

THE ANT-LIONS OF FLORIDA. *GLENURUS GRATUS* (SAY)

(NEUROPTERA:MYRMELEONTIDAE)¹

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INTRODUCTION: One of the most striking ant-lions in Florida is *Glenurus gratus* (Say) (fig. 2). The richly dark-marked wings (fig. 2) are distinctive in Florida according to Stange (1980a). The unusual, 2-toothed mandibled larva (figs. 1,4,5,6) lives in tree holes (fig. 3). Adults can be seen flying in forested areas during the summer months and sometimes are attracted to lights. This species is found throughout peninsular Florida, and new records are given here from the Florida Keys. There are 8 known species in this predominately Neotropical genus. Banks (1922, 1928) has published keys to many species, and Stange (1970) has provided a catalog and discussed the taxonomy of the genus.

DISTRIBUTION: UNITED STATES. Florida, Kentucky, Mississippi, Ohio, Tennessee, Texas. FLORIDA. Alachua Co.: Gainesville, VI (Florida State Collection of Arthropods); Dade Co.: V (FSCA), no further data; Highlands Co.: Archbold Biological Station, VI (Archbold, FSCA); Levy Co.: Gulf Hammock, XI (FSCA); Liberty Co.: Torreya State Park, IX (FSCA); Marion Co.: Ocala, VI (FSCA); Monroe Co.: Windley Key, V (FSCA), Upper Matecumbe Key, V (specimen lost); Seminole Co.: no specific locality, VII (FSCA); St. Johns Co.: Moultrie; VI (FSCA).

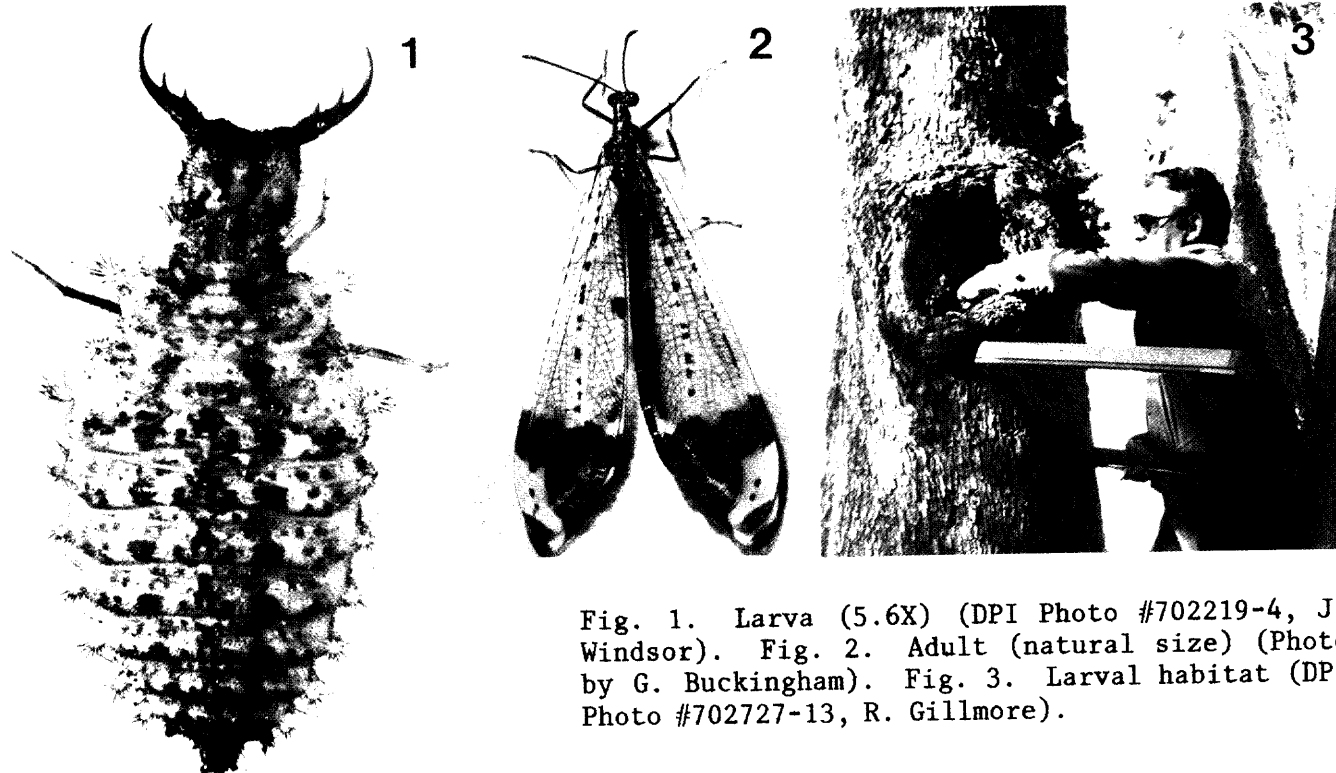


Fig. 1. Larva (5.6X) (DPI Photo #702219-4, J. Windsor). Fig. 2. Adult (natural size) (Photo by G. Buckingham). Fig. 3. Larval habitat (DPI Photo #702727-13, R. Gillmore).

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BIOLOGY: Oviposition and eggs are not known, but all 3 larval instars live in dry hollows of trees among fine wood particles, squirrel frass and other fecal matter, and other assorted debris. These hollows are large enough to allow for free movement of the larvae under the surface of the debris and are structured so that rainfall does not fully soak the contents of the hollow. The larvae may dig or run after prey, but not rapidly. At times, larvae may simply lie in wait. They feed on assorted insects found in their microhabitat such as termites, beetle larvae, and ants. We found as many as 3 Glenurus larvae in one hollow, and in one instance, a larva of Dendroleon obsoletus (Say) was coinhabiting. Natural enemies and parasites are unknown. Larvae complete their life cycles in 1 or 2 years, depending upon the abundance of food and the duration of warm nights in their habitat during the year. Of 2 larvae reared by us, both constructed cocoons measuring 13 mm in diameter which were completely but shallowly buried beneath the debris. Cocoon construction to emergence of the adult required 28 days in both instances.

DETECTION AND SURVEY: Larvae can be found by sifting dry organic material in tree holes, especially on Quercus virginiana Mill. Adults can be collected at night at lights and found in forests by beating plants.

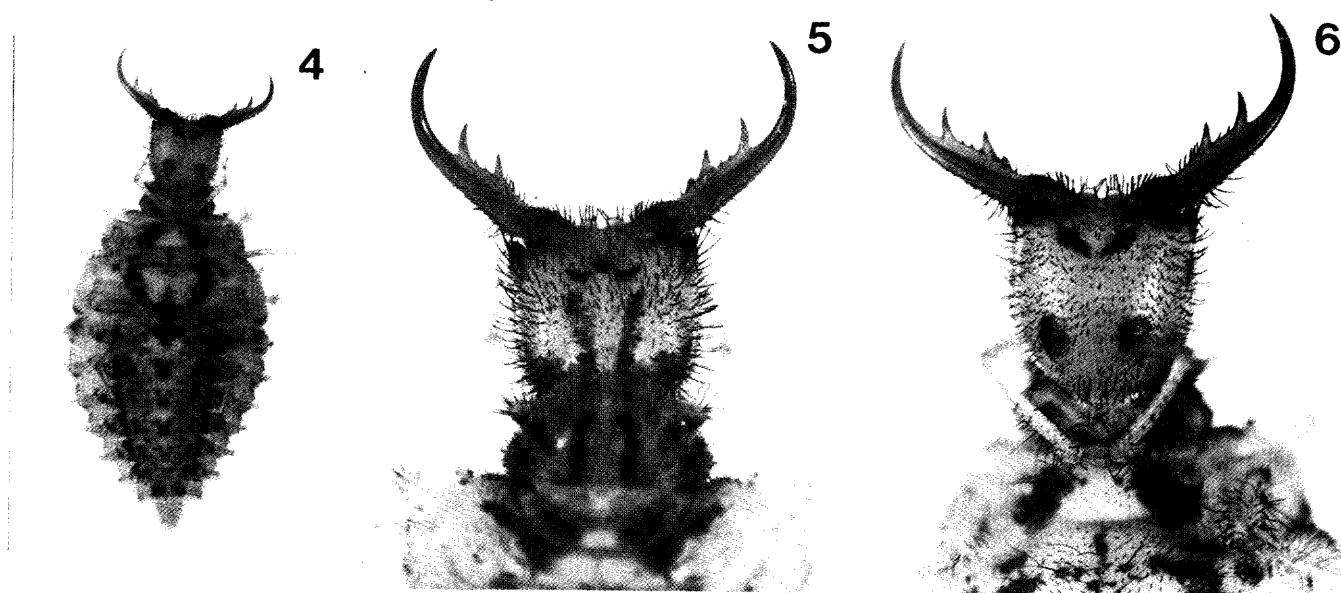


Fig. 4. Larva, ventral view (3.3X). Fig. 5. Larval head, dorsal view (10X). Fig. 6. Larval head, ventral view (10X). (Photos by R. B. Miller)

REFERENCES

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