#### March 2025



The Life of an Earthworm

Earthworms thrive during rainy periods. Though their existence differs dramatically from ours, these creatures have fascinating adaptations.

**Despite lacking eyes**, earthworms possess light receptors that help them detect darkness and light. **While they have no ears**, their bodies can sense nearby vibrations. **A simple "brain"** connects to nerves from their skin and muscles, allowing them to detect stimuli and respond with movement.

**Earthworms breathe** through their moist skin rather than lungs. Oxygen dissolves on their mucus-covered skin, enters their circulatory system, and is pumped by five hearts to the head. Their body movements help blood flow backward, with hearts pumping it forward again.



For eating, earthworms use their muscular mouths to consume dirt and decaying leaves. Food passes through the pharynx, esophagus, and into the crop for temporary storage. Their muscular stomach (gizzard) grinds food before it enters the intestine, where nutrients are absorbed into the bloodstream. Undigested matter exits as nutrient-rich castings—valuable to farmers and gardeners. THIS MONTHS EVENTS

Every Friday Friday Fun\* 10:00 am - Noon Every Saturday **Guided Nature Walk** 10:00 am - Noon Thursday, March 6th Tyke Hike 10:00 am - Noon Thursday, March 13th Nature Stories & Lessons 10:30 am - Noon Saturday, March 8th Night Hlke\* 6:30-8:30 pm Star Party 7:00-9:00 pm

Tuesday, March 18th <u>PV/South Bay</u> <u>Audubon Chapter</u> <u>Meeting</u> 7:00-9:00 pm

Saturday, March 22nd Lawns to Native Gardens - Jay Estabrook and the NHS Ecology Club **Instead of kidneys**, earthworms have nephridia that filter waste from blood. Their circulatory system is simpler than ours but effective.

**Movement** occurs through the coordination of circular and longitudinal muscles beneath their skin, along with tiny hairlike setae that grip soil. By alternately contracting these muscles and gripping with setae, earthworms propel themselves forward.

Next time you encounter an earthworm, observe but don't disturb as they go about their remarkable lives.



by

SuzanHubert Friends of Madrona Marsh, President California Naturalist

Learn More About Volunteering at Madrona Marsh

# One of Our Favorite Phone Apps

You may be new to birding, or even if you aren't, this app is worth trying.

Identify birds by photos and sounds. And the list is narrowed down to birds most likely to be seen where you are.

Read more about the app at: https://merlin.allaboutbirds.org <image>

1:00 - 3:00 pm

Bird Walk PV/SB Audubon Society 9:00 - 11:00 am

\* Registration required

### **Featured Sighting**

## Black Crowned Night Heron (Nycticorax nycticorax)

Photo by Lance Hill

Black-crowned Night Herons are stocky birds that stand in contrast to their more slender, long-limbed heron relatives. These birds come alive primarily at night or dusk, when observers might glimpse their spectral silhouettes flying from their daytime resting places to hunt in wetland areas.



Visit Our Photo Gallery

Friends of Madrona Marsh is pleased to welcome back *Lance Hill* and his popular "Scenes and Notes from the Preserve" photo series to our social media channels.

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From the Manager



by Liz Evans Madrona Marsh Preserve Manager

The rains we were all waiting for finally fell with earnest in February. In this month alone, 2.5" of rain fell in the Preserve, bringing the seasonal total up to 3.45" of rain. Mallards, wigeons, ring necked ducks, northern shovelers, and cinnamon teals have all been observed foraging in the shallow South Pond. The vernal pools remain dry. We will need a little morerainfall before water begins collecting in the vernal pools.



In February, the Nature Center hosted a number of groups, including the Tongva Basketweaving Collective, the South Bay Wildlife Rehab and Education organization, the San Pedro Garden Club, the Heal the Bay Foundation, and the University of Southern California's landscape architecture program.

Miriam Taeubel, our Sciences Coordinator, and I served as judges at this year's Palos Verdes Peninsula Science and Engineering Fair. Several of the students that Miriam mentors presented their research about the Madrona Marsh during the fair. Anika Savai came in third place in theEnvironmental Engineering category for her project, "Efficiency of *Schoenoplectuscalifornicus* (Tules) in Reducing Eutrophication and Toxicity." Anika's project also won the US MetricAssociation Award and was referred to compete in the Los Angeles County Scienceand Engineering Fair. One of the Marsh'sanimal care volunteers, Michael Chao, came in first place in his category ofAnimal Sciences. Congratulations to allof the students for their hard work and dedication to advancing our collectivescientific knowledge!

Daniel Huang and Amy Kim came in second place in the Earth and Environmental Science category for their project, "Evaluating Salinization's Effect on *Daphnia magna* as a Keystone Species and Bio indicator in the Madrona Sump and Amie Basin."



Anika Savai came in third place in the Environmental Engineering category for her project, "Efficiency of *Schoenoplectus californicus* (Tules) in Reducing Eutrophication and Toxicity." Anika's project also won the US Metric Association Award and was referred to compete in the Los Angeles County Science and Engineering Fair.

One of the Marsh's animal care volunteers, **Michael Chao**, came in first place in his category of Animal Sciences.



Congratulations to all of the students for their hard work and dedication to advancing our collective scientific knowledge!

#### Join the Friends of Madrona Marsh

As a member of the Friends of Madrona Marsh, you are supporting the upkeep of this incredible natural treasure in the heart of Torrance. Your membership donation is wisely invested in the preservation of the Preserve and in the creation and ongoing support of the education and research programs at the Nature Center and Preserve.

Become a Member Today!



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