

# Freshwater Snails

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Freshwater snails are included as an interesting addition to many ponds and aquariums. Most will grow to be 1-4 inches in size. They are very peaceful animals and should not be housed with any other animals that may eat or harass them. They are easy to care for, requiring a low light level, temperatures of 68-85°F, and a pH of 6.5-8.0. Different snails require different water hardness; members of the Ampullariidae family need a dH of 12-18, while the other snails listed here prefer a hardness of 8-10.

There is considerable confusion regarding freshwater aquatic snails. The names "apple" snails and "mystery" snails are used by different references and the aquarium trade to describe a number of snails of different genera and species. In addition, various genus names are sometimes used synonymously, e.g.; *Pomacea* and *Ampullaria*. There is even confusion about the family name of some of these snails, some referring to it as Ampullariidae, and others, Pilidae.

## Ampullariidae (Pilidae)

Members of the Ampullariidae family are often called "apple snails," and include members of the genera *Pomacea* and *Marisa*. *Pomacea* snails usually remain inactive and sometimes hidden during the day, coming out at night to forage for food. In their natural environment, they may leave the water to find food.

Respiration: Snails of the Ampullariidae family have both gills and a lung. They use a siphon, much like a snorkel, which the snail can extend out to the water surface allowing the snail to breathe while submerged. Therefore, in an aquarium setting, there should be two to four inches of open air space above the waterline to provide the snail with open air to breathe. The siphon of the *Pomacea* genus is typically longer than the length of the snail's body.

Reproduction: Members of the Ampullariidae family are either male or female. Males and females of some species can be distinguished by shell-shape, but for many, there is no outward physical difference. Upon examination of the mantle, however, the male will have a relatively large penis sheath in front of the gills, the female will not.

A female *Pomacea* snail will lay her eggs in clutches above the waterline, generally at night. Usually 200 to 600 eggs can be laid. Eggs of *Marisa* snails are also laid in clutches, but below the waterline, on vegetation. Depending on the temperature, eggs of either genera hatch after two to three weeks. The young will eat the same diet as the adults.

Ampullariidae snails commonly found in the aquarium trade include:

- *Pomacea bridgesi*: Shells of the *P. bridgesi* snail may be found in a number of patterns and colors, including black, gold, and ivory. The gold variety is often sold as the "Golden Mystery Snail." The shell of *P. bridgesi* has square "shoulders," when viewing it from the side. *P. bridgesi* generally reaches a size of 2 inches in an aquarium setting. Since this snail mainly eats algae, *P. bridgesi* is a good choice for a planted aquarium. In general, it will only eat plants if other food is not available. This snail will eat algae, vegetables, flake food, frozen foods, and live foods.
- *Pomacea canaliculata*: The shell of *P. canaliculata* has deep "sutures," or grooves, between the swirls of the shell. This snail is often brown to yellow, and can grow to a size of 3 inches. *P. canaliculata* does eat plants, so unless it will be fed enough other vegetable-based food, this snail would be more appropriate for an aquarium without live plants. *P. canaliculata* will eat algae, plants, vegetables, flake food, frozen foods, and live foods.
- *Marisa cornuarietis*: The shell of *M. cornuarietis* looks like a ramshorn, and thus the snail is commonly called the Ramshorn Snail. The shell can vary significantly in color and pattern, but is usually yellow, cream, or reddish brown with dark brown or black stripes. This snail is an omnivore, like other snails, but will eat live plants. The Ramshorn Snail originates in lakes, ponds, and swamps, and prefers areas of shallow water with a large amount of vegetation. It can live in slightly brackish water. The *Marisa cornuarietis* snail has a large appetite and will eat almost anything including dead and rotting plants, fresh plants, dead animals, algae, vegetables, fish food, frozen foods, and live foods.

## Vivipariidae

Members of the Vivipariidae family are the true "mystery" snails. These snails do not have a lung, and are livebearers, not egg layers. A member of this family commonly found in aquariums is *Viviparus malleatus*, the Japanese Trapdoor Snail.

- *Viviparus malleatus*: The shell of the Japanese Trapdoor Snail, also known as the



Chinese Mystery Snail, can vary significantly in color and pattern, but is usually brown to gray. It originates from ponds and slow-moving streams with some vegetation and a muddy substrate. The Japanese Trapdoor Snail bears live young generally twice a year, and limits the number of young to just a few. Thus the number of young produced is less than egg-laying snails, which is beneficial since some snails may overrun ponds or large aquariums. It will eat algae and generally does not eat live plants. This, too, makes it a good addition to smaller ponds where it can aid in [controlling algae growth](#). It is an omnivore, and should be fed algae, vegetables, fish food, frozen foods, and live foods.



#### Neritidae

Members of the Neritidae family are also known as Nerites. Most Nerites live on the shore, and various species can be found in salt, brackish, or fresh water. The shell has a drop-like shape, which distinguishes it from other freshwater snails. As with the other snails mentioned, Nerites have separate sexes. They are egglayers, depositing their eggs in clutches, with about 30 eggs inside a larger egg capsule. The capsule is attached to a rock or other hard surface. Compared to other snails, they are slow growing, and usually reach only one inch in size. Members of the Neritidae family eat algae, and generally leave the plants in an aquarium alone.

#### *Viviparus malleatus*



#### Nerite

