

EXOTIC SPECIES ALERT

APPLESNAILS IN TEXAS WATERS

CHANNELED APPLESNAIL (*Pomacea canaliculata*)



GENERAL BACKGROUND: Applesnails (genus *Pomacea*) are medium to large aquatic snails with shells 2” to 6” in height. They are native to Central and South America, with one native species in southern Florida. They have gills, but can survive for extended periods and even forage on land. They also have a trap door (operculum) to protect their soft tissues when withdrawn into the shell. Some 50 to 150 species have been described, but three are most likely to be encountered in U.S. waters. Spiketop applesnail (*P. bridgesi*) is common in the pet trade and water garden stores; it can reach about 2” in size. Florida applesnail (*P. paludosa*) may also appear for sale in the pet trade, but only rarely. Channeled applesnail (*P. canaliculata*), shown above, also occurs in the pet trade. Although spiketop applesnail feeds primarily of decaying vegetation, channeled applesnail feeds aggressively on many types of aquatic and terrestrial plants, including commercial crops. Applesnails are typically called “mystery snails” when sold by pet stores. Several species occur in white, ivory, gold, and blue color morphs known as golden applesnails, ivory mystery snails, and the like.

INTRODUCTIONS AND IMPACTS: Channeled applesnail was introduced to Taiwan and the Philippines in the 1980s to be cultured for human consumption. There was little interest in eating the species locally and stocks escaped or were released. The species spread rapidly and now reaches from Indonesia to southern China and Japan. They were also introduced into Hawaii in 1989, both for human consumption and through pet-trade releases. This species has become a significant crop predator in Southeast Asia where it damages rice fields, and in Hawaii where it consumes both rice and taro. It can also host rat lung worm that can infect humans. **TEXAS CONCERNS:** Although there were previous reports of applesnail releases in Texas, no established populations were documented. However, in July 2000 a reproducing population of channeled applesnails was found in the American Canal south of Houston, Texas, in Galveston and Brazoria counties. Because this canal is centered in the heart of the Texas rice belt and the snail’s record of damage to rice fields in Hawaii and Asia, both state and federal agencies are concerned. Texas rice is a one billion dollar per year industry. It is not illegal to possess or sell applesnails, but it is illegal to release them in Texas waters.

DESCRIPTION AND IDENTIFICATION: Channeled applesnail is a large, globular snail. Some Texas specimens have been nearly 4” in shell height. Coloration is brown or olive brown, often with darker bands and blotches. Some individuals may be completely dark or pale. Channeled applesnail has a deep groove (channel) that separates each shell whorl from the one below (shadowed in the photo above left). This channel is absent in spike top and Florida applesnails. Applesnails lay clusters of pink to red eggs that look like small bunches of pink grapes (often 1-4” in length) on solid objects above the water. Observing egg masses is often the fastest way to determine if applesnails are present.



REPORT SITINGS:

Please report applesnails and their eggs to:
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Applesnail egg clusters on twigs (left)