

Cultivating a responsibility for the natural environment  
and our human communities  
through interdisciplinary science education



## MSI Tide Pool Expedition Program

An example of the real-world work going on at the Marine Science Institute is our Tidepool Expedition Program where students in third grade and above can participate in on-going intertidal monitoring.

The Tidepool Expedition takes place in Half Moon Bay at Pillar Point. MSI instructors guide students over wet and rocky terrain on a mission to find tidepools brimming with a wide variety of fascinating marine animals. Whether they have shells, spines or scales, most can actually be touched and handled by budding scientists. During this hands-on exploration they see animals from several different environments between the high and low zones. These are regions of constant and radical change. Intertidal zones extend from the highest wave-splashed rocks to levels that are only uncovered by extremely low tides. The study of animals from high and low zones helps students identify differences in animal adaptations and their habitats.

MSI instructors teach up to 60 students participating in a Tidepool Expedition, which is 2.5 hours in length and must be scheduled according to the tides.

*During MSI's 2013-2014 fiscal year 1,227 students in 22 Tidepool Expedition programs were introduced to citizen science and how rocky shore animals have adapted the ways they move, eat and protect themselves.*

## Coastal Cleanup September 21, 2013



MSI employees and 33 volunteers braved the rain for our 2013 Coastal Cleanup event. Trash was cleared from 1.5 miles of coastline at Pillar Point in Half Moon Bay. Buckets, bags, gloves and supplies were provided by volunteers or donated by several organizations. By the day's end MSI staff and volunteers had removed 113 gallons of debris and 12 gallons of material suitable for recycling.

## 2013-2014 Marine Science Highlights

- ◆ MSI held its 5th Annual Teacher Event for 54 area teachers
- ◆ 1,093 kids attended Marine Science Camp and contributors donated \$5,500 for camp scholarships for budding scientists
- ◆ MSI launched the "Wonders of Watersheds" program for schools
- ◆ 1,613 people attended "Earth Day on the Bay" in April 2014



## Cosco Busan Legacy

In 2007, the container ship Cosco Busan struck a Bay Bridge tower tearing a hole in the hull, spilling over 50,000 gallons of bunker oil and tainting miles of shoreline from Redwood City to Tomales Bay. MSI's 90-foot *R/V Robert G. Brownlee* passed the spill soon after and continued to revisit the affected waters in the following weeks. It was an opportunity for MSI instructors to use a current event to teach about the adverse impacts that humans can have on the environment.



*The Cosco Busan with a long gash in its hull*



*Third grade students at MSI's newly-renovated Shoreside Platform*

After years of studies a settlement and restoration plan in 2012 detailed results of the spill and restitution efforts. In the \$36 million settlement, \$6.8 million was earmarked for recreational use grants administered by the National Fish and Wildlife Foundation. In February 2014, MSI received two grants awarded in San Mateo County. Work funded by the first grant of \$25,000 is done: upgraded public restrooms, renovated Shoreside Platform, newly paved walkways for safety and wheel-chair accessibility, and interpretive signs on railings.

The second grant was for \$120,000 to restore our oyster shell beach, one of the few public Bay-access beaches in San Mateo County. Over decades it has eroded to 25% of its original size, which limits water access. Launching of watercraft will be greatly improved by this project. The oyster shell will be provided by a local vendor, Jerico Products. More than 30,000 visitors annually enjoy photography, wildlife and nature study, canoe and kayak launching, and picnicking at MSI's site.



*New interpretive signs on the amphitheater railing*



## Marine Science Camp—Summer 2014

This summer over 1,000 campers joined us for Marine Science Camp. Generous donors contributed \$5,500 for full scholarships so that 15 kids from low income families could participate. As they hauled in a fishing net, squished their fingers into the mud, and ran their own experiments campers were also preparing for school, becoming stewards, and growing an appreciation for their role in the environment. Every activity from crafts and songs to collecting water quality data was designed to engage, excite and inspire budding biologists.

Each summer we welcome back more returning students—this year nearly 30% of campers had attended our camp before (up from 24% in 2013). We aim to keep every child engaged and provide opportunities for those “experts” who are ready to keep learning and participate even more. Adding new activities and restructuring old camp favorites, such as touching the sharks and studying fish, keeps our curriculum fresh and exciting for the most dedicated campers.

Under the direction of a new volunteer coordinator, opportunities were available for people to get more involved with MSI. Returning camp volunteers rose into leadership positions to guide new volunteers. Younger devotees got involved as junior volunteers and in total, a team of 39 volunteers participated this summer, putting in over 4,500 hours of work to make camp a fun and meaningful experience.

# Marine Science Institute Financials: September 1, 2013—August 31, 2014

Cash and investments	\$ 240,000	Accounts payable and other current liabilities	\$ 55,000
Grants and other receivables	242,000	Unrestricted net assets	2,891,000
Prepaid expenses and other assets	19,000	Temporarily restricted net assets	236,000
Land, property and equipment, net	2,681,000		
<b>Total assets</b>	<b>\$ 3,182,000</b>	<b>Total Liabilities and net assets</b>	<b>\$ 3,182,000</b>

<u>REVENUES</u>		
School & Public Programs	33%	\$ 464,000
Marine Camp	34%	479,000
Corporations	9%	109,000
Foundations	6%	89,000
Government	11%	152,000
Individuals & Investments	7%	99,000
	<b>100%</b>	<b>\$ 1,392,000</b>
<u>EXPENDITURES</u>		
School & Public Programs	57%	910,000
Marine Camp	22%	347,000
Fundraising	7%	108,000
Administration	11%	172,000
Membership	3%	45,000
	<b>100%</b>	<b>\$ 1,582,000</b>

*The Marine Science Institute is a tax-exempt organization under Sections 501(c)(3) and 509(a)(2) of the tax code (Tax ID #94-1719649). Contributions are tax-deductible to the fullest extent allowed by law.*



## Thank You To Our FY 2013—2014 donors!

*Donations received September 1, 2013 through August 30, 2014*

### \$50,000 and Above

National Fish & Wildlife Foundation  
David & Lucile Packard Foundation\*

### \$25,000 to \$49,999

Contra Costa Water District  
Nat'l Oceanic & Atmospheric Admin.  
Central Contra Costa Sanitary District  
Oracle  
Sand Hill Foundation

### \$6,000 to \$24,999

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Homestead Foundation \*\*  
Silicon Valley Clean Water  
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Leshar Foundation  
Furnessville Foundation  
Scandling Family Foundation \*\*  
Turner Designs (Jim Crawford)  
Solano County Water Agency  
Kohls

### \$2,000 to \$5,999

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### \$500 to \$1,999

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\* Allocation from 2012-2013 donation

\*\* Via Silicon Valley Community Foundation

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