were "finished off" for life and held their "coming out party" there. I add these few notes because Mr. Hargrave may have thought that the nest was not occupied, as in some cases that he had observed. I saw several gnatcatchers in the Mounds State Park that summer, but in 1932 could find no nests any place, although they may have nested there. These nests are not so easy to locate. That was the only one I have ever found. Perhaps the Hairy Woodpecker or ourselves made them move the nest, but if they did, it was after it had housed the family through one brooding season.—Mrs. Horace P. Cook, *Anderson, Ind.*

Nesting of the Northern Raven in Virginia.—The Northern Raven (*Corvus corax principalis*) was once found along all the higher mountain ranges of southwest Virginia, but is now almost a bird of the past with us, and the few that remain are confined to a small section of the Clinch Mountains and the area of the White Top Mountain and adjacent territory. Except in a general way there is not much to be found about the nesting habits of the raven in the various bird books. The best accounts are to be found in *Life Histories of North American Birds*, by Major Bendire (1895), but even those apply mostly to the West. However, most of the data given on the ravens of the West seem to be characteristic of the birds we have here, with a few exceptions. For the past few years I have made a special effort to get some nesting data on the ravens of this part of the state, and have been fortunate in finding a number of nests with both eggs and young. As there does not seem to be a published account of a raven's nest from this state, I will describe one which is typical of the majority that I have examined. Here they do not build on flat rock ledges, such as the Duck Hawk uses, but make the nest back in a pocket of a steep rock cliff, protected above with an over-hang.

On April 11, 1933, while hunting by myself for a nest of the raven on the north side of White Top, I saw a raven fly out from the cliffs, and in rounding a corner of the ledge that I was on, I could see the white-washed rocks and the nest about forty feet above me. I had some rope, but there was no way of reaching the nest from above on account of the wide over-hang, so I cut a spruce pole and climbed up to a crevice and pulled the pole up, finally reaching the nest in this manner. It was situated in a down-slanting pocket, too steep to stand on, and was nicely made of sticks, with a thick, smoothly finished lining composed of about equal parts of sheep's wool and Spanish moss, with a little buffalo hair. The exterior was twenty-four inches wide by eighteen inches deep, and the inside measured ten by five inches.

The four eggs which the nest contained were brought down in my binocular case, and on later examination they all proved to be decomposed, which was accounted for by seeing where some cat hunter had built a fire close to the nesting cliffs. The embryos were well formed in all of the eggs previous to their decomposition, so while no accurate nesting date can be given, the eggs must have been laid about the middle of March. They were smaller than the average eggs for this species, and were rather sharply pointed. They measured as follows: 1.94x1.24, 1.93x1.24, 1.86x1.23, and 1.83x1.23. For the hour that it took me to reach the ground after my examination of the nest none of the ravens were seen or heard, but while putting on my boots one of them alighted in a red spruce