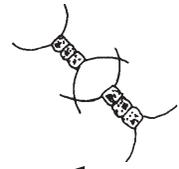




Hayward Shoreline Interpretive Center
4901 Breakwater Avenue, Hayward, CA 94545 (510) 670-7270



The Diatom Digest



Spring 2006

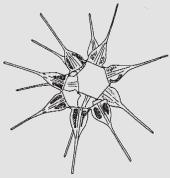
A biannual guide for educators and friends of the Hayward Shoreline School Program

What's Inside:

School Program



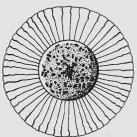
New! Bilingual Programs, Shark Exhibit & Tuesday Programs



Tide Table



What's so special about the marsh?



Student Feed-

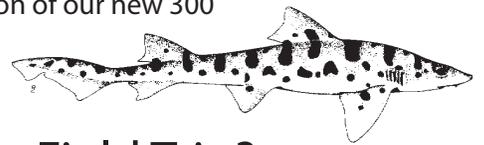
NEW! Bilingual Programs and Additional Spring Dates Offered

This spring, the Center is pleased to announce the addition of two Spanish-speaking naturalists. In an effort to serve you better, we are now offering Spanish-English interpretive programs every Friday, as available. These programs will be booked on a first-come, first-served basis, so sign up early! To provide even more opportunity for you to enhance classroom curriculum, the Center is adding an additional day of programming. Programs are now offered Tuesday through

NEW! Leopard Shark Exhibit

After two years of fundraising and research, the installation of our new 300 gallon aquarium will be completed by January 29, 2006.

Featuring the fascinating and somewhat intimidating Leopard shark this new exhibit is a fantastic addition to



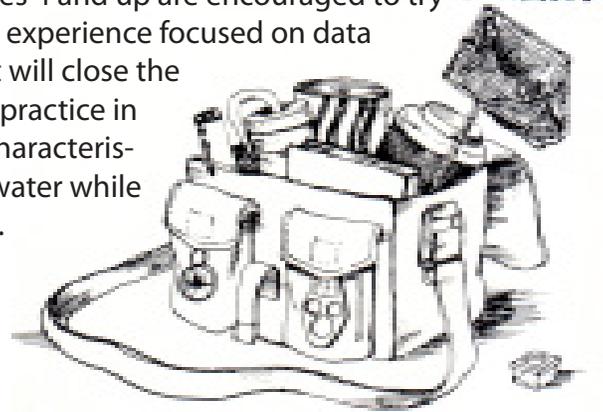
Why Come to the Shoreline for a Field Trip?

The salt marsh is a mysterious place full of tiny creatures, calling birds and unique adaptations. A hike at the shoreline with one of our naturalists opens up this world to you and your students. Investigation, inquiry-based learning and curiosity fuel the program, which is based on fulfilling California State Education Standards in Science and other subjects.

Some students who visit the shoreline have never been to a park or natural area that doesn't have grass, trees and a baseball diamond. We help them discover life beyond the school yard with an exploration of the marsh. Four unique marsh education programs expand the classroom into the out-of-doors for different grade levels.

Pre-K and 1st grade students take a one-hour, naturalist-led hike that focuses on fostering a connection to nature through bug-hunts, role-playing and sensory exploration of the marsh. Grades 2 through 4 explore three habitats, adaptations, the food web and microscopic organisms. Students will dynamically learn away from books and computers with visual aids, a hands-on science lab and channel study, as well as in-the-field observations with a real-life scientist. Grades 4 and up are encouraged to try our Wetland Ecology program, a four-hour experience focused on data collection using scientific instruments that will close the gap between theory in the classroom and practice in the field. Students will learn the physical characteristics of salt water by sampling and testing water while learning to use plant keys and field guides.

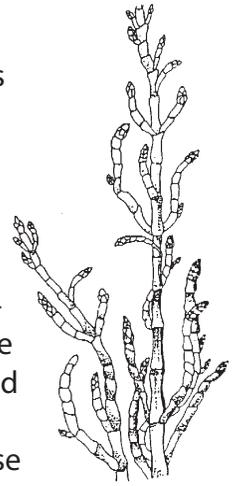
Shoreline naturalists are fun and knowledgeable, and create a memorable field trip for your students. We provide pre- and post-trip activity packets, as



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What's so Special about the Salt Marsh?

Anyone who has been on a hike here in the marsh can tell you, there is more than meets the eye. Tides constantly bring new breath into the marsh. Leopard sharks sun themselves in the channels at low tide, and shorecrab exoskeletons litter the pickleweed by the hundreds; all of which make for exciting teachable moments. Flocks of dowitchers flying in unison, disturbed by a hunting marsh hawk or kestrel, resemble schools of fish darting through the water. You can even feel the breeze from their wings and hear them cutting through the air. On a clear day, students can see the Bay Bridge, Mt. Tamalpais, San Francisco, Mt. Diablo, and more, giving them a sense of place and an idea of the scope of the geography of the Bay. The reds, greens and browns of the marsh pickleweed and other plants combine in a mosaic of color not unlike Monet's soft, impressionistic paintings. A hike here brings nature alive to students. Wonderment, excitement and close



School Program Fees, 2005-2006

Program Title	Length	District*	Out of District*	Recommended Grades
Salty Stories	1 hour	\$100	\$125	K - 1st grade
Saltmarsh Wonders	2 hours	\$155	\$193.75	2nd grade
Shoreline Discoveries	3 hours	\$196	\$245	3rd - 6th grade
Wetland Ecology	4 hours	\$232	\$290	4th - 6th grade
Mudlab Only	.5 - 1 hour	\$64	\$80	All ages
Outreach Programs	1 hour	\$85	\$106.25	All ages

Call (510) 670-7270 to make your reservation for spring 2006.

*District-Hayward, Castro Valley and San Lorenzo Unified boundaries.

Thank you for your Feedback

Your experiences are a valuable resource. What were your impressions of your field trip? What did you discover that you didn't know before? Do you wish anything had been different? Every piece of feedback we get helps us to better serve you and your students in the future. As student feedback is also valuable to gauge the impact of our programs, we'd like to share this letter from Dhruvika from Washington Manor school who participated in the Wetland Ecology program this fall. In her words...

"Dear Mike,
I absolutely [sic] enjoyed coming to Hayward Shorelines [sic] with you our dependable [sic] adult. One thing between you and me, this was the best field trip ever! I learned that being outside is much better than being inside, for me. Truly [sic] what I learned is that in one little spoon of mud there can be millions and trillions of microscopic bugs. My favorite type of thing we did was the hike, I learned so many things [sic] on it. I can't believe [sic] time flew so quickly. I think what you should do as an addition to what you do is whenever you see something cool you can stop and do a little 'I spy' thing so everyone will see it and learn from it. Thank you for taking time off to hike and tell us things.

Your hiking friend,

Tide Table

Plan your field trip when the mid-morning tide is low so your class can see the marshes and the mudflats. These days will get booked fast, so sched-

Date	Low Tide
Feb. 2nd	9:33 am
Feb. 3rd	10:39 am
Feb. 17th	9:10 am
Mar. 3rd	9:10 am
Mar. 22nd	12:32 pm
Apr. 19th	11:54 am
Apr. 20th	1:01 pm
May 3rd	12:08 pm
May 17th	10:39 am
May 18th	11:34 am
May 19th	12:32 pm
May 31st	10:39am
June 1st	11:27am
June 14th	9:34 am
June 15th	10:22 am
June 16th	11:10 am

Student Preparations

Often, the more intimate we get with the marsh, the dirtier we get. Make sure your kids are prepared for what a marsh exploration may entail: mud, drizzle, wind or sun. We encourage exploration of the mudflats during low tides, so shoes that are old and can get dirty are advisable. Also, it helps us if your kids wear name tags. We will send you a Teacher Letter with important information after you make

