community science URBAN NATURE FIELD GUIDE



NATURAL HISTORY MUSEUM LOS ANGELES COUNTY urban nature RESEARCH CENTER

Welcome to your NHMLAC Community Science Urban Nature Field Guide!

The following pages will help you identify the common species of reptiles, amphibians, snails, slugs, birds, and mammals that you are likely to encounter while observing wildlife in the L.A. area.

STEP 1



Discover Wildlife

Help us investigate the incredible nature all around L.A.— in backyards, schools, and in neighborhoods, and discover the wildlife all around you.

STEP 2



Record What You See

Snap a photo of the animals, plants, and fungi you find, and when and where you found them. The more detailed the observation, the better!

STEP 3

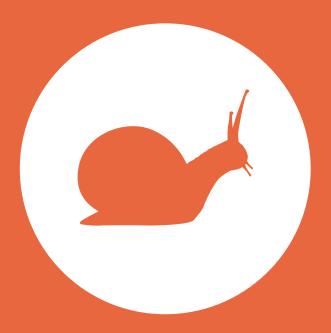


Share What You Find

Submit your observations to iNaturalist, available on the App store for OS or Android.

For help using iNaturalist

- · Consult the tutorial in the iNaturalist app
- · Visit the Help section at iNaturalist.org
- E-mail us at nature@nhm.org or call us at 213.763.3272



Snails and Slugs

Common European Garden Snail

Cornu aspersum, nonnative







The most common snail in Southern California; the most likely to be in a garden or crawling on a wet sidewalk.

Appearance The shell is brown, yellow, and tan with variable banding,

blotches, streaks, and/or patterning. The body is tan, gray,

or brown with a bumpy and mottled appearance.

Shell diameter is about the same as a quarter.

Habitat Often on and near the vegetation they eat and on sidewalks

after rain or watering.

Notes Very common. Eats vegetation. Most active at night.

Introduced from Europe to California in the 1800s as escargot; now a pest in gardens and to some food crops. Adults can be found motionless but alive, attached to

vegetation or structures during dry periods.





This is one of the most invasive snails found in Southern California with populations that are likely growing.

Appearance The shell is sometimes solid white but usually with variable

tan or brown bands, zigzags, dashes, or arrow-shaped stripes of various thickness. The umbilicus, which is at the center of the shell's underside, is partially covered by the shell lip. The body is creamy white, gray, or yellow with a relatively

smooth appearance.

Shell diameter is about the same as a nickel.

Habitat Found in large and concentrated populations on the

Palos Verdes Peninsula and in other coastal areas. Climbs and attaches to tree branches, fence posts,

and other structures.

Notes Eats vegetation. Most active at night. Can be found with

milk snails (*Otala lactea*), with which they are sometimes mistaken. Introduced to California and elsewhere from Southern Europe; has become a major agricultural pest in parts of the Middle East and Australia. Documenting this snail throughout Southern California is essential to understanding how quickly it establishes new populations

and expands its range across the region.

Milk Snail

Otala lactea, nonnative







At maturity, this is the largest snail found in Southern California. Where one is found, many more are nearby.

Appearance The shell may be almost totally white to heavily banded,

often chalky in appearance, with brown and tan stripes that can be solid or stippled. In mature snails, the underside of the shell near the aperture (opening) is shiny and chocolate brown in color. The shell lip is thickened and flares outward.

The body is white to gray with a bumpy appearance.

Shell diameter is slightly larger than a quarter.

Habitat Found in large and concentrated populations in the

Baldwin Hills (Scenic Overlook area) and Palos Verdes Peninsula. Climbs and attaches to tree limbs, branches,

and dry vegetation.

Notes Eats vegetation. Most active at night. Introduced from

Southern Europe. Can be found with the white Italian

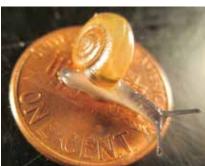
snail (Theba pisana).



Glass Snail

Oxychilus alliarius, Oxychilus draparnaudi, Oxychilus cellarius, nonnative





This small, common snail is distinguished by its amber shell and blue eye stalks.

Appearance The shell is flat, amber in color, thin, glossy, and semi-

transparent. There is a depression or hole at the center of the shell on its underside, called an umbilicus. The body is gray to blue, including the eye stalks, and sometimes two-toned with the foot lighter in color than body, and

smooth in appearance.

Shell diameter is about half to ¾ of a dime.

Habitat Found among leaf litter and soil in parks, gardens,

greenhouses, and watered areas.

Notes Common. Eats vegetation, eggs of other snails, earthworms,

and slugs. Most active at night. Introduced from Western and Central Europe. The three species in this genus look very similar to each other and to the smaller orchid snail

(Zonitoides arboreus).

Orchid Snail

Zonitoides arboreus, native







Although native to North America, snails in urban Southern California might be introduced from populations established elsewhere because of the horticulture trade.

Appearance

The shell is flat, brownish to amber in color, thin, glossy, and semi-transparent with obvious growth lines. There is a depression or hole at the center of the shell on its underside, called an umbilicus. The body is gray to blue, sometimes two-toned with foot lighter in color than body, and smooth in appearance. When alive, a dark band of the body is visible through the shell, especially in the first shell whorl.

Shell diameter is less than half of a dime.

Habitat

Found among leaf litter, woody debris, and soil in parks, gardens, greenhouses, and watered areas.

Notes

Common. Eats vegetation. Most active at night. Native to California and much of the Northern Hemisphere. Looks very similar to glass snails (species of *Oxychilus*) but is smaller. Introduced to Europe and Hawaii where it has become a common pest in plants grown in greenhouses, such as orchids.





Although nonnative, this small, flat, snail does not become invasive or seem to disrupt native ecosystems.

Appearance The shell is light-to-dark brown in color, robust, and very

densely ribbed with gray, brown, or red blotches or flecks. Shell is flat (planispiral). The body is light to dark gray, sometimes two-toned with foot lighter in color than body,

and smooth in appearance.

Shell diameter is less than half of a dime.

Habitat Found among leaf litter, vegetable debris, and decaying

wood in native habitats as well as in parks, gardens,

greenhouses, and watered areas.

Notes Eats fungus and plant matter. Most active at night.

Introduced from Western and Central Europe. Looks similar to a nonnative snail from the U.S. Southeast that has recently become established in Southern California,

the southern flatcoil snail (Polygyra cereolus).

Slippery Moss Snail

Cochlicopa lubrica, native







This small snail is a synanthrope: a species that lives close to human dwellings.

Appearance The shell is small, light-to-dark brown in color, glossy,

and with a high spire. After death the shell may become off-white in color. The body is gray to black and smooth

in appearance.

Shell length is about half of a dime.

Habitat Found among leaf litter, decaying wood, and fungi in

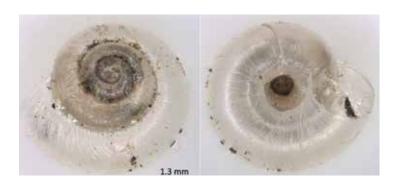
native habitats as well as in parks, gardens, greenhouses,

and watered areas.

Notes Common. Most active at night. Native to California and

much of the Northern Hemisphere





Probably common but very tiny and therefore often hard to find.

Appearance The shell is creamy white in color with subtle growth lines.

Shell lip is thickened and flares outward. The body is white

in color, translucent, and smooth in appearance.

Shell diameter is less than half of a dime.

Habitat Found among rocks, grasses, and leaf litter in native

habitats as well as in parks, gardens, greenhouses, and

watered areas.

Notes Native to California and much of the Northern Hemisphere.

Eyes are at the tips of upper tentacles and often extend and

retract as the snail moves.

Decollate Snail

Rumina decollata, nonnative







This snail is predatory and, when mature, has an unmistakable shell.

Appearance The shell is thick, tan to brown, white in dead specimens,

and missing at least three of its upper whorls in adults. The body is gray/blue to brown in color, bumpy in appearance,

and is very small compared to the shell.

Shell length is slightly longer than the diameter of a nickel.

Habitat In leaf litter, decaying vegetation, and among other snails

in native habitats as well as in parks, gardens, greenhouses,

and watered areas.

Notes Can be common. Carnivorous; eats other snails and snail

eggs. Most active at night. Introduced from Southern Europe to California as a biological control for European garden snails

(Cornu aspersum).



Shoulderband Snails

Helminthoglypta tudiculata (left), native and Helminthoglypta traskii (right), native





Two native Southern California species of many in the genus *Helminthoglypta*; both are considered critically imperiled.

Appearance

The shell is amber to medium brown in color with a darker brown band along the largest shell whorl. A hole at the center of the shell on its underside is partially covered by the shell lip. In *H. tudiculata*, the largest whorl of the shell is covered by many small, shallow indentations. In *H. traskii*, the shell is smaller and has more obvious growth lines, very fine spiral lines, and no shallow indentations. In both species, the body is brown and bumpy in appearance.

The shell diameter of *H. tudiculata* is approximately the same as a quarter; in *H. traskii*, it is usually a bit smaller than the diameter of a quarter.

Habitat

Found in native habitat especially in decaying logs and yucca, near water sources, or among decomposing vegetation.

Notes

Endemic to Southern California. Eats detritus and decaying vegetable matter. Most active at night. Not a pest to agriculture or garden plants. Documenting these native snails in and around the L.A. area is essential to understanding the population sizes and range of these imperiled species.

Three band slugs



Ambigolimax nyctelius, Ambigolimax valentianus, nonnative





The two species of this genus are very common in Southern California and very difficult to distinguish from one another.

Appearance The body is cream, tan, and/or brown in color, somewhat

translucent, usually with 2-3 brown longitudinal stripes running from head to tail. Stripes may be continuous or dashed, few, or numerous. Texture is wrinkled, like a fingerprint, on the upper $\frac{1}{3}$ of body. Their slime is colorless and watery.

and watery.

Can grow up to 3 inches long.

Habitat Found in leaf litter and generally where it is dark, cool,

and moist in parks, yards, gardens, greenhouses, and

watered areas.

Notes Very common and found with other slugs. Eats vegetation

and dead and decaying organisms. Most active at night.

Introduced from Southern Europe.





This species is an agricultural pest throughout much of the western and midwestern United States.

Appearance The body is cream, tan, and brown in color with a mottled

appearance including flecks of darker pigment. Texture is wrinkled, like a fingerprint, on the upper $\frac{1}{2}$ of body. Their slime is sticky and white, which is how they got their common name, and produced when they are agitated.

Can grow up to almost 2 inches long.

Habitat Found in leaf litter and generally where it is dark, cool,

and moist in parks, yards, gardens, greenhouses, and

watered areas.

Notes Common. Eats vegetation and sometimes dead and

decaying organisms. Most active at night. Introduced

from Europe.

Cellar Slug Limacus flavus, nonnative







This is the largest slug in Southern California.

Appearance The body is yellow-green in color with light brown or

greenish flecks and blotches. Eye stalks are blue in color. Sometimes the body has a yellow stripe to the tail. Texture is very finely wrinkled like a fingerprint on the upper $\frac{1}{2}$ of

the body. Their slime is clear or yellowish.

Can grow to nearly 5 inches long.

Habitat Found in leaf litter and generally where it is dark, cool,

and moist in parks, yards, gardens, greenhouses, watered

areas, and sometimes within damp parts of homes.

Notes Common. Can climb trees and structures. Eats algae,

fungus, and other detritus. Most active at night.

Introduced from Europe.

Glossary

Biodiversity

The variety of living things in a region. This variety includes variability at all levels of organization from genes in a population to species in an ecological community.

Captive

Animals that are not wild and are cared for by people.

Community Science

Projects in which volunteers partner with professional scientists to answer real-world questions.

Cultivated

Plants that were planted and/or maintained by people.

Data Point

A single fact that can be used in scientific research. An iNaturalist observation that includes a photo, date/time, and geolocation can be used by NHM scientists as a data point.

Diurnal

Active during the day.

Ecosystem

A community of organisms living in conjunction with nonliving components of their environment and interacting as a system.

Endemic

Native species found only in that one geographic area.

Habitat

The place where a plant or animal lives. Successful habitats must have food, water, space, shelter in an appropriate arrangement.

Habitat Fragmentation

The division of natural habitat into smaller and smaller plots, separated by habitats that are significantly different from the original habitat.

Introduced

Species only present in a region because of accidental or deliberate human transportation.

Invasive

Introduced species that spread widely and have negative economic or ecological impacts.

Muzzle

The projecting nose and mouth of an animal's face; the snout.

Native

Species naturally found in that region, regardless of human activity.

Nocturnal

Active at night.

Nonnative

Species that are not naturally found in that region.

Urban Nature

Nature in a city.

More information

REPTILES AND AMPHIBIANS

An excellent online field guide with numerous photos and lots of natural history information: californiaherps.com

The standard reference field guide for reptiles and amphibians: Stebbins, Robert C. 2003. *Peterson Field Guide to Western Reptiles and Amphibians*, 3rd Edition. Houghton Mifflin.

SNAILS AND SLUGS

McDonnell, R., 2009. *Slugs: A guide to the invasive and native fauna of California*. UCANR Publications. https://anrcatalog.ucanr.edu/pdf/8336.pdf

Roth, B. and Sadeghian, P.S., 2006. *Checklist of the land snails and slugs of California*. Santa Barbara (CA): Santa Barbara Museum of Natural History.

SQUIRRELS AND OTHER MAMMALS

Thorington Jr., Richard W., and Katie E. Ferrell. 2006. *Squirrels: The Animal Answer Guide*. Johns Hopkins University Press.

Jameson, Everett Williams, and Hans J. Peeters. 1988. *California Mammals*. University of California Press.

Myers, P., R. Espinosa, C. S. Parr, T. Jones, G. S. Hammond, and T. A. Dewey. 2015.

The Animal Diversity Web (online). http://animaldiversity.org

BIRDS

Dunn, J. L. and J. Alderfer. 2017. Field Guide to the Birds of North America, 7th ed. National Geographic.

Sibley, D. 2014. The Sibley Guide to Birds, 2nd ed. Alfred A. Knopf. More local in scope:

Garrett, K. L., J. L. Dunn, and B. E. Small. 2012. Birds of Southern California. R. W. Morse Co

Natural History Museums of Los Angeles County

nhm.org/nature #natureinla





