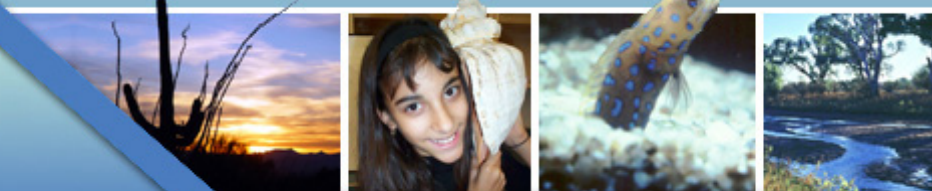




## Sonoran Desert Waters Institute

Arizona's Rivers to Mexico's Sea of Cortez



## SeaScapes Online

The SDWI is organized as a nonprofit 501(c)(3) corporation dedicated to bringing a world-class public aquarium to Tucson promoting education, conservation and preservation of Arizona's rivers and the Gulf of California for future generations. Sonoran Desert Waters Institute, Bringing the sea to the desert!

El Acuario del Mar de Sonora (Sonoran Sea Aquarium)™ está organizado como una corporación sin fines de lucro 501(c)(3), dedicado a traer a Tucson un acuario público de primera clase para promover la educación, la conservación y la preservación de los ríos de Arizona y el Golfo de California para el disfrute de generaciones futuras. El Acuario del Mar de Sonora. ¡Trayendo el mar al desierto!

Sonoran Desert Waters Institute

Volume V Issue 1 - 1 November 2008

### Greetings from the Director of Education

So much happened over the last year that it was hard to stop the train and create a newsletter to keep everyone up to date. Anyone interested in helping with future issues please let me know! Perhaps the biggest and most obvious thing has been our name change!

On **April 10, 2008** the Board of Directors of the Sonoran Sea Aquarium (SSA) voted to start "doing business as" the Sonoran Desert Waters Institute (SDWI). This step was taken to refocus the community on the successes of our education and outreach programs, make grant writing less cumbersome and allow future collaborations to be more straightforward. It remains the long term goal of the now Sonoran Desert Waters Institute to develop a facility in the Tucson area that will serve to enhance education, conservation and research efforts involving "Arizona's Rivers to Mexico's Gulf of California."

Here are some other highlights since last April:

1. SDWI staff completed programming for the 2007-08 school year having provided instruction to nearly 5,000 local students.
2. Much of the school year's programming involved our new Aquatic Invasive Species curriculum. The development of this curriculum and the scholarship resources needed to introduce it were made possible by a generous (\$10,000) Heritage Fund grant from the Arizona Game & Fish Department. Special thanks to Wildlife Biologist Jeff Sorensen of AG&F and Ranger Steve Haas of Patagonia State Park for their assistance and support.



Ranger Steve (right) and Franklin set crayfish traps in Sonoita Creek.

Students from Patagonia Elementary later came out and checked them for invasive species.

3. SDWI collaborated with the Arizona Sonora Desert Museum for the second summer in a row to offer High School Earth Camp 2008. EC08 was a ten-day resident camp for students from all over the country. Shannan Marty, President of our Board of Directors, offered her boat for several days of snorkeling off San Carlos, Mexico. This was extremely huge especially for our campers from Minnesota!



First the Dessert

4. Initial discussions began with the Desert Museum about a possible renovation/extension of the current fresh aquarium in the Mountain House at ASDM. Plans for a Sea of Cortez addition proposal are underway. Board member and local exhibit design architect Willy Gonzalez of Architectural Geology LLC is teaming with Oracle surveyor Robert Breen of Environmental Field Services to create a footprint of the proposal. Thanks for the pro bono work of both Willy and Robert!



Robert Breen of EFS completes "As Built's" on the Mountain House

5. SDWI and Biosphere2 have begun to work collaboratively to promote the appreciation and study of marine science in Southern Arizona. Whenever possible the facilities at Biosphere2 will be used as the venue for this effort. Initiatives may include, but are not limited too; the conceptualization and design of an interactive "Ocean Discovery" center at Bio2 where classroom size groups of student's role-play oceanographers, biologists, technicians and mariners to confront marine research challenges. Establishment of marine themed learning stations throughout the ocean biome where individual visitors can explore and learn about marine science. Use of Bio2 as a site to offer educator workshops to extend NOAA's Ocean Exploration curriculum in Arizona.



6. SDWI has been invited to submit a full proposal for a \$50,000 National Oceanic and Atmospheric Administration (NOAA) grant. Our pre-proposal offered to introduce NOAA's Ocean Exploration curriculum into Southern Arizona. This would be done by hosting teacher workshops at both Biosphere2 and at The Intercultural Center for the Studies of Deserts and Oceans (CEDO) in Puerto Penasco. SDWI staff would also present the curriculum in local schools and serve as a resource for educators.

I'd like to thank our teaching and volunteer staff for the tremendous work they've done this past year. Long time Education Coordinator and volunteer extraordinaire Cathy Franklin has taken a well-deserved break and now works as a contract teacher for us. She joins Annette Felix and Svea Anderson on the teaching staff. Finally, fair winds and following seas to primo volunteers Cheryl Bonnes and Missy Smith. Cheryl took a position with NOAA in St Petersburg, Florida as the Marine Mammal Outreach Coordinator and Missy returned to Iowa to continue her work with an Osprey rehabilitation/relocation project.

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## **TWO DAYS OF INTENSE TRAINING:**

### **SWMEA Conference Notes**

By Annette Felix and Cathy Franklin  
aka Education Specialists @ SDWI

Cathy Franklin and Annette Felix represented SDWI at the yearly SWMEA Conference held at Birch Aquarium on the Scripps Institution of Oceanography (UCSD) campus, April 11 and 12, 2008. SWMEA, the Southwest Marine/Aquatic Education Association, is a regional chapter of NMEA - the National Marine Educators Association, whose mission is "to make known the world of water, both fresh and salt." SWMEA includes educators from California, Nevada, Arizona, New Mexico, Colorado, and Utah. Formal and informal educators are offered a way to share ideas, current scientific information and activities related to all aspects of the marine and aquatic ecosystems through SWMEA.



Cathy Franklin, Annette Felix, and a friend  
in sunny La Jolla - Birch Aquarium.

preview exhibit opens, we should consider  
hosting the conference here in Tucson!

This was a wonderful conference with only about 35-40 people in attendance. The information shared by researchers, grad students, and aquarium staffers was excellent and all in a very useable format. There will be a website shortly to share the Powerpoint presentations, website suggestions for additional information on the topics, and contact information about the presenters for further questions. It is important to continue being a member of this organization and attending their yearly conferences. And, when the Sonoran Desert Waters Institute's

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**DONATIONS ONLINE.** It is now possible for us to accept donations via credit or debit card online. We've established a PayPal account. Simply open the website at [www.tucsonaquarium.com](http://www.tucsonaquarium.com) and click **Donations/Memberships**.

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## WISHLIST

1. Scholarship for Reynolds Elementary. Four-day Desert Waters Curriculum. February 2009. (\$500)
2. Set-up, stock and maintain Invertebrate Tank for Outreach Program. (\$1,000)
3. Sun-Earth-Moon model for Gravity/Tides class. (\$250)
4. New or used printer.



## Fish Humor

A shoal (see venery article below) of fish was swimming in a reservoir. The lead fish all of a sudden bumped his head into something. He turned to the others and said, "Damn!"



Courtesy of Gene Collins of Genes Barbershop Wrightstown and Pantano. I know, I need to find another barber!

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Terms of Venery: In [linguistics](#), a **collective noun** is a word used to define a group of objects, where "objects" can be [people](#), [animals](#), [inanimate](#) things, concepts, or other things. For example, in the phrase "a pride of [lions](#)," pride is a collective noun.

Originally it was a shoal of fish, but over time this morphed into a "school".

There is debate on a Pod of Whales. You will often see a Gam of Whales, with Pod being reserved for a group of seals.

How about a shiver of sharks?

If you know anymore please forward.

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## Featured Seafood

### Seafood Watch - Seafood Guide

#### Abalone



<a href="#">SEAFOOD</a>	RATING	MARKET NAMES	WHERE CAUGHT	HOW CAUGHT
Abalone	<b>BEST CHOICE</b>	Red Abalone, Green Abalone, Pink Abalone	U.S.	farmed

Abalone farming is a highly regulated, well-managed industry.

#### Summary

Abalone has long been a delicacy around the world. You'll find several species of these large sea-snails living in the wild along the Pacific coast of North America, as well as Japan, China, Australia and New Zealand.

Depletion of wild populations has encouraged the farming of abalone in many countries to meet the demand for this luxury seafood. In California, the commercial abalone fishery was closed in 1997, but sport fishing is still allowed north of San Francisco.

Although wild abalone populations remain in a state of recovery, abalone farming sustains continuing public consumption of this ocean delicacy. Farm-raised abalone are harvested when their shells are no more than four inches long, so any abalone bigger than that was probably "poached," or sold illegally by a sport diver.

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Sonoran Desert Waters Institute  
2021 N. Kinney Rd.  
Tucson, AZ 85743-8918

Email: [Sea@TucsonAquarium.com](mailto:Sea@TucsonAquarium.com), or call: **520-908-1600**

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