

Banana Slug



Naturalist and banana slug expert Alice Harper with yellow hermaphrodite friend on leaf.

Banana Slugs

# MELLOW YELLOWS

The banana slug's slimy struggle for respect

By ROBIN MUSITELLI  
Sentinel staff writer

**C**ALL IT THE "yuck" reaction. Banana slugs get it all the time.

Despite their bright, beautiful yellow color and essential contribution to the redwood forest biosystem, banana slugs get no respect.

That's a mistake, according to Alice Harper, a naturalist and expert on banana slugs.

Harper calls banana slugs the clean up crew of the redwood forest. They munch on decaying vegetation, animal carcasses, poison oak and wild mushrooms in the damp, mild coastal forests where they live.

They maintain a particularly symbiotic relationship with redwood trees which, as seedlings, they protect, says Harper.

"They eat all the other little plants that would compete with redwoods, but not the redwood seedlings," and leave behind a nitrogen rich fertilizer which give the seedlings a nutritional boost. In return, the redwoods give them the shade and water they need to survive.

Believed to have originally evolved from snails, the slime-covered invertebrates are meals to salamanders, newts, foxes, shrews, raccoons, snakes, ducks and, when they're small, birds.

Raccoons will roll them in the dirt, and then peel the dirt and slime from them before dining, says Harper.

Indigenous Yurok tribes reportedly ate them when other food became scarce, and German immigrant families ate them by removing the slime with vinegar, cutting them like fish, and deep frying them in a batter, according to Harper. Besides being food, banana slugs face another daily danger as they slime along. "They get squished a lot," says Harper. "They're run over by bicycles, hikers, cars and horseback riders."

There are several species of banana slug, but *Ariolimax dolichophallus*, the one found in Santa Cruz County, is distinctive.

The name means "long penis." And

## Going Native

**L**OCAL creatures — bats, tarantulas, owls, and sharks — are the celebrities of Native Animal Awareness Week, running today through Saturday.

The Sentinel articles today and Monday are a part of the week's emphasis on Santa Cruz County's native animals. Sponsored by the Santa Cruz Museum Association, the week will culminate in Native Animal Day on Saturday at the City Museum of Natural History, a day of talks by naturalists, educational games and activities for kids and live animal presentations from 11 a.m. to 5 p.m.

The museum is located at 1305 East Cliff Drive, Santa Cruz. For more information phone 429-3773.

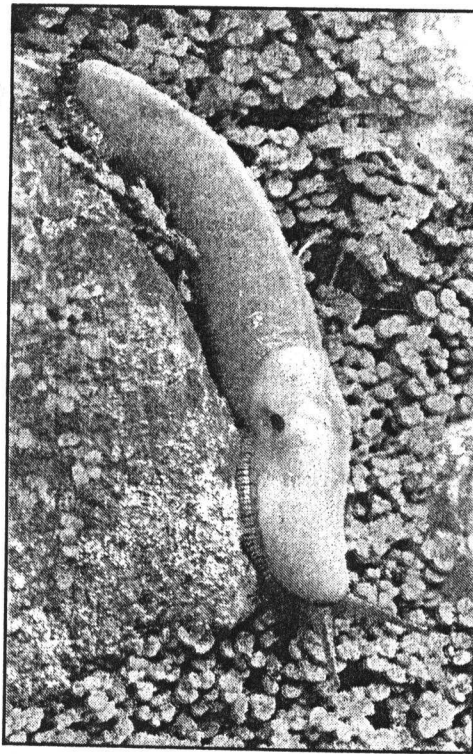
that, says Harper, is one of the most interesting aspects of our local slugs.

Banana slugs are hermaphrodites: each animal has both male and female organs. They mate with another banana slug, and cross-fertilize, each producing eggs and sperm simultaneously.

Some researchers believe slugs advertise their readiness for potential partners in messages left in their slime trails.

Mating for these creatures is a long, brutal affair, during which they often bite off hunks of flesh. When they are ready to separate, more difficulties occur.

Because of the huge male organs, — often longer than the banana slug's body — they regularly become stuck and cannot separate. After hours of trying, the mollusks will give up trying to disengage and



A slug slimes along in Aptos.

take turns gnawing off the stuck organ or organs.

This paradoxical act is a unique phenomenon, says Harper. Some researchers believe the severed organ regenerates, but the theory has not been proved.

Then there's the slime — mucus produced by all parts of the body. The thick and sticky slime is what the slug travels on and, at the same time, protects the slug's soft body from sharp objects. When the slug is threatened it emits a very thick mucus and bunches its body into an arch. This makes for a slimier and fatter bite than some predators' mouths or beaks can handle.

And it's repugnant. Dogs and ducks have been seen gagging when they tried to eat a banana slug, and attacking shrews

## Slug facts

- Banana slugs produce their own "ropes" of slime to lower themselves from trees. The transparent slime cords give them a quick and easy way to return to the ground from a high place.

- The banana slug in this area can grow to 10 inches long. In the world of land slugs, its size is second only to the European slug.

- Banana slugs "slime" themselves clean. When dirt sticks to the slug's body, it cleans itself by moving the dirt backward in its slime until a hunk of debris-laden slime is at the tail. Then the slug turns around and bites off or eats the mass, leaving its body clean.

- Banana slugs aren't always yellow. They can be greenish, brown, spotted and even candle-wax white.

and beetles spend time trying to rid themselves of slime, which gives the slug a chance to escape.

The slime and the slug's ability to make itself long and thin enables it to crawl into extremely small places, making amazing escapes from people who try to keep the banana slugs in terrariums.

Still, the banana slugs have traditionally been afforded little respect.

That was, until 1986, when a group of UC Santa Cruz students rebelled against their chancellor and demanded that the banana slug become their university mascot.

The students won. And the lowly slug finally earned some respect.