

# **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

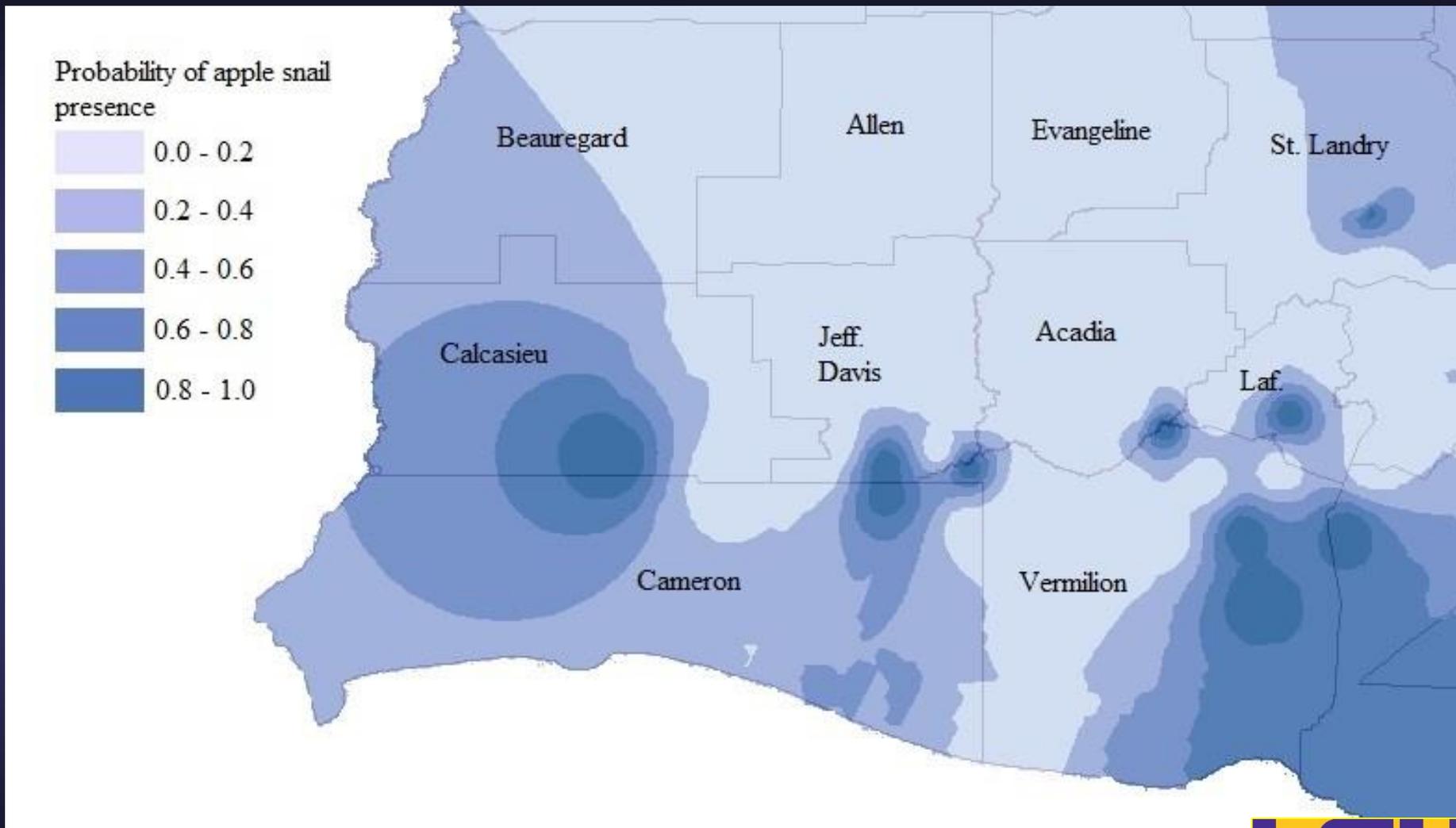
- **Hundreds of very small hatchlings from each egg mass**
- **Reach reproductive age in 6 weeks**
- **Adults live up to 3 years, 10-20 egg masses per season**
  - **>4,000 offspring/female/year**

# 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.**

