

Field Guide to Hawaiian Land Snail Families

(13 families, 759 species, 99.9% endemism)

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Achatinellidae (215 species): Primarily Hawaiian, but with several Pacific-wide species. Shells cone-shaped. Adult shell height 2-22 mm. Snails > 5 mm are usually brightly colored and thick-shelled and are arboreal. Those < 5 mm have brown, thin shells and are arboreal and ground-living.



Amastridae (325 species): Only extant endemic animal family left in Hawaii. Shells mostly cone-shaped with some helicospiral. Adult shell height 2-80 mm. Shells can be (1) brown, smooth, thin, translucent, (2) brown, rough, thick, or (3) white, smooth, thick. Shells often covered with dirt or their own poop! Primarily ground-living, but some arboreal species exist.



Endodontidae (34 species; ~200 undescribed): Pacific-island endemic family with an estimated 200 Hawaiian endemic species that are still undescribed. Shells helicospiral. Adult shell diameter 2-6 mm. Shells are creamy white to tan with dark stripes, rough with heavy longitudinal ribbing. Primarily ground-living, but some arboreal. "Endo" = inside, "donte" = tooth - describes tooth-like structures inside shell opening of many species.



Euconulidae (60 species): Globally distributed with Hawaiian endemic species. Shells helicospiral. Adult shell diameter 3-10 mm. Shells brown, smooth, thin, translucent. Speckled tan-gold body color can be seen through shell. Arboreal and ground-living. Some people call them "cinnamon buns" because of their shell shape and speckled colors resembling this food.



Gastrodontidae (3 species): Globally distributed with Hawaiian endemic species. Shells helicospiral. Adult shell diameter ~3 mm. Shells brown, thin, translucent. Body color grey to black. ground-living. May be confused with Hawaiian *Euconulidae* but lack speckled body color.



Helicinidae (14 species): Globally distributed with Hawaiian endemic species. Shells helicospiral. Adult shell height 3-5 mm. Shells can be dark brown to red, smooth, thin, and opaque to translucent. Primarily ground-living. Has an operculum (shell door) on its foot, to protect from predators and prevent desiccation. Closest relative is a marine snail!



Oxychilidae (6 species): Globally distributed with Hawaiian endemic species. Shells helicospiral. Adult shell diameter 8-10 mm. Shells brown, smooth, thin, translucent. Body color grey to black. Ground-living. May be confused with Hawaiian *Euconulidae* but lack speckled body color. Called "glass snails" because many have glossy shells.



Hydrocenidae (2 species): Globally distributed with Hawaiian endemic species. Shells cone-shaped. Adult shell height ~1 mm. Shells tan-yellow, rough, thin, and translucent. Generally called "cave snails" because they are often found in caves but the ones in Hawaii are found on moss in the forests. Ground-living. Has an operculum (shell door) on its foot to protect from predators and prevent desiccation.



Punctidae (1 species): Globally distributed with Hawaiian endemic species. Shells helicospiral. Adult shell diameter ~1 mm. Shells thin, brown and rough with subtle longitudinal ribbing. Commonly called "dot snails" because they look like dots with your naked eye. Arboreal and ground-living.

Pupillidae (1 species): Globally distributed with a Hawaiian indigenous species. Shells cone-shaped. Adult shell height < 3 mm. Shells thin and brown. Primarily ground-living.

Succineidae (42 species): Globally distributed with Hawaiian endemic species. Shell shape oval-teardrop with wide opening. Adult shell height 5-12 mm. Shells tan-brown, smooth, thin, translucent. Arboreal and ground-living.



Vertiginidae (55 species): Globally distributed with Hawaiian endemic species. Shells cone-shaped. Adult shell height < 3 mm. Shells thin, brown and surface rough with longitudinal ribbing. Arboreal and ground-living. Often called "beehives" due to shell shape.

Vitrinidae (1 species): Globally distributed with Hawaiian endemic species. Shells helicospiral. Adult shell diameter 8-10 mm. Shells brown, smooth, thin, translucent. Body color grey to black. Ground-living. May be confused with Hawaiian *Euconulidae* but lack speckled body color. Called "glass snails" because many have glossy shells.