

Bay Lines

MARINE
SCIENCE
INSTITUTE

500 Discovery Parkway
Redwood City, CA 94063-4715



DISCOVERING OUR BAY

Winter
2007

www.sfbaymsi.org

MSI Around the Bay

Our satellite season is in full swing for the *R/V Robert G. Brownlee*. This is the time of year when the ship brings the gift of knowledge to all parts of the Bay. The satellite programs began in late October, docking at the Richmond Marina. For most of the crew this was a brand new season and port. They were not to be disappointed with the Central Bay's variety of fish and grand vistas. The catch varied from microscopic *Podons* (a type of zooplankton) to hauling up massive white sturgeons. By mid-November it was time to move on to a new port- AT&T Park. With the well known stadium looming overhead, the setting

**Marine Summer Camp
Registration Begins
February 1st at 10am!**

provided the perfect opportunity for a Member Voyage. This location also allowed access to the ship by public transportation, something the urban schools very much appreciated. Thanksgiving marked the homecoming of the ship in order to get it all spruced up for the New Year. The New Year brings a fresh start in more ways than one. The *Brownlee* is now docked in Antioch, exploring the fresh waters of the Delta. The theme of the Delta programs focuses on the importance of our watershed and how we're all connected to the Delta and Bay. After two months of sharing this message with over 4500 students, the ship will return to Redwood City on March 3.



The *Robert G. Brownlee* in Antioch

Re-Certified & Ready

We did it! Thanks to many wonderful supporters, MSI was able to reclassify our Research Vessel, the *Robert G. Brownlee*, as a ship-for-hire. The *Brownlee* entered dry dock in Alameda on Wednesday August 30, 2006 and returned to Redwood City on Wednesday, September 13th freshly painted and looking fantastic.

The new classification will enable MSI to offer educational programs on board the ship to the general public. The previous classification limited our on-board programs to educational and research programs. The new classification will help MSI better reach our vision of "inspiring respect and stewardship for the marine environment through experiential learning".

Keep your eyes open for news on when the public trips will start. Please contact MSI if you are interested in reserving it for a private group or company.



Photo by Michael Lee
www.islandsofthebay.com/msi

Pulling Together

Longtime allies and supporters of MSI, the Peninsula Community Foundation and the Community Foundation of Silicon Valley, are joining forces. The new Silicon Valley Community Foundation has opened their doors with a mission to "bring the people of San Mateo and Santa Clara counties together as one to spur social change on a region-wide scale." We wish them luck on their merger and look forward to working with them in the future.

Learn more at www.siliconvalleycf.org.

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

David & Lucile Packard Foundation

\$25,000 — \$49,999

Bothin Foundation

Contra Costa Water District

Sidney S. Byers Charitable Trust

Toyota Motor Sales, Inc., USA

\$15,000 — \$24,999

Cisco Systems Foundation

Crescent Porter Hale Foundation

Dean & Margaret Leshner Foundation

Moore Family Foundation

Peninsula Community Foundation

Wayne & Gladys Valley Foundation

\$10,000 — \$14,999

Central Contra Costa Sanitary District

Danford Foundation

Delta Diablo Sanitation District

Sand Hill Foundation

Symantec Corporation

Synopsys

Verizon Wireless

\$5,000 — \$9,999

A&B Foundation

Alza Corporation

Association of Bay Area Governments

Bernard Osher Foundation

California Casualty Group

City of San José

Community Foundation of Silicon Valley

Dow Chemical Company Foundation

Frieda C. Fox Foundation

Lockheed Martin Missiles & Space

Myrtle L. Atkinson Foundation

San Francisco Estuary Project

Scandling Family Foundation

South Bayside System Authority

Turner Designs

Y & H Soda Foundation

\$1000 — \$4,999

AAA—San Francisco

BAE Systems (formerly United Defense)

Corrigan-Walla Foundation

Dawson Family Fund

Dirk & Charlene Kabcenell Foundation

Doering Family Foundation

Jones & Stokes

Mt. View Sanitary District

Scandling Family Foundation

Wells Fargo Foundation

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When drafting your will, please consider making a bequest to the Marine Science Institute.

Meet the Staff

We are delighted to introduce MSI's new Marine Camp Director and Assistant Development Director. Two talented staffers to help MSI grow into the future.

Julie Xelowski-Brooker is our new Marine Camp Director! She has a B.A. in Education from Prescott College in Tucson, Arizona. She comes to MSI from the Sonoran Sea Aquarium in Tucson, Arizona where she was the Director of Education. Julie has spent the last 10 years developing programs and teaching marine science in the desert. Julie will be responsible for all aspects of the MSI Marine Camps. Just in time too! Summer Marine Camp registration begins February 1st!

Janeen Rossi Tuitupou's development experience includes roles as the grants manager at two local non-profits, OICW and the Boys & Girls Clubs of the Peninsula, and more than 15 years of grantmaking as director of a family foundation. After Janeen graduated from Stanford School of Education with a Master's in Curriculum and Teacher Educa-



Welcome Julie & Janeen!

tion in 1991, she developed and taught a variety of programs, and started two education businesses in post secondary and corporate education markets. She serves on the boards of Stanford Professional Women and the Environmental Volunteers. Janeen is responsible for developing and coordinating all aspects of grant funding at MSI.

Thanks for coming aboard and joining our great team!

Whats New on the Web?

There's lots of new things on our web site, so swim over to www.sfbaymsi.org!

- ◆ See our new video featuring the Virtual Voyage program
- ◆ Explore the beautiful new photography and natural history book, [Islands of the Bay](#), and benefit MSI!
- ◆ Play and learn about our aquatic neighbors with our new amazingly-fun [Virtual Bay!](#) (Flash required)
- ◆ Our ever-popular Summer Marine Camp on-line registration opens Feb 1st for members, and Feb 8th for the general public. Are you a current MSI member? [Sign up today!](#)

Bay Lines

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Translating the Tides

Waves

*In and out, in and out
Gently beating like a drum.
Mountains in the vast ocean,
Peaks touching the clouds.
Crashing on the rocks.
Swept up on to the sand,
Like rolling meadows across the hills.
Swelling, thundering, spraying, roaring.
Big waves, crashing ships upon the rocks.
Lapping, foaming, splashy-splashing.
Little waves, come fill up the tidepools.
Energetic waves rising, tired waves falling.
Waves, sail me home across the sea.*

By Ayesha Bajwa
Ohlone School, Grade 5
Program Funder: Community Foundation of Silicon Valley

Call to Rescue!

What would you do if you found an injured animal on the beach? On a brisk December morning MSI members ventured out to Rodeo Beach to answer this important question and learn how to rescue marine mammals. In collaboration with the Marine Mammal Center, we found an injured seal, herded him into a cage, treated him for illness, tagged and then finally released him. Of course we could do this all in a short time because our willing victim was a stuffed animal seal! We look forward to working with the Marine Mammal Center again and wish them luck with their new animal hospital.



Alice Kutsy leads the charge carrying an injured (stuffed) seal to safety!

Life in the Bay

When the Otter trawl was raised aboard the *R/V Robert G. Brownlee*, the class was met with a fish larger than any of the students aboard. The fish was a member of the largest freshwater fish species in North America, *Acipenser transmontanus*, the white sturgeon. Reaching up to 18ft in length and weighing up to a ton, these gentle giants have been poking around in the mud of North American estuaries virtually unchanged for the last 200 million years. These amazing fish can live to be 100 years old!

MSI voyages encounter about a dozen white sturgeon each year, as well as a handful of the smaller green sturgeon species, *Acipenser medirostris*. Ms. Hariman's class was treated to a close encounter with the beautiful green sturgeon pictured below. The fish was released quickly, but not before the class was able to get a good look at this real life sea monster and wish it a safe and happy life.

We're always excited to see sturgeon in our trawls. Numbers have remained critically low since an intensive fishery in the late nineteenth hundreds decimated the population. Wild populations of white sturgeon have hovered at less than 5% of historic populations for the last fifty years.

Sturgeon are anadromous, meaning that they migrate upstream to breed and lay eggs in cool fast moving rivers. While many sturgeon spend their whole lives in freshwater others prefer to hang out in the estuary where food is plentiful and only migrate upstream to breed. Some adventurous sturgeons have been known to enter the ocean and travel along the coast to other estuaries. We don't know why these fish would ever want to leave the San Francisco Bay.



MSI Instructor Julia Bicht poses with a beautiful green sturgeon caught in Richmond before freeing the fish overboard.

Earth Day is Coming!!

Let your green out and join MSI for the only day we throw open our doors to the public. Lots of activities, games, boat trips, and fun are in the works. April 21st, 2007! If you are interested in helping out, please contact Aaron@sfbaymsi.org.



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

Join MSI naturalists for whales of tales and touch live fish & amazing artifacts from the seas. This FREE event is held on the third Saturday of every month (except August & December) at the Redwood City Library's Main Branch on 1044 Middlefield Road in downtown Redwood City. **January 20th** we're reading up on Whales & Dolphins, **February 17th** we'll sink our teeth into Shark Stories, and it's Mollusc Madness on **March 17th**!

SHARK DAY!!! Saturday, February 3rd 9am ~ noon

Sharks, sharks, sharks – it's everything SHARKS at MSI on Shark Day! So how many species of sharks live in the Bay, and are sharks *really extra-sensory*? Find out 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: dah-da...dah-da...dah-da... dah-da... LIVE shark feedings, an arts and crafts table, a touch tank, and an informative interpretive table. Cost: \$5/person.

AÑO NUEVO STATE RESERVE Elephant Seal Walk

Saturday, February 17th Walk #1 @ 9am ~ 11:30am; Walk #2 @ 2pm ~ 4:30pm

Año Nuevo State Reserve is the site of the largest mainland breeding colony in the world for the northern elephant seal. Docents from the State Reserve and MSI will lead a fun and entertaining 2.5-hour interpretive hike. See this once-a-year spectacle as the males battle for mates on the beaches and the females give birth to their pups on the dunes. Hikes will cover 3 miles of rolling sand dunes and are considered to be moderately strenuous. Online Registration Required, SPACE IS EXTREMELY LIMITED. Cost: \$10/person, kids 3 and under are FREE.

WHALE WATCHING TRIP out of Half Moon Bay

Saturday, March 3rd 9am ~ noon

If there is one MSI event you don't want to miss this year – this is it. Join the Oceanic society and an MSI naturalist for a voyage aboard the *Salty Lady*. The annual gray whale migration will be underway, along with great potential to see a wide variety of other whales, dolphins, sharks, and other marine life. Online Registration Required, SPACE IS LIMITED. Minimum age: 10 years old. Departs from Pillar Point Yacht Harbor in Half Moon Bay. \$55/person.

BAIR ISLAND RESTORATION Saturday, March 17th 9am ~ 2:30pm

Want to set foot on Bair Island and help to improve its habitat? This **canoe** and restoration trip with Save The Bay will explore Redwood City's Bair Island, a unique Bay gem with a history that includes use as a salt pond and cattle grazing farm, and is now protected as part of the Don Edwards National Wildlife Refuge. We will be planting natives like gumplant, alkali health and jaumea on Middle Bair Island and you will be part of this exciting restoration! Other activities may include removing non-native species like iceplant and a shoreline cleanup. \$25/ person. Minimum age is 10 years old.

To sign up visit: <http://www.savesfbay.org/bayevents>. Please fill out "MSI member" in the "How did you hear about us?" box to receive the membership rate of \$25 per person.

LOW TIDE WALK Saturday March 24th 9am ~ noon

Take advantage of an extremely low tide to enjoy the revealed treasures of the intertidal world. The group will meet at Pillar Point in Half Moon Bay. Join MSI naturalists as we carefully explore the tiny worlds of tide pools. This event is FREE. Call for meeting place details (650) 364-2760

Find out more about our programs and sign-up information at www.sfbaymsi.org

Spread the News ~ Earth Day @ MSI on April 21st 2007!