

Snails & Mussels Scavengers of the Pond

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One scavenger found in any ornamental garden pond is the snail. An old saying makes a claim they help keep ponds clean and tidy. Another "old" idea is the snail helps keep water "sweet". I'm afraid I would question all of these claims just a bit. Snails do eat some algae and fish offal, scraps of food, and any dead fish that may sink, unnoticed, to the pond bottom.

Snails can help us understand what is going on in the pond, primarily the health of the pond. Snails are a living meter that most often will react to drastic chemical changes taking place in the pond. Though healthy for fish, if the water becomes slightly acidic, this will cause snails' shells to become pitted and scored. This is a general indication the pond is healthy, although extremely acidic water is dangerous to fish and will kill the snails.

Snails clinging to the surface rim of the pond, for as long as one day, may mean the water is out of balance. If in checking the water, you find it is foul, change it. Should the water be clear and have no odor, the snails could be objecting to an exceptionally high oxygen content or high acidity. Neither will be dangerous to the fish.

Now, here are just a few tidbits about snails. Snails are a shell-bearing gastropod mollusk living in sea and fresh water, with some even living on land. The majority belong to two orders, *Pulmonata* and *Prosobranchiata*. The majority of land and fresh water snails are hermaphrodites, in sea snails the sexes are often separate. In general, most snails lay eggs, but in certain species, the young are born alive. Snails can be anywhere from 1/16th - 2' in length. What we are writing about here are the general pond snails, and so, no two-footers.

Attention!!!! Be on the lookout for the Zebra mussel they can be nasty. They are ¼" to 1 ½" long and have a D-shaped shell. They can attach to any firm surface like pump motors and inlet grates. As of yet, I have not heard of any in our pond environments, but they are not something you want in your pond. They are infesting many bodies of water and causing wide spread concern. They can attach themselves to aquatic plants so be aware when handling new plants.

Species and Varieties

African Paper Shell Snail – this is a formed snail of medium size, somewhat flattened shape, with attractive brown markings on a horn-colored background. This is a good scavenger and one that won't attach to aquatic plants. Every time the pond is cleaned, empty shells will be found of this species, for it is comparatively short-lived.

Australian Red Snail – this is one of the smaller species with a conch-shaped, bright orange-red shell. They are very useful, of average hardiness, and reproduce in the pond without special conditions.

Japanese Snail – also called Great Japanese Snail or Trapdoor Snail. One of the largest and best scavengers, it often grows to the size of a golf ball, is very hardy, and has a long life. The pea size progeny are born alive, too big for fish to eat.

Potomac Snail – they resemble the Japanese Snail, except for three brown stripes running parallel to the spiral of the shell. They are sometimes sold as the Japanese Snail, but are not the same.

Limpet – they are a small snail about the size of a match head, with a flat semi-transparent, rather attractive shell. They turn up occasionally in ponds and sometimes in considerable numbers, having apparently gotten there as a stowaway on some newly purchased aquatic plant.

Pond Snail – they are a small snail about as large as the end of a little finger. Easily identified because the spiral of the shell is the reverse of most other snails, they could be called "the snail with the left-hand thread". They breed prolifically and the hard shells of the very young protect them from fish. They are the best of all scavengers and are a thorough feeder. Their small size enables them to move easily among the more slender plant stems in search of algae. This allows them to feed where other snails can't because other snails are too large and heavy.

Red Ramshorn – they are also called Coral Shell or Copenhagen Red Snail. They are an excellent scavenger with a large, flattened, orange-red shell shaped like a ram's horn. They do quite well in ponds, where they can be seen. They are considered the most handsome snail.

Black Ramshorn – they are a black-shelled, medium sized snail, similar in shape to the Red Ramshorn and just as good a scavenger. They are common in European water gardens, but scarce in the United States.

White Ramshorn – they are similar to the Black Ramshorn, but have a white shell. They are common in Europe, but rare in the United States.

On average, snails are seldom culprits in eating the aquatic plant life in ponds. Many at times, may be seen feeding on the edge of a leaf or lily pad that has started to die away. This is one of their normal jobs given by their creator, but some snails get carried away with the job and attack the plants. You must bring this under control quickly.

The snail, *Lymnaea stagnalis* (Giant Pond Snail) has a thin, very pointed shell, grows to 2.5 inches long, and needs to be avoided. It will feed on and eat away aquatic plants rather quickly.

Should the snail population get carried away, place lettuce leaves and other soft plant material on the water's surface to attract the snails, so you can lift them out and dispose of them. Watch for flat jelly-like strips on pots and plants, as these are snail eggs. Keep as many of these eggs cleaned from the plants as possible.

Clean all new plants of eggs before placing them in the pond. At times, I have found eggs so thick on a plant's parts; the entire plant had to be disposed of. Nip the pad at the base of the petiole (stem), and if on the peduncle or flower, treat the same. Any part of either will only remain on the plant base and rot. Try to avoid dead plant material in the pond when possible.

To clean the plants of snail eggs, use your thumbnail and gently slide or push under the jelly-like material holding the eggs, detach them, and then throw them away. Once plants and ponds are established, snails can be tolerated - to a point!

Sources

Colliers Encyclopedia, no longer in print

<u>Goldfish Pools, Water-Lilies, and Tropical Fishes</u> by Dr. G. L. Thomas, Jr. © 1965. ASIN: B0006BNIBQ <u>Ponds and Water Gardens</u> by Bill Heritage © 1985. ISBN10: 0713711418, ISBN13: 9780713711417 <u>Pond Life</u> by George K. Reid, © 1989. ISBN13: 9780307240170

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