

**Courtship behavior of the Pied-billed Grebe.**—Pied-billed Grebes (*Podilymbus podiceps*), of which no more than 4 were present at any one time, were watched on a small pond in Seneca, Maryland, from approximately 8 to 9 a.m. on successive week ends from March 22 to April 19, 1953. Activity suggestive of courtship was first noted on March 28 when 2 grebes swam together for a few moments with bills touching, one making a loud, rapid note *h'n, h'n* resembling a nasal laugh. On the following day 2 grebes made the same noise as they swam near each other. On April 5, one grebe (A) suddenly flew over to a second (B). Then B swam after A, remaining 2 to 6 feet behind. Grebe A kept turning its head from side to side as it swam away. The pursuit, which was not hurried, continued for about 30 feet. This same performance of one grebe flying to another, then swimming away with head turning, was observed 3 times in one hour. On April 12 a single grebe (C) remained in one spot and fairly motionless for some time. Suddenly it stood upright on the surface, beating its wings rapidly, and treading water with both feet. In spite of this vigorous and sustained activity the bird remained in one spot. Another grebe (D) was 20 feet away at the time and began to swim toward C, which soon ceased performing and swam toward D. As the 2 came together they floated side by side. Grebe D then held its wings out horizontally and beat them in a rather helpless fashion against the water. Grebe C mounted the back of D and both birds sank under the water with much splashing. After a few moments they separated and swam away. By April 25, the grebes had left the pond, on which they have not been known to nest in previous years.

On April 26 continued observations were made in a wooded swamp one mile from the pond. I waded to the middle of this small swamp until I was about 25 feet from 2 grebes which I couldn't see because of bushes. One made *coup, coup, coup* noises interspersed with *ugh* notes suggestive of air being sucked into a defective pump. The other grebe joined in with the *h'n, h'n* notes described above. Suddenly both birds burst into an open stretch of water, one pursuing the other at top speed. The bird I judged to be the male grabbed the female by the nape of the neck with his bill and held on vigorously for the next few minutes. During this time there was much thrashing about, the pair being as much under the water as above and moving about irregularly the whole time. The male hung on so that he was somewhat on the side of the female. When they had separated and returned behind the bushes, I waded through and found an uncompleted nest. This consisted of old bull rush stalks on top of which was a circular layer of mud and plant matter, the whole resting on the submerged end of a log in 3 feet of water. There were no eggs. Grebe feathers floated nearby on the water. A week later the nest had not been added to, although one grebe was calling in the vicinity. No more grebes were seen in the swamp after this time.

Comment: Courtship activities and at least attempted coition may take place among Pied-billed Grebes before they reach their nesting waters. Activities associated with coition may be more abrupt and violent when eventuating in the vicinity of a nest as Glover (1953. *Wilson Bull.*, 65:32-39) has also described. Courtship behavior of Pied-billed Grebes, especially the standing upright on the water and the head turning, shows some resemblances to that described for other species of grebes.—LAWRENCE KILHAM, 8302 Garfield St., Bethesda, Maryland, May 11, 1953.

**Blue Jays feed tent caterpillar pupae to nestlings.**—Although it is generally known that American cuckoos (*Coccyzus americanus* and *erythrophthalmus*) and Baltimore Orioles (*Icterus galbula*) feed on tent caterpillars (*Malacosoma americana*), there are few references to the important activity of Blue Jays (*Cyanocitta cristata*) in