

Marine Biodiversity Center

SCAVENGER HUNT



NATURAL
HISTORY
MUSEUM
LOS ANGELES COUNTY

DISCO

Diversity Initiative for the Southern California Ocean

LET'S LOOK FOR
ROLY-POLIES

We're looking for special roly-polies, and we'd like your help!



Roly-polies (also known as *pill bugs*, *sow bugs*, *slaters*, and dozens of other names) are some of the most popular small land animals — most of us remember playing with them as kids. Although they have hard shells like insects, they're actually crustaceans, in the same group as crabs and shrimp, and are technically called isopods.

WHERE TO FIND ROLY-POLIES

Roly-polies need to live in slightly damp areas, and eat decaying plant matter. You can find them under plant pots or rocks (please replace any pots or rocks back exactly the way you found them), or by sifting through leaf litter. They're completely safe to touch, so you can pick them up to photograph them before they run away.

RECORDING AND REPORTING ROLY-POLIES

The best way to report your findings is to use the iNaturalist application on your phone or computer. Our growing project, "Roly-Polies of Southern California", is at: <https://bit.ly/rolypoliesofsc>. More detailed species lists and identification keys are in the "Read more" section of the iNaturalist project. Each roly-poly observation you submit to the project will be identified. Your efforts will help us determine the distribution of isopod species in Greater Los Angeles, document introduced species, determine which species are common versus rare, and much more!

WHICH SPECIES OF ROLY-POLY ARE OUT THERE?

In urban areas, nearly all the roly-polies you see will be from two non-native species that people have distributed around the world: *Porcellio scaber* and *Armadillidium vulgare*. We're interested in knowing where those two species live. We're especially interested in any and all species beyond the two common non-native species. If you see any isopod that strikes you as a bit different from the usual two non-natives, please record it!

COLOR VARIATIONS WITHIN SPECIES

There are color variations within isopod species. The common *Porcellio scaber* varies from dark grey or dark brown through white, orange, and variegated. Eye colors can also be colorless, red, or black. However, not a lot is known about the occurrence and genetics of different color variations. We'd like to begin understanding the distribution of color variants around here, so if you see any isopods with colors other than the most-common dark grey or dark brown, please record them!

Roly-Polies Have a Virus, Too!

Certain isopods are infected with a virus, called “Isopod Iridescent Virus” or IIV, that turns them bright iridescent blue. Like the SARS-CoV-2 virus that causes COVID-19 in humans, IIV is transmitted between isopods (but only isopods — IIV cannot infect people). We would like to learn where IIV is found, so that we can start learning more about how it affects natural populations.

But our small group working on isopods at NHM can’t possibly visit enough places or find enough isopods to map out where the IIV virus exists.

Therefore we need your help. If you can hunt for isopods that are blue (infected with IIV) and report them, then we’ll be able to build a picture of where IIV exists in the Southern California area. As a bonus, we’ll also learn about which species of isopods live where.



IDENTIFYING VIRUS-INFECTED ROLY POLIES

Any roly poly that’s bright blue is infected with the Isopod Iridescent Virus (completely safe to humans) — we want to hear about those! Report those sightings on iNaturalist as species “Isopod Iridescent Virus” (don’t worry about the species of isopod).

WHO ARE WE?

We are researchers from the Museum’s Marine Biodiversity Center and much of our time is spent on the (marine-oriented) Diversity Initiative for the Southern California Ocean (DISCO) project. *Regina Wetzer* is Associate Curator and Director of the MBC, and her research specialty is isopod systematics (admittedly with a marine focus). The rest of the group collaborating on this project are: *Leslie Harris*, *Kathy Omura*, *Dean Pentcheff*, *Adam Wall*, and *Jenessa Wall*.

Image Credits: Page 3, Isopod Iridescent Virus photo by sbstrongbeach. Page 4, *Armadillidium vulgare* photo by dannymn12; *Ligia occidentalis* photo by Daniel Onea; *Porcellio laevis* photo by James Bailey; *Porcellio dilatatus* photo by Alex Bairstow; *Pocellionides floria* photo by Ron Matsumoto; *Porcellio scaber* photo by Alex Bairstow.

Can you spot these roly polies?



COMMON PILL WOODLOUSE
Armadillidium vulgare



WESTERN SEA ROACH
Ligia occidentalis



SWIFT WOODLOUSE
Porcellio laevis



GIANT CANYON WOODLOUSE
Porcellio dilatatus



FLOWERY BLUE ISOPOD
Porcellionides floria



COMMON ROUGH WOODLOUSE
Porcellio scaber