Shorter Contributions

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LEAF-CARRYING WITH THE TAIL IN THE VIRGINIA OPOSSUM, DIDELPHIS VIRGINIANA. — The Virginia opossum, Didelphis virginiana, is well known for its long, scantily haired, prehensile tail used for grasping in climbing activities and, for example, the grasping of the tail of the mother by young. Although leaf carrying with the tail had been reported in captive animals (Pray, 1921; Layne, 1951; Hopkins, 1977) and in a wild setting (Smith, 1941), I was unaware of such use until I made the observation described herein. The phenomenon seems to be little known among biologists.

At 0700 h on 4 July 1992, while looking out the window into my wooded back yard in suburban Chesterfield County, Virginia, I saw what appeared to be a severely injured Virginia opossum. It was unusual to see an opossum active in daylight and I assumed its behavior to be the result of an injury. Only 10 to 12 m away and moving among a few low shrubs and past tree trunks, the opossum appeared to have a rough-shaped mass under its tail that looked like protruding viscera. The opossum walked irregularly, frequently stopping, and with its back hunched would reach back with its head under the belly between its legs and appeared to be grabbing at the mass under its tail.

I then realized that the mass grew larger each time the opossum reached back. It was placing leaves under its belly with its mouth and then grasping them with its tail. The opossum ambled out of sight relatively rapidly when the bulk of material (in lateral view) was equal to what I estimated to be about one third the size of its body; much larger than the mass depicted in the accurate sketch by Pray (1921). From close-range observations, Smith (1941)

and Layne (1951) noted that the opossum used its hindlegs to help pass the material and settle it in the tail loop. I did not see this. The opossum I observed appeared to be an adult, but leaf carrying with the tail is not restricted to adults. Smith (1941) observed a "slightly more than half grown" individual, Layne (1951) a "young male opossum," and Hopkins (1977) reported on young "estimated to be 88 to 97 days old" that "weighed about 121 g."

It had rained more than 1.5 cm in the 24 hr preceding my observation and, although partly sunny at 0700 h, the leaves on the ground were wet. It is likely that the opossum was collecting leaves to construct a nest or add to a pre-existing one. Opossums construct nests in a variety of situations including arboreal sites. Since they are known to build nests of coarse leaf material, it is possible that carrying leaves and similar items is a common use of the prehensile tail but one that we rarely get to observe because they normally are nocturnal. McManus (1974) summarized that leaf carrying with the tail "...frees the limbs for locomotion," but it likely has other functions as well. Nesting material is carried in the mouth by most mammals and leaf carrying by the tail by the Virginia opossum also frees the mouth for opportunistic feeding. Layne (1951) and Hopkins (1977) observed that captives sometimes paused to feed or drink while clutching the nesting materials in their tails.

Literature Cited

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