## Be a Good Apple! Combat Snail Invasion! See Eggs? See Snails? No eat eggs or snails!

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Scientific Name: *Pomacea maculata*, previously *P. insularum* Common Names: Apple snail, giant apple snail, island apple snail, channeled apple snail

**Note:** We choose to refer to the snails by their scientific name because common names breed confusion. Dozens of apple snail species exist, many attain large or "giant" sizes and several have channels or deep grooves in their shells. Therefore, no single common name correctly identifies the species with which we are dealing within Texas.

**WHERE DID THEY COME FROM:** *Pomacea maculata*, a non-native apple snail from South America, has invaded the southeastern United States<sup>1</sup>, including Texas! These apple snails should be considered pests because they threaten freshwater biodiversity, including within the greater Houston area. Flooding events may have contributed to their colonization and spread in recent years. Also, recent publications have synonymized *Pomacea maculata* with previously referred names<sup>2</sup> "island apple snail" or *Pomacea insularum*.

**HOW DID THEY GET HERE:** Releases from the aquarium trade<sup>3</sup> likely introduced *Pomacea maculata* into the southeastern states. The pest species gets confused with the aquarium variety that eats algae. When these pest species grow too large, people ill advisedly release them to "natural" habitats. However, the U.S does not represent a natural habitat to these non-native snails.

While these snails benefit their native habitats in South America (largely Uruguay, Brazil, and Argentina), *Pomacea maculata* threaten U.S ecosystems. *Pomacea maculata* eat vascular plants (green plants with leaves and stems) causing clear water to become murky. Furthermore, apple snails grow to about the size of a fist (or an apple) and can carry parasites, including *Angiostrongylus cantonensis*- a roundworm that causes rat lungworm disease responsible for meningitis. While some cultures do eat snails, they need to be thoroughly cooked before consumption.

Success of this invasion can be attributed to the abundant reproduction of *Pomacea maculata*. Identified by their bright-pink color, a single egg clutch has an average of 2,000 eggs<sup>4</sup>!

## Want more information on apple snails?

- https://www.cabi.org/isc/datasheet/116486
- <u>http://www.profromi.com/research/publications/</u>
- <u>https://snailbusters.wordpress.com/</u>
- <u>www.usgs.gov</u> (search *Pomacea maculata*)
- <u>https://www.youtube.com/watch?v=Pi2wcFPPJsI&feature=youtu.be</u>

## What Can/Should You Do:

- Eggs should be crushed- not just knocked into the water.
- Children should not play with or eat egg clutches or snails.
- Do not consume raw snails.
- To prevent their spread, refrain from moving apple snails to another water system.
- Report all sightings of **bright pink eggs** and apple snails to your local park ranger or community manager.
- Organize efforts to remove snails from invaded bodies of water. They can be sacrificed efficiently by freezing.

**Take Home Message:** *Pomacea maculata* exemplify non-native, nuisance species that spread easily and should be eradicated. They pose minor threats to human health but large threats to aquatic environments.