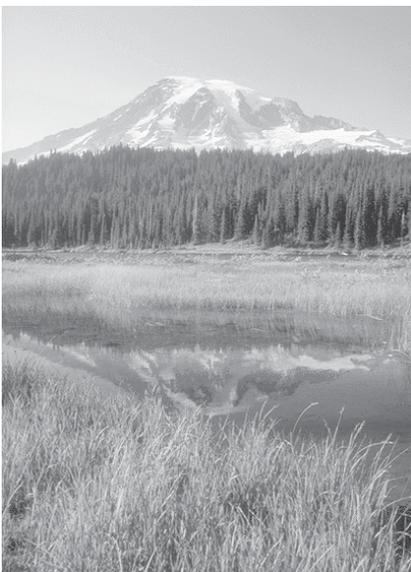


The Challenge of Environmental Ethics

by Chuck Louch, PTMSC Docent

The degree to which we are all involved in the control of the earth's life is just beginning to dawn on most of us, and it means another revolution for human thought.

—Lewis Thomas, *Lives of a Cell*, 1974



“When god-like Odysseus returned from the wars in Troy, he hanged all on one rope a dozen slave-girls whom he suspected of misbehavior during his absence.”¹ Thus Aldo Leopold opens his discussion of environmental ethics in his book, *A Sand County Almanac*. In Odysseus’ time there was nothing wrong with what he did. The girls were his property to do with as he wished.

In the language of environmental ethics the girls were of *instrumental value* to

Odysseus, a means to further ends. Once those ends had been met they were dispensable. Now, some 3,000 years later, our ethical values have expanded so that, in addition to *instrumental value*, the girls would have *intrinsic value*. That is, they would be ends in themselves regardless of their usefulness in achieving other ends and there would be moral strictures preventing Odysseus from hanging them out of hand. They would have moral standing.

For most of human history non-human things have been assigned only instrumental values; horses for pulling carts, dogs for guarding or herding, cats for killing mice, etc. Once they were unable to fulfill their assigned task, they were disposed of in one way or another. There were no laws governing their treatment. Now, in Western society anyway, most domestic animals have been granted intrinsic value so there

are laws regulating how they are to be treated. It appears that the more closely related to humans animals are, the greater their intrinsic value and the more rigorous the laws prescribing their treatment. Thus, there are clear regulations as to how lab rats are to be housed and treated but no such regulations for fruit flies. It seems that sentient things that appear to have feelings or emotions similar to ours can have intrinsic value, and therefore are worthy of moral consideration, while those that don’t, aren’t. But how do we know what a fruit fly feels?

This raises an interesting and important question: We know that a tree can have instrumental value, but can it also have intrinsic value? After all, a tree carries on all the basic functions of life that we do. It grows to maturity, reproduces sexually, heals wounds, resists disease, communicates with other trees, invades new territory and so on, but it can’t smile or otherwise express emotion that we can understand. So, on what basis can we decide whether or not it has intrinsic value? It appears that if, like a giant redwood, the tree invokes feelings in us such as awe, wonder, or peace, it must have intrinsic value and be worthy of protection. But if it’s just a nuisance, like kudzu, it can be destroyed without compunction. Our judgment on this question depends on our response to the item, whatever it might be. And this leads down another slippery path to confusion that I’m not going to follow. I’m confused enough already.

... Continued on page 2



FALL HOURS
begin after Labor Day

BOTH EXHIBITS OPEN
Friday through Sunday noon-4pm

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Now we come to the problem of an ecosystem such as a forest, a prairie, or arctic tundra. We know that such systems can have instrumental value, but can we broaden our ethical horizons to say they also have moral standing—have intrinsic value? The same question applies to an entire species of plant or animal as opposed to single individuals. It doesn't seem that the criteria we have discussed previously could apply to these entities. But possibly we could make the following argument. An ecosystem is the product of many natural processes acting over a long period of time to produce a dynamic system with many parts interacting with each other in complex ways. To destroy such a system would be to reduce our ability to understand how nature works and how our world has come to be as it is. Similarly, the loss of a species would represent the loss of a large amount of genetic information and the possibilities for new genetic combinations in the future. Furthermore, a deliberate destruction of an ecosystem or species shows disrespect for the processes that have brought it into being and is, therefore, morally wrong.

Finally, what difference does it make whether a natural entity such as a forest has instrumental or intrinsic value? The answer is pretty obvious. If the forest has only instrumental value then it can be destroyed or dispensed with just like Odysseus' slave girls. But if it has intrinsic value, we have a moral obligation to treat it with consideration.

More immediately, does Puget Sound, with all of its varied habitats, have an intrinsic value or is it just a means for supporting the economy of the area (an instrumental value)? If the former, then we have a moral obligation to save it, if the latter, then we can do a cost-benefit analysis to decide if it's economically worthwhile to make the effort.

As you can imagine, environmental ethics is a complex subject and has developed into a separate sub-discipline of Philosophy. If you want to pursue the subject further, a good place to start is the article by Brennan, Andrew, & Le-Yeuk-Sze, "Environmental Ethics," The Stanford Encyclopedia of Philosophy (Summer 2002 Ed), http://plato.stanford.edu/archives/summer_2002/entries/ethics-environmental. Or, you can simply type the term "environmental ethics" into a search engine and then look for the item "Stanford Encyclopedia of Philosophy-Environmental-Ethics." It will take you straight to this article.

1. Aldo Leopold. *A Sand County Almanac*. Oxford University Press. 1968.

From the Director ...

A Clean Puget Sound by the Year 2020



Governor Gregoire is serious about cleaning up Puget Sound, but it seems her first hurdle in doing that will be convincing people that it is actually in poor health. A recent survey of Puget Sound Basin residents sponsored by the group leading the Governor's effort—the Puget Sound Partnership—found that 73% of the respondents believe that Puget Sound's environmental quality is excellent or good.

Those of us working in the field of marine sciences and marine education know that many Puget Sound species are at risk and the web of life is unraveling. Two of the Pacific Northwest's icons are now on the endangered species list—salmon (two species) and southern resident orca populations. In the early days of the PTMSC, sport fishers regularly launched their boats from the Fort Worden boat ramp and could be seen with a crowd of boats fishing mid-channel for salmon, halibut and ling cod. Now the boat ramp is used primarily by non-fishers.

In a July 2006 report to the Governor, the "Partnership" reports that forty marine invertebrate, fish, bird or mammal species in Puget Sound are listed on Federal or State lists as threatened, endangered or candidates for listing. Assessments of all known species in the Puget Sound region suggest that nearly a thousand species are imperiled, representing ~14% of the total species diversity. Some seabird populations have dropped by 50% since the 1970s and others such as the Western Grebe have plummeted by 90%. Rockfish and other groundfish have declined dramatically in the last 25 years.

The report lists other threats to water quality and quantity, habitat and species including: toxics and contaminants entering the Sound; low stream flows and stormwater surges effecting rivers and streams; and development pressure on forests, shorelines, rivers and estuaries posed by population growth. Our current population of 3.8 million is expected to increase by another 1.4 in the year 2020, and most of these people will live within 25 miles of the shoreline.

Currently there is a gap between the perceived quality of Puget Sound and the imminent threats to its health. The public might not be ready to support a major, coordinated, Sound-wide restoration program if they are unaware of the extent of the problems. This presents a call to action for the PTMSC, other educational organizations/institutions and the media to assist the effort. This was the topic of discussion at a recent PTMSC staff retreat and we are 100% committed to help tell the Puget Sound story. We will use a variety of means to inform and educate our clientele, members, docents and patrons about the fragile conditions of the inland sea where we live.

To learn more about the Puget Sound Partnership or to access the Interim Report to the Governor, visit the Partnership's website: www.pugetsoundpartnership.org.



Octopress is a publication of the Port Townsend Marine Science Center, A 501(C) (3) nonprofit educational organization. Your comments, contributions, and support are greatly welcomed and appreciated. PTMSC is located at Fort Worden State Park in Port Townsend, Washington on the Olympic Peninsula.

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The Main Office is located on the 2nd floor of the Fort Worden State Park Office. The Marine Exhibit & Natural History Exhibit are located on the Pier and on the Beach at Fort Worden State Park.

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PORT TOWNSEND MARINE SCIENCE SOCIETY BOARD OF DIRECTORS
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Dan Darrow Frank Handler Gary Pascoe Connie Welch

PORT TOWNSEND MARINE SCIENCE CENTER

SCHEDULE OF EVENTS

FALL HOURS

MARINE EXHIBIT (ME) & NATURAL HISTORY EXHIBIT (NHE) HOURS:
Friday through Sunday, noon to 4pm

SEPT	6	W	Fall hours begin after Labor Day
	26	TU	Geology Study Group 5:15pm NHE
	30	SA	Lecture: <i>Explorations for Colorful Deep Coral Communities</i> 4pm NHE (see page 6)
OCT	3	TU	Cooking Class at the Green Eyeshade 7–9pm (see page 7)
	7	SA	Protection Island Fall Migration Cruise 1–4pm
	10	TU	Cooking Class at the Green Eyeshade 7–9pm Geology Study Group 5:15pm NHE
	14	SA	Protection Island Fall Migration Cruise 1–4pm
	17	TU	Cooking Class at the Green Eyeshade 7–9pm
	21	SA	Protection Island Fall Migration Cruise 1–4pm
	22	SU	Lecture: <i>UW Paleontologist Bax Barton on Recent Mammoth Finds in WA</i> 4pm NHE (see below)
	24	TU	Cooking Class at the Green Eyeshade 7–9pm Geology Study Group 5:15pm NHE
NOV	28	SA	Protection Island Fall Migration Cruise 1–4pm
	1	W	Winter hours begin at both exhibits: Natural History Exhibit: Friday through Sunday 12 noon to 4pm Marine Exhibit: Open by appointment only for 12 or more guests.
	4	SA	Protection Island Fall Migration Cruise 1–4pm
	10	F	Lecture: <i>Humpback and Blue Whales in the North Pacific</i> 7:30pm NHE (see page 2)
	14	TU	Geology Study Group 5:15pm NHE
	28	TU	Geology Study Group 5:15pm NHE
24 & 25	F-SA	Annual Gift Shop Holiday Sale & Fish Printing 12 noon to 4pm Both Exhibits open 12 noon to 4pm	
DEC	25	SA	Protection Island Thanksgiving Cruise 1–4pm
	12	TU	Geology Study Group 5:15pm NHE
	31	SU	New Year's Eve Protection Island Cruise 1–4pm

Interpretive Programs—These lively programs are guaranteed to inform, educate and entertain you with the wonders of the marine world. Saturday & Sunday at 2:30pm in the NHE or ME. Go to www.ptmsc.org for the listing of topics and locations.

**FOR INFORMATION ON ANY OF THESE PROGRAMS CALL THE PTMSC
at (360) 385-5582 or e-mail—info@ptmsc.org**

PORT TOWNSEND MARINE SCIENCE CENTER PROGRAMS ARE OFFERED IN COOPERATION
WITH THE WASHINGTON STATE PARKS AND RECREATION COMMISSION

New Development Director: JoAnne Heron

“After reading Rachel Carson’s The Sea Around Us and The Edge of the Sea, I wanted to be an oceanographer, even though the sea of rolling Plains grasses was the closest I came until college years at UW. The coast of Washington was seminal in my connection to the marine environment, where, among many other amazing experiences, I watched the stars over the ocean (and one of the first satellites) at remote Shi Shi Beach in 1968 with Hazel Wolf. I am not only excited about my move to Port Townsend, and reconnecting with coastal habitat, but also learning about everyone else’s relationship to the marine environment and PTMSC.”



JoAnne served as executive director for the Center for Alaskan Coastal Studies in Homer, and as development coordinator at the Pratt Museum in Homer, which focused on people’s connection with the marine environment through science, art and history. For the past six and a half years, JoAnne has led the fundraising efforts for Olympic Park Institute, located at Lake Crescent, west of Port Angeles. Her passion for environmental education and preserving wild lands has spanned 35 years. Through drawing and painting, she expresses her love of nature, travel, and the world’s cultures and landscapes. She is an avid hiker and backcountry paddler. JoAnne invites you to call or email to introduce yourself or give her your input on fundraising for the organization. Contact jheron@ptmsc.org, 385-5582 ext. 101.



Fall Lecture Series



Explorations for Colorful Deep Coral Communities Off the Olympic Coast

Did you know that off our coasts we have deep sea corals every bit as colorful as in tropical reefs? That, even in perpetual darkness and near freezing temperatures, these plant-like animals obtain their nourishment from underwater snow? That rockfish lounge in red tree coral branches like squirrels in a tree? Learn this and more with a slide and video presentation by Mary Sue Brancato and Ed Bowlby on **Saturday, September 30th at 4pm** in the **Natural History Exhibit**.



MARY SUE BRANCATO AND ED BOWLBY

Mary Sue Brancato and Ed Bowlby both work for the Olympic Coast National Marine Sanctuary and have graduate degrees in marine biology. They co-lead the recent expedition to explore for deep sea communities with robotic videos. Mary Sue's background is in marine invertebrates and aquatic toxicology. Ed's background is with marine wildlife and nearshore ecosystems.

Admission: Members \$3 adults/\$2 youth; nonmembers \$5 adults/\$3 youth.

Thomas N. Hagen D.D.S.

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[360] 437.9392

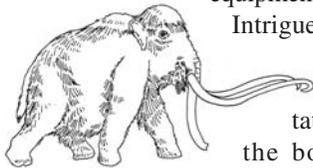
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UW Paleontologist Bax Barton to Talk about Recent Mammoth Finds in Washington

In February 2005, a rancher along Wenas Creek near Selah Washington was having a road built on his property when construction equipment hit a large bone.



Intrigued, he contacted regional geologists who tentatively identified the bone as the humerus (front leg bone) of a mammoth. By the summer of 2005 paleontologists from Central Washington University and the University of Washington had formed a research team and a full scale dig was underway. To enlist help and provide a unique hands-on experience for students and teachers on summer break, the team formed the Wenas Creek Mammoth Investigation Field School. Over the past two years, students have worked alongside researchers to determine the age of the bones, learn about the environment the animals lived in and search for additional specimens.

Mammoth specialist Bax Barton, Curator of Special Collections in the Quaternary Research Center at UW is research faculty for the Wenas Creek investigation. We are excited to announce a special lecture by Bax and his associate Jake Shapley on **Sunday, October 22nd**. They will describe the work taking place on this ongoing paleontological dig and bring us up to date on what is known about the lives and times of the mammoths that once inhabited Washington State. This program will take place at in the **Natural History Exhibit at 4pm**. Lecture fees are \$5 for adults, \$3 for youth (\$3 for member adults, and \$2 for member youth). Earlier this day (time yet to be determined) Bax and Jake are inviting people who have found mammoth or mastodon specimens locally to bring them in for examination and identification.

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Humpback and Blue Whales in the North Pacific: their Status, Movements, and Underwater Behavior

For decades after humpback and blue whales were commercially hunted, many feared that their numbers had been reduced to the point that extinction was inevitable. Off the coast of California, Oregon, and Washington, recent research had revealed a surprisingly large population of humpback and blue whales, representing the highest concentration of blue whales since whaling days.

Join John Calambokidis, one of the founders of Olympia-based Cascadia Research who began documenting the existence of these populations in the 1980s, as he shares some



PHOTO: ALEXEI CALAMBOKIDIS, CASCADIA RESEARCHER

of the exciting recent discoveries on these species. This includes results of ongoing research attaching instruments to their backs using a suction-cup to gain access to their underwater world. He will share information on the movements and behavior of these species from long-term tracking of identified whales and show new video footage taken from a Crittercam on a blue whale showing them feeding and vocalizing underwater. He will also discuss the preliminary results from SPLASH, an international collaborative study of humpback whales throughout the North Pacific, which has involved more than 50 research groups.

This program will be held on **Friday, November 10th at 7:30pm** in the **Natural History Exhibit**. Lecture admission is \$5 for adults and \$3 for youth (\$3 for adult members of PTMSC and \$2 for youth members). For more information call the PTMSC at 385-5582.

Hadlock Dental Center

Donald R. Young, DDS, FAGD
Fellow, Academy of General Dentistry

906 Ness' Corner Road
P.O. Box 268
Port Hadlock, WA 98339
dryoung@olypen.com
(360) 385-4373

Where's the MSC Pen?

Regular *Octopress* readers will notice that there is no separate *MSC Pen* volunteer newsletter in this issue. The "Sea Pen" has been at least temporarily retired. Volunteer profiles and other articles of interest to volunteers will continue to be included in the *Octopress*, just not as a separate publication. We are exploring new ways of communicating with and about our dynamic group of volunteers. All ideas are welcome! Jean Walat, Volunteer Coordinator.



New Interactive Exhibit in the NHE



Animal Song Exhibit

Each of the birds seen along our shores has a characteristic song, and so of course do marine mammals. But how many of them can you recognize? This fall we're working hard on a new interactive exhibit developed and built by two highly skilled volunteers that lets you test your knowledge of animal sounds. Cabinet-maker Richard Inman and electronics engineer Otto Smith put their heads together to design a beautiful and functional unit that will let you match 10 animal calls with the animals that make them. Even better, we will be able to reprogram the micro-chips that store the animal sounds, letting us update the exhibit with new animal calls at a later time. We intend to have our new exhibit on-line by mid-September. We hope you'll come in and see if you can recognize the song of a black turnstone or an elephant seal!



Kids' Corner

This past summer the new Kids' Corner in NHE has been a magnet for young children, and some not so young. A small table and chairs, donated by an anonymous volunteer, is just the right size for a tray of rocks, bones and feathers to explore and a basket of children's books from the Literacy Council of Jefferson County. We like it!

Featured Volunteer: JAMIE PARKER

When I first started as Volunteer Coordinator last September, it was fairly easy to miss Jamie Parker among a sea of volunteers, most of them new to me, because he is quiet and reserved. However, I soon noticed that Jamie's name appeared frequently whenever there was physical work to be done. It didn't really matter what—helping set up the volunteer gathering, showing up every week for homecrew, signing on to a second home crew when the need arose, or hauling landscape waste to the dump, Jamie was always ready to lend a hand. Jamie doesn't go for the big glory tasks, but the ones in the background, the ones that any organization has to have done in order to operate.



Like many quiet people, Jamie is full of surprises. He was a physics and math major in college, then entered the Army and served as a helicopter pilot. He later had a long career as a nurse anesthetist, and served as President of the Hawaii Association of Nurse Anesthetists. He is also a retired commercial pilot of fixed wing aircraft. He's an experienced camper and kayaker, favoring inflatable kayaks popular in Hawaii because they can be transported by plane between the islands.

A native of Wenatchee, WA, Jamie moved from Hawaii to a five acre homesite on Discovery Bay about four years ago. He got involved with the Center after seeing an article in the newspaper asking for volunteers to paint the Marine Exhibit building in 2004, and has been helping ever since. He is the kind of willing volunteer without whom the Marine Science Center literally could not exist, since we could never pay for all of his 'behind the scenes' services.

Besides the Marine Science Center, Jamie volunteers with the Ft. Worden Coast Artillery Museum, Habitat for Humanity, the NW Salmon Coalition, and as a volunteer preparer of income taxes. He thinks that the PT Marine Science Center has an important role in educating children and the public about the environment, and says that working with the Center is one way that he can contribute something positive towards conservation of the natural world. Thanks, Jamie, for what you bring to the Marine Science Center.

Seth Bender Memorial Scholarship Fund

PTMSC's hands-on Marine Science and Natural History camps provide educational opportunities for boys and girls ages 8–18. This scholarship fund, established in memory of Seth Bender, provides tuition assistance for low-income families.

We sincerely thank the following who have contributed since our last issue: Elsie and Hank Kimball, Alan Rammer, Barbara Adler and John Nemerovski.

Contributions to the scholarship fund are always accepted and can be sent to: Seth Bender Memorial Scholarship Fund, Port Townsend Marine Science Center, 532 Battery Way, Port Townsend, WA 98368.

MARK YOUR CALENDARS!
NOVEMBER 24 & 25

Don't miss the
**Annual Thanksgiving
Weekend Gift Shop Sale**
at the
Natural History Exhibit.



Get your
holiday
shopping
out of the
way early.

There will be Fish Printing
noon–4pm each day!

PHOTO: CAROLINE LITTLEFIELD

PROTECTION ISLAND FALL MIGRATION CRUISES

SATURDAYS, 1 PM TO 4 PM
OCT. 7, 14, 21, 28 NOV. 4 & 25 DEC. 31

Tickets: \$50 per person
(\$45 for PTMSC, Burke Museum, Audubon or WOS members)
Reservations and information:
(360) 385-5582, (800) 566-3932 or cruises@ptmsc.org
Discounts are available for children and groups

Reinvigorated Teachers Take New Activities Back to School

Onshore-Offshore Marine Ecology for Teachers just finished its 9th successful season this year with a new focus on marine conservation and the use of marine refuges as a tool in protecting the coastal habitats and species. With a group of hard-working and enthusiastic teachers, a great agenda and a terrific team of program partners, how could we go wrong? Still, the testimony of teacher Cathy Buck has brightened our day:



"I learned tons about marine biology, and got many great activities to use in my classes but, most of all,

your class gave/reminded me of a different perspective on living. The time on the Adventuress is still with me strongly. As a result, I have made several changes in my life since I came home. Maybe we can't measure that with WASL scores, but I think the students must benefit from having healthier, more grounded teachers. Thank you for making the effort to incorporate that experience into the class. Thank you for the incredible amount of work you put into making the whole experience happen for us."

The PTMSC wishes to thank everyone who made this workshop a success:

Instructors—Cinamon Moffett and Judy D'Amore

Guest Instructors—WWU graduate student Pema Kitaeff and Washington Department of Fish & Wildlife shellfish biologist Theresa Cain

University of Washington's Research

Vessel Centennial Crew—Skipper-scientists David Duggins and Craig Staude

Sound Experience Adventuress Crew—under the guidance of skipper Al Nejmah

City University—Paul Ganalon, sponsor of undergraduate and graduate credit

Primary Funder—National Fish and Wildlife Foundation

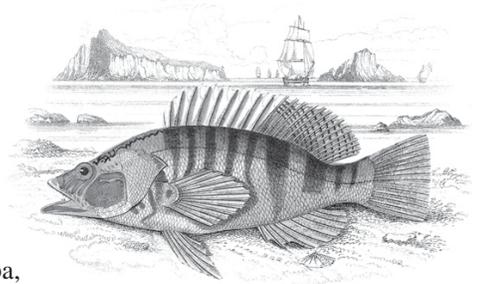
Participating Teachers—Phyllis Bazzano-Carr, Tim Behrenfeld, Catherine Buck, Lynne Buechler, Cheryl Campbell, Criss Forslund, Jeanna Fox, Michele Gates, Kathy Hall, Liz Horn, Mike Horn, Darryl Hrenko, Tina Jones, Nancy Lombard, Cathy McMaster, Robyn Murphy, Amy Palmer, Kirk Parker, Colleen Rentko, Lynnea Roberts, Paul Rocks, Marla Schwartz and Dawn Wheeler

Living and Working in the Middle East

by Anna Bachmann—former PTMSC staff

Living in a city like Amman gets depressing after awhile ... the noise, the traffic, the seemingly endless miles of concrete ... I'm not really a city girl at heart. Recently I had the opportunity to travel to Aqaba, the southernmost city in Jordan and the only port Jordan has on the Red Sea. I jumped at the chance to get out of Amman. In Aqaba,

I had my first opportunity to go snorkeling ... actually I've done it before in the Pacific Northwest, but I didn't like it ... all that gear you had to wear to protect yourself from the cold water made me feel claustrophobic ... but snorkeling on the Red Sea was an entirely different matter. I loved it! ... especially since I used to work at the Port Townsend Marine Science Center and have seen hours of educational videos on coral reef ecosystems. Finally, a chance to see these animals with my own eyes!



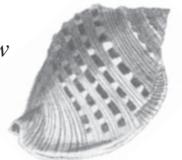
We had to drive south of the city to find a nice private beach (at the public beaches in town a woman in a bathing suit would cause quite a stir ... the men around here don't get to see a lot of naked female flesh). Also, just south of town, right after the port, is the Jordan Marine Science Center and Aquarium. Of course, that warranted a stop. It is a small facility and looks a bit run down (a bit like the PTMSC before its renovation!) ... but the tanks were in good shape and the animals looked healthy. Unfortunately, the educational posters they had, though colorful, were mostly in English (it is an Arabic country after all) and their tanks were not properly labeled ... many had no labels at all.

In fact, the educational component seems to be almost completely lacking and there was no one there to do any interpretation. I kept thinking about how we ran things at the PTMSC ... and realized how important volunteers are in making an exhibit like this come alive. Walking into a place like that without anyone to show you around and introduce you to these amazing animals is really a terrible waste and a missed opportunity.

And Jordan really needs to work on their public awareness as far as their environment goes. The other day I was walking in Amman along a road following the contours of a steep hill. Three guys were unloading the back of a pick-up truck full of garbage and just tossing it all over the edge of the road onto the steep hillside ... in broad daylight and no one around seemed in the least disturbed about it. I should have said something to them, but my lack of ability to curse someone out in Arabic for such behavior makes me a little too shy sometimes!

Anyway, living and working here in the Middle East on environmental issues makes me realize just how far we have come in the U.S. in the effort to raise the environmental awareness of the general public. You guys at the PTMSC probably don't realize what a vital part you play in that process, but without you, the behavior of the general public towards the natural world would probably be vastly different.

Anna Bachmann is the former volunteer coordinator at the PTMSC and is now based in Amman, Jordan and working for an Iraqi environmental group called Nature Iraq. Despite all the unrest inside of country, Nature Iraq is moving forward on several interesting new projects (doing a biodiversity survey of Kurdistan, creating a national park in the marshlands of southern Iraq, building a green village in the Central marsh, and lots of capacity building projects on the environment). You can follow Anna's activities on her weblog, Sophia's Peace Work: peacework.blogspot.com.



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NEW & RENEWING MEMBERS

Thanks! To our New & Continuing Members! The following folks have either joined or renewed their PTMSC membership since the Summer '06 *Octopress* was sent!

STUDENT

Marie Wright

INDIVIDUAL

Patt Ayers
Bud Babcock
Hyatt Barnes
Gladys Barry
Loren Clark
Barbara Cook
Marcia Jones Hartshorn
Larry Heater
Caroline James
Judy Larimore
Gerald Larson
Sallie Luers
Stu & Pat MacRobbie
Cheryl Maglosky
Stephen Murphy
Moh O'Hanlon
Paula Orkand
Yvonne Otterness
Lynn Petersen
Linda Pfafman
Alan Rammer
Sally Robbins
Lorraine Trautman
Doris Unruh
Chrilo Von Gontard
Trish Walat



Priscilla & Steve Cooper
Craig Degginger
JoAnne Dille
Tiffany & David Drewry
David Eekhoff
Bob & Charlene Engel
Bernt Ericson
Joan & Bill Ewbank
George Forman
Kay & David Goetz
John Golden
Steven Goldenbogen
Chris, Jamie & Mari Gower
Nancy & Mark Grant
Alan Greenwald
Catherine Groscoat
Brenda Hack
Susanne Hainsworth
William Ham
Timothy Harrington
Carol Hartly
Sandra Haston
Hugh & Terry Haven
Ronald Hayes
Malcolm Hepworth
Marilyn Hoeft
Carla Hoggarth
Brigitte Hoopes & Family
Derrold Hopkins
Amber Hudson
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Mary Lou Iverson
David & Joyce Klemann
Cynthia Knudson
Sandra Kurtz
Stephanie Kurtz
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October Cooking Classes at The Green Eyeshade

“Specialties of the House” is the theme for this year’s cooking classes at the Green Eyeshade. All classes are from 7–9pm and are a fundraiser for the PTMSC. Let our local chefs’ “specialties of the house” become your own specialties. The line-up of featured chefs is:

Tuesday, Oct. 3rd

Kris Nelson, Sirens, salads and appetizers

Tuesday, Oct. 10th

Tim Tocatlian, T’s Restaurant, entrees

Tuesday, Oct. 17th

Arran Stark, a new caterer specializing in local fresh farm products, entrees

Tuesday, Oct. 24th

Heather Polizzi, Otter Crossing, desserts, including specialty crepes

This is our fourth year in offering cooking classes. Tickets will be \$25 per person for PTMSC members or \$85 for all four classes for members and \$30 per person per class for nonmembers.

If you attended any of the previous PTMSC cooking classes, you’ll know you don’t want to miss a single class. Sign up early, as space is limited to only 20 per class. All proceeds go toward funding PTMSC programs. Please call 385-5582 or e-mail info@ptmsc.org for reservations.

Many Thanks are due ...

- ✦ **Tim Carpenter** at the Seattle Aquarium for ten Pacific Spiny Lumpsumbers.
- ✦ **Kathryn Edens** of Microsoft for donating software and operating systems for our new computer network.
- ✦ **Port Townsend Rotary, Admiralty Audubon** and the **Geology group** for their donations towards a cordless sound system.
- ✦ **Leslie Aickin** and **Kitty Reed** for putting together a brochure on the geology of Fort Worden.
- ✦ **Katie Glessing** for her expertise.
- ✦ **Karen** and **Henry Nichols** for their support.
- ✦ **Karen DeLorenzo, Dan** and **Soozie Darrow** and **Johanna King** for hosting our Puffin Cruises.
- ✦ **Richard Inman**, and **Otto Smith** for our new bird song exhibit.

W H A T ' S N E W A T T H E B U R K E

Archaeology Day at Discovery Park

“Tsunamis, Sewage, and Salmon”

Sat. October 14, 10am–2pm Free!

Specialists from the Burke’s’ archaeology division and Seattle’s Department of Parks and Recreation conduct a day filled with exciting tours and activities. Find out what tsunamis, sewage, salmon, and archaeology have to do with each other. Learn who lived at Discovery Park thousands of years ago. Discover the geological history of the West Point Peninsula. Try your hand at archaeology activities for all ages. Co-sponsored Seattle Department of Parks and Recreation. Check in at the Discovery Park Visitor Center.

**PORT TOWNSEND MARINE SCIENCE SOCIETY
 FORT WORDEN STATE PARK
 532 BATTERY WAY
 PORT TOWNSEND, WA 98368**

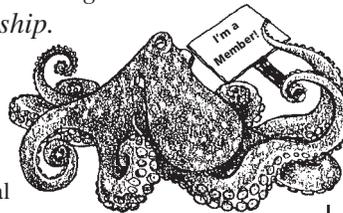
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- ◆ Discount admission to all PTMSC events: Protection Island Cruises, Speaker Series, etc.
- ◆ Reciprocal member privileges at the Burke Museum
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- ◆ Unlimited use of the PTMSC library
- ◆ Advance notice of programs & events

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- ◆ All of the above plus unlimited free admission to the Marine Science Exhibit and Natural History Exhibit for your family
- ◆ Tuition discounts for the PTMSC Hands-On Summer Science Camps

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- ◆ All of the above plus 2 free admission tickets for friends

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- ◆ All of the above plus 6 free admission tickets for friends and/or associates

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