

Island Apple Snail

Scientific name:
Pomacea insularum
(d'Orbigny, 1835)

Habitat: Freshwater

Origin: South America

Suspected pathway of introduction: Deliberate and accidental releases by aquarium hobbyists. In the aquarium trade they are sometimes sold as the "Golden Apple Snail" or "Mystery Snail"

Description and similar species:

The island apple snail is now the largest non-marine snail in the southeastern United States and is the most common apple snail found in Georgia. It can be distinguished from the native Florida apple snail (*Pomacea paludosa*) by the deep groove (channel) between the whorls of the shell. Shells are 70-100 mm high as adults and are highly variable in color, from olive brown to yellowish brown, often with darker bands and blotches. Gold and albino color forms are popular in the aquarium trade.

Facts and potential impact:

This snail feeds aggressively on many types of aquatic and terrestrial plants. Apple snails were introduced to Taiwan and Hawaii for human consumption and have since spread rapidly, becoming a serious rice and taro pest. While not yet a rice pest in the continental US, there is concern that this apple snail may out-compete native snails for food. In areas where they are eaten, undercooking can lead to parasite infections (e.g. rat lung parasite). This species has great potential to continue to spread throughout coastal Georgia. Apple snails, in general, have a lung in addition to their gills, allowing them to survive considerable time out of water and to migrate between water bodies. In addition, this species has a lower tolerance for cold temperatures than the Florida apple snail.



Photo credit: Bill Frank



Egg mass clusters of *P. insularum* (Photo credit: Bill Frank)

Apple snails lay their egg clusters on solid objects above the water line. It is normally the presence of these masses that alert individuals to their presence. The island apple snail lays thousands of

eggs in clusters that are initially bright pink or red in color. After time, the eggs fade to a lighter pink or even white color. The native Florida apple snail also lays pale pink to white clusters, but the eggs are larger in diameter and each cluster typically averages only 30 eggs.



Selected References:

- Howells, R.G. 2000. Applesnails (*Pomacea*) in U.S. waters. Retrieved 8/1/2007. www.cdfa.ca.gov/phpps/ppd/Entomology/Snails/ApplesnailIdentification2.pdf
- Ghesquiere, S. 2005. Apple snails. Retrieved 8/1/2007. www.applesnail.net
- Rawlings, T.A., Hayes, K.A., Cowie, R.H., and Collins, T.M. 2007. The identity, distribution, and impacts of non-native apple snails in the continental United States. *BMC Evolutionary Biology* 7: 97.



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