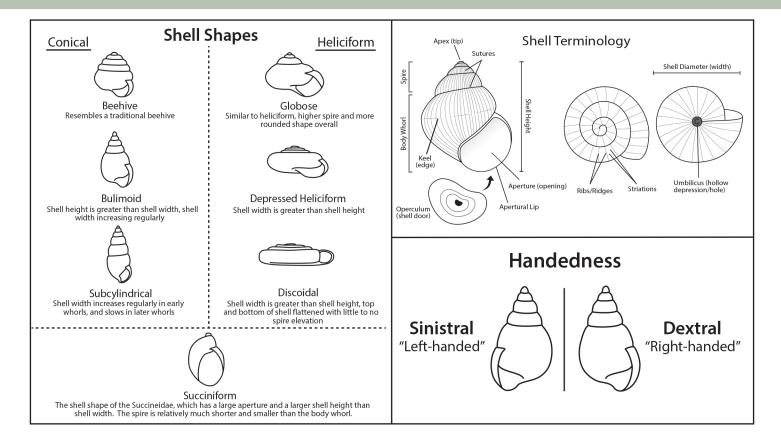
Introduced Freshwater Snails in Hawai'i:

Taylor M.B. Maruno, Bishop Museum, Honolulu. Illustrations by Lily Evans (Shell Shapes) and Andy J. Huang (Shell Terminology & Handedness)



<u>Planorbidae</u> Planorbella duryi/trivolvis

Ramshorn snails



Shell light to dark brown, relatively thin and somewhat translucent; body is brown, may see some patterning through shell

Shell is spiraled like a "rams-horn" in a flat coil shape; common snail in the aquarium trade



Shell diameter: 1-2 cm Shell shape: heliciform (discoidal)

<u>Ampullariidae</u>

Pomacea canaliculataApple snail



Shell usually tannish brown/yellow to dark brown; shell rounded with deeply impressed sutures

Lays bright pink eggs in clusters/masses; the largest freshwater snail in Hawai'i (one of the world's worst invasive species); common pest in lo'i



Shell height: 6-9 cm Shell shape: globose Operculum present



Lymnaeidae

Pseudosuccinea columella American ribbed fluke snail





Shell tan/light brown, relatively thin and translucent with fine ribbing

Aperture has no operculum; body whorl is very large compared to spire





Hawai'i also has various native species of Lymnaeidae that inhabit waterfalls and seeps

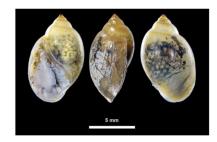
Shell height: 1 cm

Shell shape: succiniform/conical (bulimoid)

Dextral (right-handed)

<u>Physidae</u>

Physella acuta Acute bladder snail



Shell yellowish tan, transparent and glossy; body has black/white spotted pattern usually visible through shell

Aperture ear-shaped, has no operculum; body whorl is very large compared to spire







Shell height: 1-1.5 cm

Shell shape: succiniform/conical (bulimoid)

Sinistral (left-handed)

Thiaridae

Melanoides tuberculata Red-rim melania







Shell light brown with reddish (chestnut) spiral bands/flames made from spots; shell moderately thick, has ribs/ridges

Strongly pointed spire, though tip (apex) of shell usually eroded/broken; operculum present



Shell height: 2-4 cm
Shell shape: conical (subcylindrical)

Dextral (right-handed)

Tarebia granifera Quilted melania





Shell brown to yellow-tan, color can be variable; shell moderately thick, ribs and striations make the shell look bumpy

Strongly pointed spire, though apex (tip) of shell usually eroded/broken; operculum present



Shell height: 2-4 cm

Shell shape: conical (subcylindrical/bulimoid)

Dextral (right-handed)

Mieniplotia scabra





Shell brownish, sometimes with rustcolored flames/spots

Spiral ridges/ribs form spikes or spikelike nodules that protrude upwards on shell; whorls distinctly sutured

Spire not as elongated as *M. tuberculata*; operculum present

Shell height: 1-3 cm

Shell shape: conical (bulimoid)

Dextral (right-handed)

Pacific Island Land Snail Field Guide Series by Rüdiger Bieler (editor) and Lisa Kanellos (design), Field Museum. Photos by Bishop Museum Malacology. Project funding by NSF DEB-1656254, DEB-1837849, DBI-156774, DBI-1902328, USDA APHIS, and Hawaiian Land Snail Conservation Program. Kenneth A. Hayes and Norine W. Yeung © CCBY-NC 4.0. July 2024







