

Bay Lines

MARINE
SCIENCE
INSTITUTE

500 Discovery Parkway
Redwood City, CA 94063-4715



Winter
2009

www.sfbaymsi.org

The Delta in Focus

Every Winter for the past seven years MSI has brought our floating classroom, the **R.V. Robert G. Brownlee**, north to Antioch to teach students about critical marine science issues of the Delta. Over a couple of months we host over 4000 students for a journey above and below the calm waters flowing towards the Bay.

The Delta is unlike any other ecosystem. The Sacramento and San Joaquin Rivers converge to form the Delta, creating the brackish mixture of fresh water flowing down from the mountains with the saltiness of the Pacific Ocean. The area that drains into the Delta is staggering—about 40% of the state. This watershed provides drinking water to citizens of the Delta region, but is further piped to supply over two-thirds of all the state's residents—over 25 million people.

MSI staff took a first-hand look at the water management machinery responsible for collecting, cleaning and distributing this essential resource to the half-million residents of the Delta. Realizing that the region is facing the third year of an increasingly serious drought, and that the largest use of energy in the state is involved in moving water—added to the importance of understanding this people ⇌ water connection.



MSI staff on tour at the Contra Costa Water District's Randall-Bold facility. This is where Delta water becomes drinking water!

What...?

An array of tubes sit ready to clean water through UV radiation—a more environmentally friendly alternative to using chemicals.



The technologies of treatment systems for water heading towards, and away from homes in the Delta are extremely impressive. From the water storage ecosystem at Los Vaqueros, to the rooms full of computers at Randall Bold, and the, uv radiation, incineration and energy recapture at the Bollman plant in Martinez—we witnessed a tremendous amount of sophistication and pride in the people who are responsible for keeping the water clean. Now the rest of us must do our part!

Summer Marine Camp
sign-ups are
underway! Sign-up today
@
<http://www.sfbaymsi.org>



Look
Inside!



A Salute To Our Funders

The Marine Science Institute receives grant support from many different foundations and businesses. We would like to recognize those who helped MSI bring science to life in the past year.

\$100,000+

Robert Brownlee Foundation

\$50,000 – \$99,999

Central Contra Costa Sanitary District
Contra Costa Water District
David & Lucile Packard Foundation
Silicon Valley Community Foundation

\$25,000 – \$49,999

Bothin Foundation
Motorola Foundation
Sidney S. Byers Charitable Trust

\$15,000 – \$24,999

Crescent Porter Hale Foundation
Dean & Margaret Leshner Foundation
Delta Diablo Sanitation District
Moore Family Foundation
Toyota Motor Sales, Inc., USA

\$10,000 – \$14,999

ALZA Corporation
Atkinson Foundation
Cargill & Redwood City Saltworks
Contra Costa County Watershed Program
Morgan Family Foundation
Sand Hill Foundation
Scandling Family Foundation

\$5,000 – \$9,999

Alexander & Baldwin Foundation
Myrtle L. Atkinson Foundation
City of San José Environmental Services
Danford Foundation
Derry & Charlene Kabcenell Foundation
Lockheed Martin Missiles & Space
Pacific Gas and Electric Company
San Francisco Estuary Project
Solano County Water Agency
South Bayside System Authority
Morris Stulsaft Foundation
Symantec Foundation
Turner Designs
Wells Fargo Foundation
Y&H Soda Foundation

\$500 – \$4,999

Codexis
Corrigan-Walla Foundation
Dow Chemical Company Foundation
Frieda C. Fox Foundation
Jones & Stokes
Lynngo Garden Materials, Inc.
Mt. View Sanitary District

Peninsula Aquatic Center
Pete's Harbor
Port of Redwood City
Rio Vista Lion's Club
Rossi Family Foundation
Rotary Club of Rio Vista
San Mateo Countywide Water
Pollution Prevention Program

Does your company have a matching gifts program? Please contact your HR Department or MSI for more information.

Development Corner

Dear Friends,

I am so excited about this year at MSI and the great opportunities before us. It has been such an amazing experience meeting our wonderful instructor staff, donors, members and even the animals over these past 6 months at MSI. The one thing I have really come to realize since my first day is how important our programs truly are in reaching so many students. We reach over 40,000 every year. And they're students of all ages and that excites me!

Thank you so much for your continued support! We are only able to provide our amazing programs and to educate students of all ages because of the generous support we receive from our friends. And for that we thank you!!!

Warmest Regards,



Missy Howard
Development Director



MSI has been selected as a recipient for Whole Food's "Nickels for Non-Profits" fundraiser until July 5th. This means that whenever you take your reusable shopping bags into the **Redwood City** store, you have the opportunity to donate the \$0.05 credit for each bag to one of two charities, one of which is MSI.

Please grab your grocery lists and your reusable shopping bags and support MSI by shopping at Whole Foods in Redwood City!

Changes Behind the Scenes

New Alliance: MSI has partnered with Thriva for all of our registration needs, so please bear with us as we break in the new system. Our previous provider, Count Me In, has gone into bankruptcy. We're very happy with the new system so far.

New Engines! After chugging away for 16 thousand hours, a decade of service, and over 4000 boatloads of kids, we've just completed a total engine rebuild.

New Website! Thanks to nearly endless hours by our stellar **volunteer** Wendy Walker, we have a beautiful new web site. We love it and hope you do too. Check out <http://www.sfbaymsi.org> and see if you don't agree. Then make your next surf spot <http://www.redgreenbluestudio.com> for any & all of your web design needs.
Thank you Wendy!!

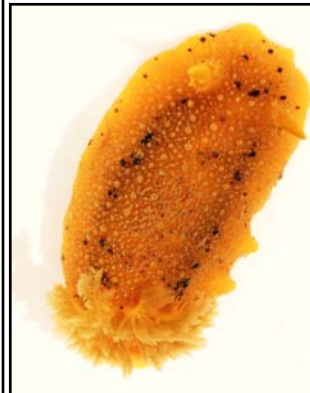
Summer Marine Camp at MSI is filling up fast! Check our web site to learn more about our large variety of week-long day camps for your little sea star!

Meet the Staff

John O'Leary has been teaching aboard the *Robert G. Brownlee* since December 2007. His degree in Biology from Aurora University in Illinois included studying in Africa and the Amazon. His experiences undoubtedly fueled his passion for wildlife and landscape photography in the process!



Above, John is holding a white sturgeon weighing 170 lbs, 74 inches long, caught & released on October 15th, 2008. John likes to photograph the uncommon and unique objects in life, and MSI provides some perfect opportunities to capture. The eye of a brown smoothound shark on page 1, and the Lemon Dorid at left, are two of John's. Please visit <http://www.sfbaymsi.org/baylines.html> to see more of John's stunning pictures!



Peltodoris nobilis,
the Lemon Dorid

EARTHDAY SAVE THE DATE
ON THE BAY April 18th

Bay Lines
Aaron Tinker, Producer & Editor

MSI Board of Trustees
Arthur Burton, *Chair* Jackelyn R. Lundy
Denise Malmquist-Little Andrea Swensrud
Eric Anderson Jim Crawford
Heather Kantor Francis 'Pancho' Chang

W i n t e r E v e n t s 2 0 0 9

SEASIDE STORY HOUR Third Saturday of Each Month, 11am ~ noon

Join MSI naturalists for stories, live ocean animals & amazing artifacts from the seas. This **FREE** event is held on the third Saturday of every month at the Redwood City Library's Main Branch on 1044 Middlefield Road in downtown Redwood City. **Feb 21st** our theme is **Molluscs**, come see & touch an array of this huge group of animals. **March 21st** we roll out **Sharks!** Always a hit, we'll be reading about our chondrichthys cousins, and bringing live ones too. **May 16th** come find out about **Crustaceans**—the cute little crabs, shrimp & their relatives.

April 18th, Please Join us for **Earth Day on the Bay at MSI!** Our big public celebration with the Banana Slug String Band, Earthcapades Environmental Vaudeville, and much, much more! Introduce your friends to MSI! Visit <http://www.sfbaymsi.org> to find out more.



Low Tide Walk Saturday, March 7th 1 - 3 pm

A nice Spring afternoon low tide will make this a very special walk indeed! Join MSI naturalists as we explore the diverse and colorful intertidal marine life of Pillar Point, near Half Moon Bay. Always one of our favorite events, this is your chance to be nature detectives—can you find a crab, a fish, or perhaps even an octopus? Bring appropriate shoes & spare socks. This event is \$5, advanced registration required through <http://www.sfbaymsi.org>.

Cal Academy of Sciences Steinhart Aquarium Sat, March 14th 9:30 am - 1 pm

Perhaps the most extraordinary place ever created to learn about life on Earth, the newly rebuilt California Academy of Sciences is full of natural wonders for all ages. A special MSI group visit is in store for the first 35 to sign up. If you haven't been, it's a must-see, and if you've been already, you know you want to go again. Prices vary \$15-\$25, ages 6 & under are Free. Check web site to register and learn more details.

Shark Day! Saturday, March 21st 1 - 4 pm

Sharks, sharks, sharks – it's everything SHARKS at MSI on Shark Day! Find out everything you always wanted to know about sharks and bring the family for an afternoon of fun and education at the Marine Science Institute. MSI naturalists will be on hand to share their knowledge with you. Activities will include... LIVE shark feedings, arts and crafts, and a chance to touch a leopard shark! A special addition to this Shark Day is **David McGuire**, local filmmaker and shark saving crusader, introducing his new film about sharks in SF Bay: **City of the Shark**.. Cost: \$5/person. RSVP on-line today!

Discovery Voyage Saturday, March 28th 10am ~ noon

Come aboard our 90' Research Vessel, the Robert G. Brownlee for an exciting marine science excursion on SF Bay! Enjoy the fresh sea air, and help out as we delve through mud samples to discover the fascinating invertebrates that thrive at the bottom of the Bay, use a trawl to catch a wide variety of fish, and catch plankton to view under a microscope! Must be at least 5 years old to attend, and ALL children must be accompanied and supervised by an adult. Closed-toe shoes required. Cost is \$10 / person. Space is limited - online registration required.

Grey Whale Watching Expedition Saturday, April 4th 1pm ~ 4pm

Catch an up-close view of Grey Whales as they make their long migration north past our shores. We'll board the Salty Lady with the Oceanic Society to see whales & who knows what else. We've seen dolphins, porpoises, humpbacks, sea lions and so much more on these trips. They are an incredible experience every time. Online Registration Required, SPACE IS LIMITED. Minimum age is 7 years old. Departs from Half Moon Bay. \$45/person.

Find out more about our programs and sign-up information at www.sfbaymsi.org
Contact Aaron for reservations (650) 364-2760 x16, or email aaron@sfbaymsi.org