

SUNFLOWER SEA STAR



School Programs
2026-2027

Scientific Name: *Pycnopodia helianthoides*

Classification:
Phylum Echinodermata
Class Asteroidea
Family Asteriidae

Size: Can grow to 3.3 feet (1 meter)

Life Span: Approximately 20 to 65 years

Range: Alaska to Baja California, Mexico

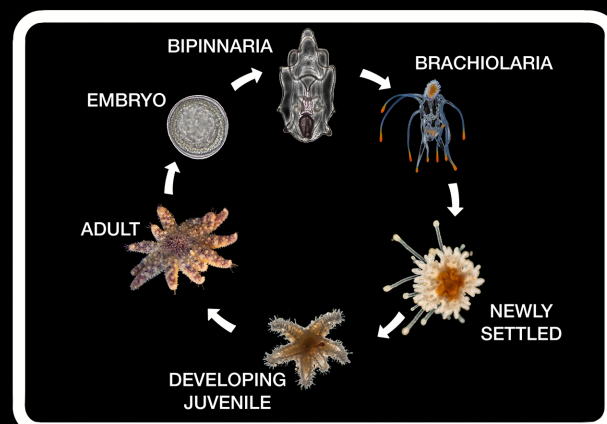
Diet: Purple sea urchins, mussels, crustaceans, and snails

Conservation Status: Critically endangered

Fun Fact: Among the largest and fastest sea stars in the world!

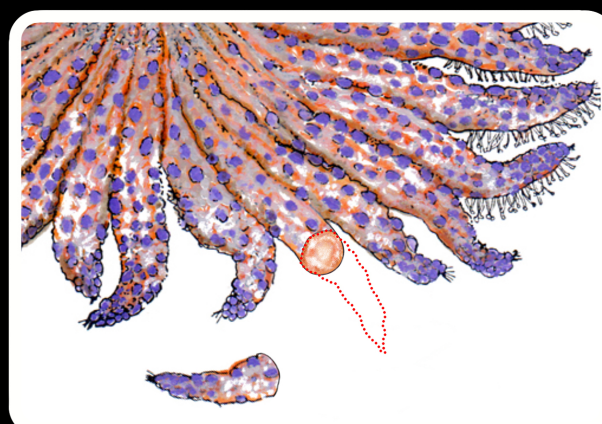


Life Cycle



As broadcast spawners, they release eggs and sperm simultaneously into the water for external fertilization, requiring close proximity for successful reproduction. Larvae spend 40–60 days as plankton before settling as five-armed sea stars, adding arms as they grow. Adults typically have up to 24 arms.

Regeneration



Most sea stars have the unique ability to regenerate, or regrow, lost arms. In addition, a detached arm can also potentially grow, or clone, into a full seastar if a portion of the central disk remains attached.

Ecology



As keystone predators on rocky reefs, they control sea urchin populations, prevent destructive urchin barrens, and help increase ecosystem biodiversity. Their specialized hunting adaptations allow them to reach prey in crevices, move rapidly across the seafloor, and capture prey with powerful tube feet.

Conservation

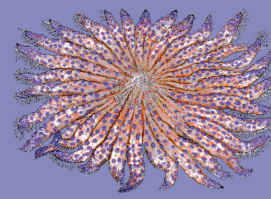


Over the last 10 years, populations have decreased nearly 95% primarily due to Sea Star Wasting Disease and Climate Change. Through collaborative efforts, scientists are working hard to ensure their survival through education, research, and aquaculture.



School Programs 2026-2027

Learn About Marine Science with Wet Hands and Sandy Feet!



Cabrillo Marine Aquarium

Education and conservation of Southern California's marine life

Tours

Sand to Sea Odyssey — CMA Docents give students a fun and interactive introduction to marine science!

Details: June-March, Tuesday-Friday, 10am. 90-minute program. Fee: Free.*

Self-Guided Aquarium Visits — Explore the Aquarium on your own; reservations required.

Details: Year-round, Tuesday-Friday, 1-5pm; Saturday and Sunday, 11am-5pm. Fee: Free.*

Outdoor Programs

Spring Outdoor Classroom — Bringing our classroom outside for hands-on fun in the sun! Through talks and activities students learn about different types of marine animals and our ocean environment.

Details: March-April (PreK-K), April-June (K-5), Tuesday-Friday, 10am. 90-minute program. No limit of students per program; no more than 1 adult per 5 students. Fee: Free.*

Explore the Shore — Learn by doing! Challenge your students to explore science concepts using the tools of a naturalist. Students engage in hands-on investigation of local habitats and marine organisms in our Coastal Park. Learn about life along the shore and our role in conservation.

Details: October-June, Fridays, 10am. 90-minute program. Limit 60 students per program; no more than 1 adult per 5 students. Fee: Free.*

Key to the Sea — This beach-based program encourages students to learn about watershed stewardship, coastal ecology and how we are all connected to the ocean. Teachers are required to attend a Key to the Sea workshop prior to their field trip. For more information visit: www.healthebay.org/key2sea/

Details: October-June, Fridays, 10am. 90-minute program. Limit 60 students per program; no more than 1 adult per 5 students. Fee: Free.*

Sea Search

Marine Biology Workshops provide hands-on laboratory and field experiences that focus on a wide range of marine biology topics. In the laboratory, activities include the use of microscopes and observation of live marine animals and other specimens. Using scientific field tools, students will explore the flora and fauna of the natural habitats in the tidepools, salt marsh or sandy beach adjacent to the Aquarium. Human impacts and conservation issues are incorporated in all classes.

Details: October-June, Tuesday-Friday, 10am. 2.5 hour program. Limit 60 students per program; limit of 35 students for Ichthyology. This fee-based program has limited space, and registration is required. For more information about our program topics and fees, please visit our website.

Ocean Outreach

Bringing the wonders of the ocean to your school! Our program captivates and engages students through interactive talks, hands-on activities, and specimen investigations. We can even bring live marine animals to your school! All topics are tailored to specific grade levels, from preschool to high school, and are designed to spark curiosity and appreciation for the ocean.

Details: Available year-round, Tuesday-Friday, from 9:30am-2:30pm. Each session lasts up to one hour, with a maximum of four sessions per school site per day. We can accommodate up to 30 students per session. Travel range is within 60 miles of the Aquarium. This fee-based program has limited space, and registration is required. For more information about our program topics and fees, please visit our website.

Whale Watching

Take your students to sea to experience whales, dolphins and sea lions in their natural habitat while enjoying a fun boat trip with an experienced guide. Our nutrient-rich waters may provide opportunities to see migrating gray whales, as well as humpback whales, fin whales, bottlenose dolphins, common dolphins, California sea lions, sea birds, and other marine life. Cabrillo Whalewatch volunteer naturalists can provide a live or virtual pre-trip classroom presentation to prepare your students for all that may be seen during the at-sea tour.

Details: Year-round, two- to three-hour boat trips departing from various landings. Live or virtual presentation by an experienced naturalist prior to your trip.

Workshops, Service-Learning and Community Service

We offer Educator Workshops throughout the year. Opportunities are also available to help students fulfill academic service hour requirements. Do you know a Middle School or High School student interested in Marine Science Research? Visit our website to learn more about our Young Scientists Program.

Cabrillo Marine Aquarium is dedicated to promoting appreciation, knowledge, and conservation of the rich marine life of Southern California.

Through our many live and interpretive exhibits, seawater laboratories and surrounding seashore habitats, your students have the opportunity to explore the wonders of our neighboring ocean.

Located on the beach in San Pedro, our beautiful Cabrillo Coastal Park includes tidepools, a salt marsh, sandy beaches, a fishing pier and grassy picnic areas, all joined by accessible trails for you and your class to enjoy.

Our programs are LAUSD Board of Education approved and are aligned with the Next Generation Science Standards.

Program Reservations

To learn more and to make reservations for our programs, please visit our website:



For more information call 310-548-7562,
Monday - Friday from 9am to 5pm.

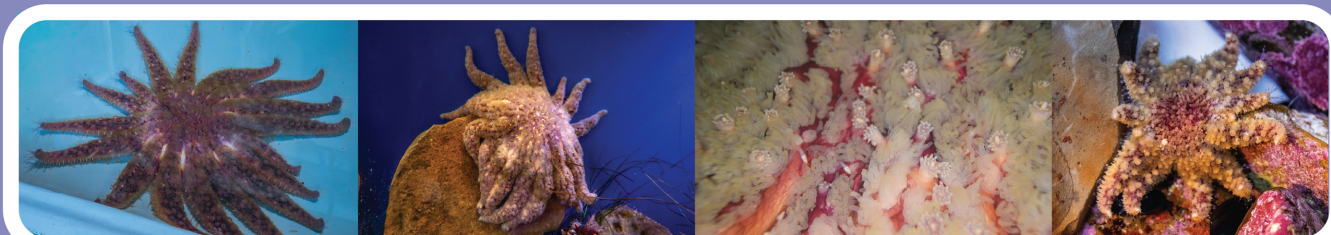
	PreK min. age 4 yrs.	K	1st	2nd	3rd	4th	5th	6th	7th	8th	High School	Adults	Availability	Duration	Cost
School Programs															
Tours — Discover local marine life															
Sand to Sea Odyssey		•	•	•	•	•	•	•	•	•	•	•	Jun-Mar	90 min.	Free*
Self-Guided Aquarium Visits	•	•	•	•	•	•	•	•	•	•	•	•	Year-round	90 min.	Free*
Outdoor Programs — Hands-on learning & coastal experience															
Spring Outdoor Classroom	•	•	•	•	•	•	•	•	•	•	•	•	Mar-Jun	90 min.	Free*
Explore the Shore		•	•	•	•	•	•	•	•	•	•	•	Oct-Jun	90 min.	Free*
Key to the Sea			•	•	•	•	•	•	•	•	•	•	Oct-Jun	90 min.	Free*
Sea Search — Marine biology workshops															
What Lives on the Sandy Beach			•	•	•	•	•	•	•	•	•	•	Oct-Jun	2.5hrs.	Fee-based
Life on the Rocky Shores			•	•	•	•	•	•	•	•	•	•	Oct-Jun	2.5hrs.	Fee-based
Salt Marsh and Plankton				•	•	•	•	•	•	•	•	•	Oct-Jun	2.5hrs.	Fee-based
Habitat Comparison			•	•	•	•	•	•	•	•	•	•	Oct-Jun	2.5hrs.	Fee-based
Ichthyology							•	•	•	•	•	•	Oct-Jun	2.5hrs.	Fee-based
Ocean Outreach — Bringing the ocean to you															
The Adventures of C. Weed the Snail Puppet Show	•												Jun-Feb	50 min.	Fee-based
At Home in the Sea		•	•										Year-round	1 hr.	Fee-based
The Greatest Fish Story Ever Told!		•	•	•	•	•							Year-round	1 hr.	Fee-based
Treasures in the Tidepool				•	•	•	•	•	•	•			Year-round	1 hr.	Fee-based
Thar She Blows! A Whale of a Lesson				•	•	•	•	•	•	•			Year-round	1 hr.	Fee-based
Shark! It's OK to Go into the Water					•	•	•	•	•	•			Year-round	1 hr.	Fee-based
Ocean Drifters: What is Plankton Anyway?					•	•	•	•	•	•			Year-round	1 hr.	Fee-based
The Art of Fish Printing: Gyotaku in the Classroom					•	•	•	•	•	•			Year-round	1 hr.	Fee-based
Ten Arms and an Attitude: A Squid Dissection					•	•	•	•	•	•	•		Year-round	1 hr.	Fee-based
No Guts, No Glory: A Fish Dissection					•	•	•	•	•	•	•		Year-round	1 hr.	Fee-based
Whale Watching — See whales and dolphins in the wild															
Boat Trip	•	•	•	•	•	•	•	•	•	•	•	•	Year-round	2-3 hrs.	Fee-based
Presentations: Live or Virtual	•	•	•	•	•	•	•	•	•	•	•	•	Year-round	Up to 1 hr.	Free*

*Free programs:

In lieu of any costs for this tour, please support our important campaign: **CMA wants a clean LA!** Your students can help us with this goal through in-class activities or service-learning projects in support of our free programs.

Make an opportunity to teach your students the importance of reaching beyond recycling, then do an environmentally conscious project. i.e. campus cleanup, reuse / repair project, art with recycled resources, etc. Once complete, please send us photos of your project. Information will be provided upon registration.

www.CabrilloMarineAquarium.org



Main photo © K. Lafferty, USGS; Life Cycle larvae photos © D. Pace, CSULB



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