PEST ALERT

Florida Department of Agriculture and Consumer Services Division of Plant Industry

Lissachatina fulica (Bowditch), Giant African Land Snail (Achatinidae)

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INTRODUCTION

The giant African land snail (*Lissachatina fulica* (Bowditch)) (GALS) is one of the most invasive pests on the planet, causing agricultural and environmental damage wherever it is found. This snail was twice established in southeastern Florida and was successfully eradicated both times (Fig. 1). On June 21, 2022, FDACS-DPI recieved a report of a possible population of the snail in New Port Richey, Pasco County. On June 23, a survey of the property confirmed the presence of a white form of the giant African land snail (Fig. 2), which is popular in the pet trade in other countries. The detection of these snails initiated treatment and quarantine. This snail is a Federally prohibited organism that cannot be legally sold or possessed in the USA.

BIOLOGY OF GIANT AFRICAN LAND SNAIL

This snail can survive in many different environments. They are primarily active at night, hiding in cool, damp places during the day. They can reproduce as young as four months old, laying many thousands of eggs in its multiple-year life span (Dickens et al., 2018). These snails can move long distances when they cling to vehicles and machinery, or in yard trash. During unfavorable environmental conditions, the snail can bury itself in soil and remain inactive for up to a year.

IDENTIFICATION

Giant African land snail (Figs. 1–2) eggs are pea-sized and adults can grow to be over 7 inches in length. The shell is thin and ceramic-like, and the shape is elongate-oval with a conical apex. GALS can be distinguished from other Florida snails by its large size, and by characters on the shell: the columella is long, with an inwardly curled free edge and truncate apex (Skelley et al. 2011). It is partially characterized by having only the regular longitudinal bands (no cross banding or other patterns). In Florida, the only large snail of similar body shape and coloration is the Stock Island Tree Snail, which occurs in Miami-Dade and Monroe counties. These tree snails are easily distinguished by their lack of the inward curled columella. For additional identification assistance with common snails in Florida, see Capinera and White (2011) and Skelley et al. (2011). GALS are terrestrial or land snails. Although they may be found near water, they cannot survive prolonged submersion in water. The large, aquatic invasive apple snails are often confused with GALS, but they are nearly always found near a body of water and the shells are round and more spherical, like an apple.

ALERT

If you see a suspect GALS, take a picture, and contact the DPI Helpline at 1-888-397-1517 or DPIHelpline@fdacs.gov for instructions how to submit pictures and needed information.

REFERENCES

Capinera, J. L. and White, J. (2011). Terrestrial snails affecting plants in Florida. Publication #EENY497. http://edis.ifas.ufl.edu/in893 [accessed June 23, 2022].

Dickens, K.L., Capinera, J.L, and Smith, T.R. (2018). Laboratory assessment of growth and reproduction of *Lissachatina fulica* (Gastropoda: Achatinidae). Journal of Molluscan Studies 84(1): 46–53.

Skelley, P.E., Dixon, W.N. and Hodges, G. (2011). Giant African land snail and giant South American snails: Field Recognition. FDACS-DPI Pest Alert, DACS-P-01717. 5p. https://www.fdacs.gov/content/download/23926/file/GALS_1717.pdf [accessed June 23, 2022].





Figure 1. Lissachatina fulica, Giant African land snail, from eradicated Miami-Dade County infestation.
Photo by Paul Skelley, FDACS-DPI



Figure 2. Lissachatina fulica, Giant African land snail, from Pasco County.
Photo by Nicole Casuso, FDACS-DPI