

Apple Snails: A new invader in Louisiana rice agro-ecosystems

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**Extension Agent Training
Rice Research Station**



Apple snails, *Pomacea maculata*



Apple snail biology

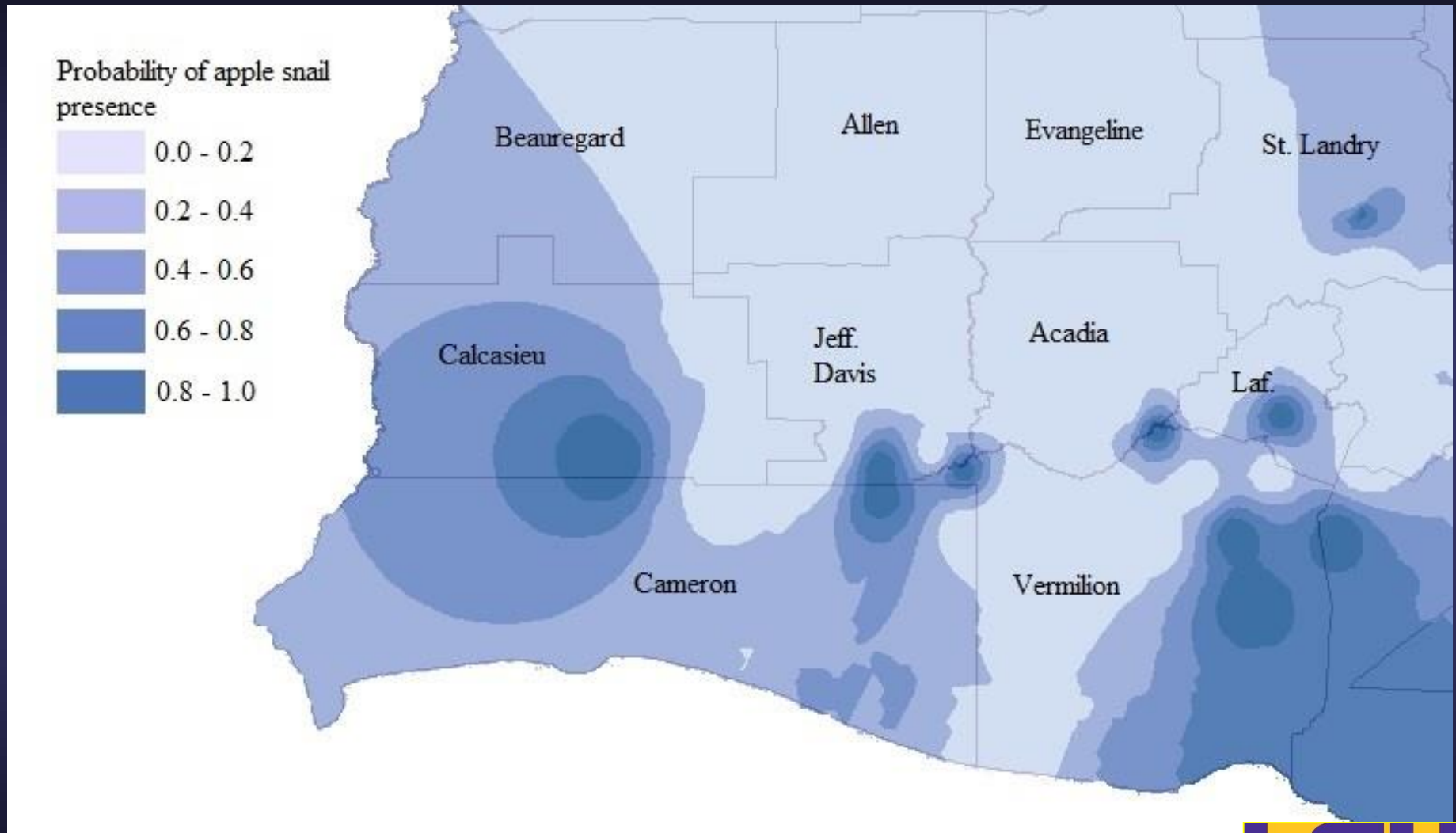
- **Hundreds of very small hatchlings from each egg mass**
- **Reach reproductive age in 6 weeks**
- **Adults live up to 3 years, 10-20 egg masses per season**
 - **>4,000 offspring/female/year**

Apple snail biology

- **Active during warm months**
- **Only leave water to lay eggs**
- **Can remain dormant for up to 1 year in dry conditions**



Apple Snail Distribution



***Estimated from detections in rice/crawfish farms**

Apple snail movement

- **Actively move through connected waterways**
- **Can move over land if moisture is high enough**
- **Long dispersal possible with assistance**

Apple snail movement



Transportation of eggs on boats, plant material, traps, etc.

Slow the Spread

Mermentau and Vermilion rivers and tributaries are infested

Check surface water irrigation sources for presence of snails

Source crawfish stock from uninfested areas

Wash boats or other equipment stored in or near infested bodies of water

Report new infestations to AgCenter extension agents

Impacts to rice?



**Major pest of rice in Philippines
and Spain**

**Reduce stands of germinating
rice**

Impacts to rice?

No feeding observed in either drill- or water-seeded rice in LA or TX.

Water seeding into heavily infested fields can see major stand loss.

Damaged levees from snails seen in TX.

Impacts to crawfish?



**Ponds drained due to
snails in Vermilion Par.
In 2018**



Clogged traps

Competition for forage

Water quality impacts

Control Options

Mechanical control?

Limited efficacy, but could help
Hatchlings are very small, exclusion unlikely
Keep water off fallow fields
Will follow water, drain to small area then kill

Chemical control with copper sulfate

Registered in rice
2 ppm is effective (about 8 lbs crystal/acre ft)
Not safe for crawfish

Questions?

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**Call me or your extension
agent with any questions.**

