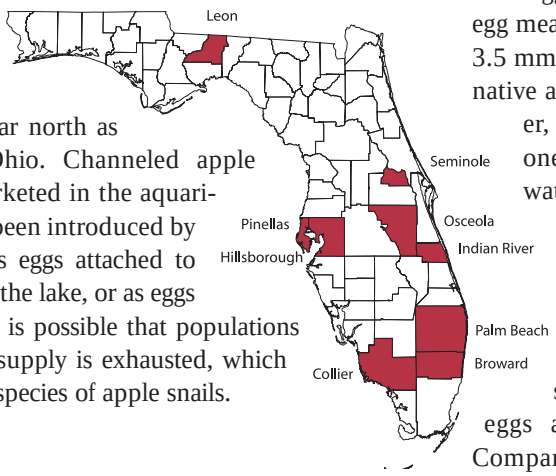
Exotic South American Snail Occurs in Florida Waters

The native Florida apple snail, *Pomacea paludosa*, a favorite food of the endangered snail kite and limpkin, now must compete for food and habitat with an apple snail from South America, the channeled apple snail (*Pomacea canaliculata*). The voracious channeled apple snail readily consumes almost any aquatic plant, and is particularly attracted to less coarse plants such as southern naiad (*Najas guadalupensis*), eelgrass (*Vallisneria americana*), and fanwort (*Cabomba caroliniana*). Their heavy feeding on aquatic plants could impact populations of invertebrates that are consumed by small fish, which are in turn eaten by larger fish like largemouth bass and crappie. Alligators, large turtles, and a few large birds may eat the channeled apple snails but probably not enough to seriously impact the populations.

Eggs hatch in one to two weeks, releasing hundreds of juveniles into the waterbody.

Mating Pomacea canaliculata *from Lake Brantley in Seminole County, Florida.*

The channeled apple snail has been introduced into many areas around the world where it has become a serious agricultural pest (mainly of rice and taro). It threatens many natural lakes and wetlands due to habitat modification and competition with native species. Populations are established throughout Florida (see map) and breeding populations also exist in Texas, California and Hawaii. Individuals have been collected as far north as North Carolina and Ohio. Channeled apple snails frequently are marketed in the aquarium trade and may have been introduced by hobbyists, or possibly as eggs attached to aquatic plants planted in the lake, or as eggs attached to boat hulls. It is possible that populations will decline as the food supply is exhausted, which has occurred with other species of apple snails.



Identification:

The shells of channeled apple snails, *Pomacea caniculata*, vary from 1.5 – 2.3 inches (40 to 60 mm) wide and 1-3/4 – 3 inches (45 to 75 mm) high. The color in the wild is yellowish to brown with or without dark spiral bands. 5 to 6 whorls are separated by a deep, indented suture, hence the species name '*canaliculata*' or 'channeled'. Reddish-pink eggs are loosely attached to each other with the mass being laid above the waterline on docks, seawalls, trees, and plant stems. An average clutch contains 200 to 600 eggs, with each egg measuring 2.20 to 3.5 mm (.086 to .138 inch) in diameter. Compared to the eggs of native apple snails, those of the channeled apple snail are smaller, pinker, and more numerous (see photo). Eggs hatch in one to two weeks, releasing hundreds of juveniles into the waterbody.

Male Pomacea canaliculata *on left with female from Lake Brantley.*

The shells of native apple snails, *Pomacea paludosa*, are 1.5 – 2 inches (40-55 mm) wide by 1-3/4 - 2.5 inches (45-65 mm) high, and are yellowish to greenish brown with red streaks and dark spiral bands. *P. paludosa* eggs are white to slightly pinkish and are laid on emergent stems of vegetation and trees. The clutches of 10 to 80 eggs are loosely packed together in a gelatinous mass. Compared with *P. canaliculata*, the eggs of *Pomacea paludosa* are relatively large, about 0.1" - 0.236" (3 to 6 mm) in diameter, but far fewer in number. –KB

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