# Giant African Land Snail (GALS) Response Program

Regulatory Requirements for Landscapers & Lawn
Maintenance

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## Background on this plant pest

- Native to East Africa; introduced Nigeria
- Since found in China, India, Indian Ocean islands, Australia, New Zealand, and the Pacific region including Hawaii.
- Established in Hawaii around 1935.
- Frequently intercepted at US Ports.
- It is illegal to possess live GALS in the United States for any purpose without a permit!

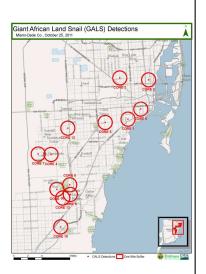
### Historical Florida Infestation

- 3 snails smuggled as a pet from Hawaii and released in North Miami in 1963.
- Undiscovered for 3 years; snails found in 1966.
- A total of 18,000 specimens collected.
- Eradication from this infestation took about 9 years.

### Present Florida Infestation

- 13 core areas identified with snails.
- About 32,000 snails collected to date.





## GALS Life Cycle



- Eggs are white, round and 3-5 mm in diameter.
   They are laid in leaf litter or under a shallow layer of soil.
- Hatchling and smaller snails are similar to other native and naturalized snails.
- They Become reproductive at about 6 months of age when 2+ inches in length.
- Normally live 5-6 years.
- In ideal climates, lay 1000-1200 eggs per year!

## Other Biological Notes

- Primarily nocturnal (like moderately warm and humid conditions).
- Smaller ones usually found in leaf litter and under ground cover.
- Larger ones will climb into bushes, trees, buildings and fences.

## Identification

 Typically reddish brown with alternating dark and cream longitudinal stripes. No bands following whorls.



## Identification

• They have a relatively broad foot.



## Other Snails - Elongate



Liguus fasciatus Florida tree snail



Orthalicus reses Stock Island tree snail

## Other Snails - Round



Pomacia spp.
Apple snail
Aquatic



Dhamus del back

Zachrysia provisoria Cuban garden snail

Caracola marginella Banded caracol

### Threats from GALS

- Massive plant foraging by prolific reproduction that build up enormous populations threatening both the agricultural food crops, ornamental plants and the natural environment.
- Known to carry the rat lungworm and transmit parasitic diseases including meningitis.
- Other hazards:
  - Lawn mowing hitting snail shells with a mower can create instant shrapnel.

#### Regulatory requirements for landscapers

- Purpose
  - Prevent the artificial and unintentional spread of GALS thru the movement of plants, plant parts, yard waste and any article capable of transporting or harboring plant feeding snails (regulated articles)



#### Regulatory requirements for landscapers

- Examples of regulated articles:
  - Nursery Stock
  - Soil/compost
  - Debris (lawn maintenance or otherwise)
  - Building materials (bricks, tiles, concrete)
  - Vehicles and equipment

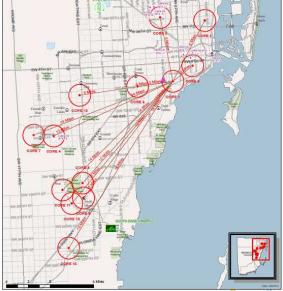


#### Regulatory requirements for landscapers

- Regulated area. Any are infested with plantfeeding snails or exposed to infestation.
- Current Regulated Area(s)
  - One-mile radius around each positive GALS find
  - Currently 38.7 square miles being regulated in 13 Cores







#### Regulatory requirements for landscapers

- Compliance Agreements
  - $^{\circ}$  Nursery/Stockdealer/Garden Center
  - Solid waste facilities and commercial trash haulers (also includes transfer stations, landfills, recycling, mulching and compost facilities)
  - Landscape/lawn maintenance

#### Regulatory requirements for landscapers

#### • Landscape/Lawn Maintenance



Florida Department of Agriculture & Consumer Services Division of Plant Industry

#### COMPLIANCE AGREEMENT / GIANT AFRICAN LAND SNAIL (GALS) LANDSCAPE / LAWN MAINTENANCE

Section 581.031(26), F.S. / 5B-43.011, F.A.C.

P.O. Box 147100/1911 S.W. 34<sup>th</sup> Street, Gainesville, Florida 32614-7100 / Phone: (352) 372-3505

NAME AND MAILING ADDRESS OF PERSON OR FIRM	2. LOCATION
	County:
	County.
3. REGULATED ARTICLE(S): All life stages of the snail Achatina fulica, plants, plant parts, yard waste and any article capable of	
transporting or harboring plant feeding enails including sail debris compact and building materials (bricks tiles concrete)	

transporting or narrounting frait recording statis including soin, deolis, compost, and duming materiars (orthes, mes, concremented from a rear regulated for glant African land snall.

4. APPERABLE STATE QUARANTER(s) OR REGULATIONS: \$70.32, \$81.031, (1)(7) \$81.091 (1)(2)(3), \$81.101 Florida Statutes, and \$8-43, Florida Administrative Code.

#### Regulatory requirements for landscapers

I/we agree to handle, pack, process, and move regulated articles in accordance with applicable plant quarantines; use all permits and certificates in accordance with instructions; maintain and offer for inspection such records as may be required; and abide by the following stipulations:

In order to limit the artificial spread of Achaima fulica (the giant African land snail (GALS)), landscape/lawn maintenance contractors agree to abide by the following conditions and provide the following information to the Florida Department of Agriculture and Consumer Services (FDACS):

- Immediately report all detections or observations of suspected GALS to the FDACS Division of Plant Industry GALS
  Helpline at 888-397-1517.
- 2. Regulated articles in #3 above shall be disposed of at the end of each work day (emptied completely) in an approved solid waste facility and shall not be parked or stored overnight at a location outside of a regulated area. Locations of regulated areas and a list of approved solid waste facility locations will be made available via the GALS Helpline at 888-397-1517, or on the division's website: <a href="http://www.mbeshfromflorida.com/piplantines/pgals.html">http://www.mbeshfromflorida.com/piplantines/pgals.html</a>.
- Each load of regulated articles shall be secured to prevent loss during transport as applicable with any local or county ordinances.
- All landscapers shall sign a compliance agreement and be issued a decal to be visibly displayed in each vehicle operating
  within the regulated area.
- 5. Furnish a list of all property accounts, if requested to do so within 7 business days.
- Disclose the location and allow access for inspection and snail bait station placement during normal business hours on properties where lawn maintenance equipment and vehicles are parked, housed, or maintained.
- Allow authorized representatives of the FDACS and the USDA to conduct inspections of regulated articles and equipment during the normal course of business while working in the field.
- 8. Training materials on snail identification and notification procedures shall be provided to employees.
- Violation of any stipulation of this agreement may result in prosecution as provided by sections 581.141 and 581.211, Florida Statutes.

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