

# 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](https://www.inaturalist.org/help)
- E-mail us at [nature@nhm.org](mailto: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.



# White Italian Snail

*Theba pisana*, nonnative



**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  $\frac{3}{4}$  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.





# Rounded Snail

*Discus rotundatus*, nonnative



**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



# Smooth Grass Snail

*Vallonia pulchella*, native



**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.

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.



# Milky Slug

*Deroceras reticulatum*, nonnative



**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  $\frac{1}{3}$  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  $\frac{1}{3}$  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](http://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.

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