August/September2008

HMSC Currents

Newsletter of the Hatfield Marine Science Center Community - Newport OR

Interns wrap up busy summer

This has been the Hatfield Center's "summer of interns", as HMSC Academic Programs Coordinator Itchung Cheung called it, with 19 participants in five different internship programs at HMSC since June. Ten of those were Research Experience for Undergraduates (REU) interns, supported by a National Science Foundation grant that included 12 additional students in Corvallis, mentored by COAS faculty. The Newport REU interns worked in various HMSC labs and spent time in the field, presenting the results of their 10-week research projects at a symposium at the on August 21.

continued on page 6

HMSC Picnic is set for September 13

Mark your calendars for the afternoon of Saturday, September 13th for the HMSC community picnic. We have a wonderful spot reserved at Moonshine Park along the Siletz River, with plenty of room for grilling, relaxing, and outdoor fun. HMSC provides drinks and meats/fish/veggies for grilling and the rest is potluck. Families and friends are invited, and people can camp overnight at the park if desired. For more information, contact Ken Hall at 867-0234.

Offshore Aquaculture is focus of September HMSC Forum

The Hatfield Marine Science Center is hosting a two-day forum that will explore the feasibility of developing offshore aquaculture programs in the Pacific Northwest on September 9-10, 2008.

Fisheries and Wildlife Professor Chris Langdon, coordinator of the forum, says the event is designed to be informational and will explore the potential rewards as well as the downsides of offshore aquaculture in this region.

"Global population is estimated to increase by 50 percent in the next 40-50 years and commercial fish stocks around the world are at or above sustainable harvest levels," Langdon said. "We need to explore other avenues of seafood production if we are going to maintain current levels of per capita consumption. However, expansion of offshore aquaculture in the United States would require a strong regulatory framework with environmental safeguards to protect natural resources and ensure consumer safety. In addition, aquaculture activities need to be sensitive to society's values and economic priorities."

Speakers at the forum include regulators, community leaders, aquaculture industry representatives, fishing industry representatives, economists and scientists. Among the topics: environmental, economic, biological and management issues, food safety, siting and engineering challenges, potential business models, and fish and shellfish species suitable for the Pacific Northwest.

For additional information, and registration info, visit the website: http://oregonstate.edu/conferences/aquaculture2008

The HMSC Currents newsletter is published 5 times a year. Your comments and submissions are welcomed! Deadline for next issue is October 6th. Send to: ken.hall@oregonstate.edu

Russian delegation visit

The HMSC welcomed a delegation of Russian scientists and resource managers visiting Newport on July 9-10 during a three-week tour of Oregon to learn about resource conservation practices involving government, research institutions, community groups and the private sector.

The group hailed from Primorsky Krai, a maritime province in southeastern Russia containing the nation's largest port city on the Pacific coast, Vladivostok, home to the Pacific Research Institute of Fisheries and Oceanography (of the Russian Academy of Sciences).

Hosted by the World Affairs Council of Oregon, the delegation was composed of professionals active in research, environmental protection, conservation and education fields. They were interested in a wide range of resource management issues, including fisheries, marine mammals, and managing impacts of offshore oil development. One worked with youth in the Russian Far East to help conserve the Siberian tiger. Another is the senior researcher at the Institute for Marine Biology at the Far Eastern Division of the Russian Academy

continued on page 3

Natural resource managers and scientists from the Russian far east region of Primorsky Krai met with ODFW Marine Resources Program staff during their visit to the HMSC in July.
Photo courtesy of Brandon Ford.

International workshop on migratory birds and tracking technology held at HMSC

A four-day course on bird movement and migration techniques and study design, sponsored by the National Science Foundation Education Node MIGRATE (Migration Interest Group: Research Applied Towards Education), was held at the HMSC from July 29 to August 1. Aimed at graduate students who are at the preliminary stages of proposal development, the course attracted 20 registrants, many coming from Latin America, the Caribbean and Pacific islands.

Workshop participants learned about traditional and cutting-edge techniques for studying bird movement including radio and satellite telemetry, stable isotopes, molecular markers, population modeling, molt and morphology, and radar technology. Lectures, field techniques, computer exercises, and lab demonstrations were presented by international experts in various fields, including HMSC's own Rob Suryan, Assistant Research Professor of Fisheries and Wildlife at OSU.

CIMRS bioacoustics researchers co-host international conference

Researchers and scholars in the field of acoustics and animal communication gathered in Corvallis on August 12-15 for an international conference on animal communication, sponsored by OSU and the Acoustical Society of America. CIMRS Senior Researcher Dave Mellinger, leader of the marine mammal acoustics group at HMSC, volunteered OSU to host the meeting when organizers indicated an interest in holding it on the west coast. CIMRS faculty research assistants Sara Heimlich, Sharon Nieukirk, and research associate Holger Klinck also participated.

Presentation topics ranged from the analysis of territorial defense communication of song sparrows to the effects of human-produced sound on various animals and the repetition of sounds made by South Pacific humpback whales.

Research Updates

ODFW study finds differences in rockfish movements

Oregon Department of Fish and Wildlife Marine Resource Program (MRP) researchers are in the final months of a two-year study on rockfish movement that suggests large differences in behaviors and use of space between different rockfish species.

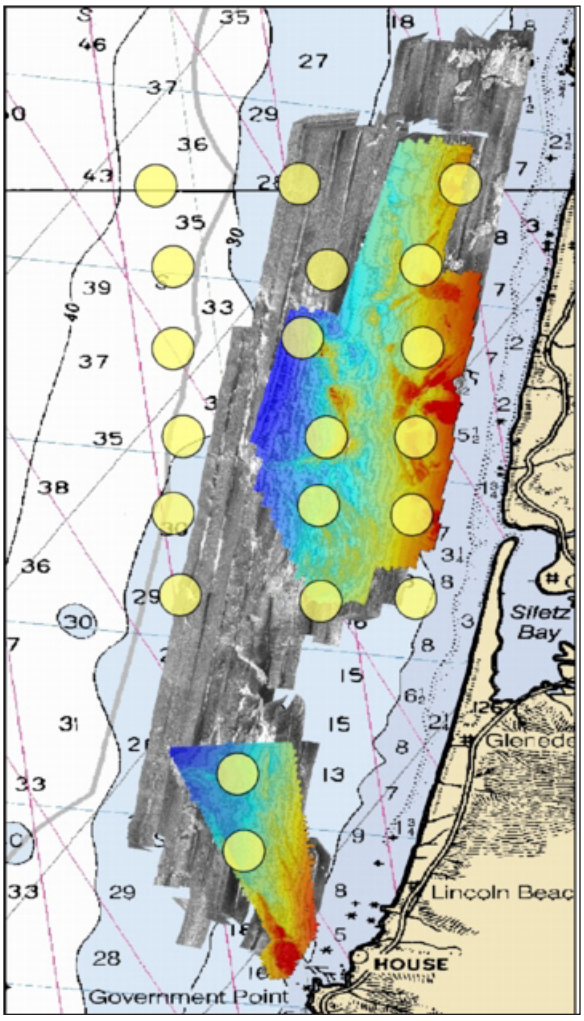
The study examined six species of Pacific rockfish – canary, yelloweye, tiger, quillback, black and vermillion rockfish – at Siletz Reef off of Lincoln City. Although a few more months of fieldwork remain, the preliminary results may assist in planning marine reserves or marine protected areas.

The Siletz Reef study began in June 2006 and data gathering will continue through October when researchers will pull the array of acoustic receivers and their moorings. MRP Researchers tagged 54 rockfish with pressure-sensing coded tags that ping an ID code and a depth which is recorded by 36 Vemco receivers. Fish are collected by hook and line and are vented, tagged and off the deck in fewer than six minutes.

The fish movements are picked up on a 54-square-kilometer grid of acoustic receivers with additional receivers off Government Point (four kilometers to the south). MRP researchers monitor the grid and download the receivers every few months.

The findings so far show that canaries range widely throughout the water column, followed by blacks. Quillbacks, yelloweye, tiger and vermillion range less than eight meters of depth. More interestingly, it appears that vermilion, quillbacks, black, yelloweye and tiger rockfish show high site fidelity. But, canaries show very low site fidelity and very high mobility.

continued on page 4



A chart overlaid with multi-beam and side-scan sonar showing the position of the major receivers in the research grid off Siletz Bay.

ODFW plays key role in Pink Shrimp sustainable fishery certification

On April 1, the Oregon pink shrimp fishery began its first season as a Marine Stewardship Council (MSC) certified sustainable fishery. The fishery got off to a slow start as processors and fishermen took some time to agree on an ex-vessel price. When things got going, fishermen found both good catch rates and an acceptable grade of shrimp on the grounds. Through May 15, the fishery landed approximately 3 to 3.5 million pounds.

"It's probably too soon to know what impact, if any, Marine Stewardship Council certification will have on ex-vessel price," said Bob Hannah, shrimp and research project leader for ODFW's Marine Resources Program. "Currently, processors are paying 50 or 57 cents per pound, depending on the number of shrimp per pound."

One factor that may influence how the 2008 season progresses though is the record high cost of diesel fuel. The average for diesel is now around $4.50 per gallon, compared to $2.80 last year at this time. While fishing is profitable at current high catch rates, it will become less so as fishing reduces the density of shrimp on the grounds.

ODFW biologist Steve Jones analyses an Oregon pink shrimp sample from a commercial boat.

One important change for shrimp fishers in 2008 is ODFW's introduction of a new logbook format. The new format is required as a condition of MSC certification and imposes a higher standard of record keeping on vessel operators. Although the old logbook format was considered one of the best in the nation for a shrimp trawl fishery, it only required information on the retained catch of shrimp, nothing on bycatch or on the catch of shrimp that were discarded. The new logbook format captures information on both retained and discarded fish and shrimp and will provide much better information on how this valuable fishery is prosecuted. So far in 2008, the new logbook has been well received by the fleet and operators are doing a good job of recording the required details.

As the shrimp fishery has progressed over the years, it has gradually become one of the cleanest shrimp trawl fisheries in the world, as reflected in the MSC certification. Bycatch reduction devices (BRDs), developed cooperatively with the shrimp industry, have greatly reduced fish bycatch and now most shrimp fishermen would not fish without them. Over time, vessel operators have gradually switched to ever more efficient BRDs, with rigid-grate BRDs replacing soft-panel BRDs, and bar spacing in rigid-grate BRDs shrinking from 2 inches down to 1.25 inches or more. Many vessels now are using even closer spacing, down to as low as 1 inch.

As significant as these successes are, challenges for the Oregon shrimp fishery remain. The potentially deleterious effect of trawl fishing on sea floor habitats is one area of concern. MRP is addressing this problem through an ROV study of trawl impacts on benthic macro invertebrate populations in four mud-bottom areas near Nehalem bank. The four areas have different shrimp trawling histories and two of them have been recently closed to all trawl gear through the federal process to protect essential fish habitat. Our hope is that through this study we can learn enough about habitat impacts from shrimp trawling to minimize the effects of this fishery on seafloor habitats.

Another challenge facing the shrimp fishery is the current federal review of the status of eulachon (smelt) under the Endangered Species Act. Eulachon have been historically captured as bycatch in the shrimp fishery. While they are excluded by modern BRDs, eulachon bycatch is reduced by only about 60 percent. MRP is addressing this potential problem by testing a new type of BRD that employs horizontal bars rather than vertical bars in the hope that it may be more efficient for excluding eulachon.

Russian delegation visit

(*continued from front page*)

of Sciences in Vladivostok, who researches the ecosystem of the shallow waters of Posyet Bay in the Sea of Japan.

Although a few of the guests spoke some English, most conversation was facilitated by the group's two designated interpreters, along with our own resident native Russian speaker, Vladlena Gertseva, who generously offered her assistance during the first day of the delegation's visit. Ken Hall and George Boehlert provided an overview of research and education activities at the HMSC, highlighting partnerships and collaborations that make the Hatfield Center unique. The visitors also heard from ODFW's John Spangler about a multi-year project to remove water diversion structures and restore natural flows in the Alsea river/estuary.

The delegation also met with members of ODFW's Marine Resources Program, prompting questions and discussion focused mainly on fisheries management. Some of them were familiar with Oregon's Nearshore Strategy. Although it was sometimes difficult to work through the interpreters, especially with the amount of technical jargon that we are so accustomed to using, it was clear that they were interested in the details of our experience handling controversial resource management issues.

Academic Programs News

Population Dynamics among Fall course offerings

This Fall term, the class "Introductory Population Dynamics" will be again offered online through the OSU Extended campus. The course is designed for undergraduate students and is a part of the core curriculum for a Bachelor's degree in Fisheries & Wildlife. Extended campus students do not need concurrent enrollment in FW 322.

The course introduces the fundamental concepts of population dynamics, exposes students to quantitative analysis of biological data, and illustrates applications of mathematical models for management and conservation of populations in fisheries and wildlife.

For further details on the course, check out the syllabus at: http://services.ecampus.oregonstate.edu/syllabi/downloadsyllabus.aspx?docid=2198

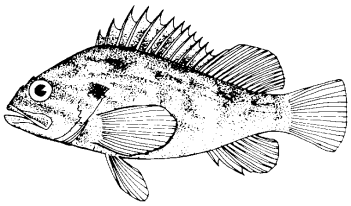
The Fall term will start on September 29, 2008. Registration for the Fall term is currently open. If you have any questions, please contact instructor at the contact information below:

Vladlena Gertseva
Assistant Professor, Senior Researcher
Cooperative Institute for Marine Resources Studies
Phone: (541) 867-0528
E-mail: vladlena.gertseva@oregonstate.edu

Rockfish Study (*continued from page 2*)

This preliminary data suggests that canaries are highly mobile and may not benefit from small or reef specific areas restricted from fishing. On the other hand, they may be resistant to localized depletion in nearshore fisheries. In contrast, some of the very site-faithful rockfish may be quite vulnerable to localized depletion and may benefit more from areas restricted from fishing

Polly Rankin, one of the researchers, presented preliminary findings at the 2008 Western Groundfish Conference Feb. 4 – 8 in Santa Cruz, Calif. Two other MRP staffers made presentations at the conference: Keith Matteson, on *Observations of fish behavior in the vicinity of a selective flatfish trawl footrope using DIDSON imaging sonar* and Josie Thompson on *Aspects of the life history of aurora rockfish (Sebastes aurora) in waters off Oregon.*



Sea Grant and Visitor Center News

Youth and family education program update

It was a busy spring and summer season for Sea Grant's Youth and Family Marine Education program, starting with the usual rush of school groups taking field trips in the final two months of the school year, and an extra home school program offered in response to high demand after the fall program filled up. We also saw the Las OLAS program complete another successful year, with a great response from Spanish-speaking families attending evening programs featuring translated curriculum and bi-lingual interpretation of our classes.

For the third year, Athena Crichton's outreach program " A Day at the Bay" in Tillamook was a great success. She trains high school students to be facilitators for elementary students participating in outdoor educational programs at the beach. Cait Goodwin,, with a grant from Oregon Sea Grant, was able to produce "Quests" for the Marine Science Center, a book of Lincoln County Quests, and a Quest teacher workshop. The spring Career Day event for high school juniors and seniors was another success. Students were able to hear presentations from scientists, take an interactive tour, learn about careers in marine science, and learn about opportunities offered here at HMSC.

This summer, we offered several popular day camps, including Marine Biology and Oceanography, which were geared toward upper-level middle and high school students. These camps offer students the opportunity to get experience in the field, work with scientists, carry out their own projects, and participate in hands-on experiences. For the younger campers 7-9 years old, Coastal Adventures I and II introduces them to the coastal environment, where they learn about habitats by collecting animals and providing habitats for those animals. This year we also added two more camps for campers 10-12 years old and they dove right in.

Many of our programs would not be possible without the generous support from our fellow HMSC organizations, amazing volunteers, and John Sherman. We'd especially like to thank the following people for taking time out of their busy schedules to meet with Fawn and/or work with our students. Deborah Boylen, John Chapman, Itchung Cheung, Allen Cramer, Ford Evans, Vladlena Gertseva, Dennis Glaze, Joe Haxel, Steve Kupillas, Marissa Litz, Toby Martin, Jessica Miller, Rob Suryan, Laurie Weitkamp. Sylvia Yamada, and on campus, Alicia Lyman-Holt and Dr. Jack Barth.

Sea safety training course offered

Sea Grant Marine Fisheries Educator Kaety Hildenbrand organized a two day sea safety training class in April for people at HMSC who conduct work or do class activities aboard the R/V Elakha. Participants included personnel from OSU, NOAA, ODFW, and EPA.

The course provided training and instruction on:

- Sea and shore survival skills including
- Donning survival immersion suits (with practice in the swimming pool and the bay)
- Operating a Coast Guard bilge pump
- Fire fighting
- Familiarity with different PFDs (personal flotation devices)

Participants also practiced drills for Emergency communications (distress broadcasts) and specific situations such as fire on board, person over board, flooding, and "Abandon Ship".

Meet the Visitor Center 2008 Summer Interns

Sean Canfield - senior at OSU (Biology)
*Project***:** Fisheries exhibit renovation - assist with updating and new development of an 'Oregon Fisheries' public exhibit at the Hatfield Marine Science Visitor Center. The overarching goal of this project is to build public understanding of Oregon's major fisheries.
Principal Investigator: Kaety Hildebrand

Jasmine Graves - senior at OSU (Fisheries and Wildlife)
Project: Rhythms of our Coastal Waters...work with Sea Grant Education staff to aide in the implementation of a data visualization education plan highlighting new, cutting edge exhibitry including a global spherical display system (Magic Planet)
Principal Investigators: Dr. Shawn Rowe and Nancee Hunter

Valerie Lindborg - senior at Seattle Pacific University (Biology)
Project: Oregon Sea Grant Education web page - work with Sea Grant staff to aid in the updating and new development of the Sea Grant Education Web site (Visitor Center and K-12 programs). The goal is to offer an easy to use, fun to explore, intuitive web site for the general public to find information about our programs/offerings.
Principal Investigators: Pat Kight and Nancee Hunter

In the News

CIMRS Senior Researcher **Bill Chadwick** was interviewed by Discovery News (a web-based companion to the popular Discovery Channel) about his research on undersea volcanic activity around the Marianas Archipelago. Prompted by a recently published article in the Journal of Geophysical Research, a reporter contacted Chadwick by phone to develop a story for the website, featuring clips from the first-ever video-with-sound recording of an undersea eruption, captured in 2006 at a site called "Brimstone Pit", 60 miles northwest of the island of Rota. The story is online at:
http://dsc.discovery.com/news/2008/06/12/underwater-volcano.html

Professor **Chris Langdon** was featured in a July 13 Los Angeles Times article highlighting the problems that oyster hatcheries in the Pacific Northwest have been having with a bacterial species called *Vibrio tubiashii*, which kills oyster larvae. Under the banner headline "A warning from the sea", the article tells the story of how an outbreak of the bacteria nearly shut down Oregon State University's Molluscan Broodstock Program (MBP) in 2005, and how the lab's response helped the commercial oyster industry cope with subsequent bacterial outbreaks up and down the West Coast.

Langdon and former MBP field coordinator Alan Barton developed a complex seawater treatment system that uses UV exposure to kill the bacterial cells, a protein skimmer to remove toxic extracellular products produced by the bacteria, followed by a bead filter to re-introduce a balanced bacteria flora to the seawater. Installation of the system in 2006 allowed MBP to produce oyster larvae, and now commercial hatcheries are also using the system to manage the bacterial problem until a better solution can be found.

The *Vibrio* blooms are thought to be linked to warmer waters in estuaries and the oxygen-starved "dead zones" that have showed up in recent years off the coast of Oregon and Washington.

Interns

(continued from front page)

Nine other intern positions at HMSC were offered through NOAA, the Visitor Center, the OSU PROMISE program, and COSEE Pacific Partnerships, another NSF-funded program. This was the first summer of the Promoting Research Investigations in the Marine Environment (PRIME) program, led by HMSC and OIMB, working in partnership with the Oregon Coast Aquarium, South Slough National Estuarine Research Reserve, and several Oregon community colleges with the goal of integrating marine research and education for audiences that traditionally have had limited access to an understanding of the ocean.

"One difference from previous years is that there was a larger group of students focusing on research, education and outreach in the marine sciences," said Itchung, noting that all of the interns benefited from the many opportunities to cross over and participate in activities that are only available from being in residence here for the summer.

Early summer activities included the 14th Annual Markham Marine Research Symposium and SeaFest. Interns also participated in Thursday afternoon seminars, brown bag lunch meetings, and tours of HMSC labs and various other sites including Foulweather Trawl's net making operation, Newport's commercial fishing docks (with tour led by Extension Sea Grant Seafood specialist Jeff Feldner), a guided kayak trip on Beaver Creek, and a weekend field trip to learn about the forests and geology of the Oregon Cascades. Most of our interns took advantage of these opportunities and gained field work experience working with OSU graduate students, whose ranks they may eventually join.

Change in off-campus database access

The library has had to change the way it let off-campus folks into the online databases, and a new proxy server has been installed. This change means that if you are not affiliated with OSU (i.e., if you don't have an ONID account), you won't be able to access the databases and e-journals outside of the library.

Why was the change made? "Since May, the library has received a number of excessive download warnings from our electronic resource providers due a single OSU users account downloading hundreds of megabytes of content." In other words, there was systematic mining of online subscriptions that was so bad that we actually lost access to some services at times. Something had to be done.

Access via the new proxy server requires an ONID account. If you are courtesy faculty or new here and don't yet have an ONID account, just stop by the library, and any of the staff will be glad to walk you through the process.

If you aren't affiliated with OSU, but have enjoyed access to the databases in the past, we're sorry. You can always get them in the library, but access from home or the office is no longer possible without an ONID account.

Catalog of Oregon Seabird Colonies

Congratulations are due to HMSC researchers David Pitkin, Roy Lowe and Khemareth So on the publication of *Catalog of Oregon Seabird Colonies*, co-authored with Maura Naughton and Craig Strong. The book provides a comprehensive look at breeding seabirds in Oregon-colony locations, estimated numbers of different species, numbers of nests and species at particular sites. It is no small task to document the estimated 1.3 million nesting Oregon seabirds, but the authors managed to produce a lucid, beautifully organized and attractive compilation. The work will be valuable to biologists and planners as well as to lay people.

Early in September, the book will be in the New Books area of the library and will be available for checkout around the middle of the month: HMSC QL 684 .O7 C38 2007.

Library Use Surveys

During the next year, visitors to the library will occasionally be given surveys about how they use the library. Twice a month, surveys will be available during random two-hour stretches. If you are lucky enough to use the library at these times, please fill out a survey. This is part of a larger effort by the OSU libraries. Along with the voluntary print survey, there will be random on-line surveys for users of library resources.

Summit catalog to migrate to new system

The Orbis Cascade Alliance, a consortium of 35 academic institutions in Oregon and Washington of which OSU is a part, is partnering with OCLC (Online Computer Library Center) to develop and implement a new system, WorldCat Navigator, to replace the current Summit union catalog.

The new system will bring a new look to the library catalog and enable users to locate materials from OSU libraries, other academic libraries in the Northwest and libraries around the world - all with one search! Users will also be able to request materials from any of these libraries with a simple interface.

The new system will present the 28-million-volume collections of the 35 Alliance member institutions at the top of results sets, followed by results from the rest of WorldCat, which is the world's largest online database for discovery of items in libraries. The Orbis Cascade Alliance expects the new system to be available in the fall of 2008. Additional information and updates are available at the Orbis Cascade Alliance website: http://www.orbiscascade.org

Recent articles by HMSC authors

Collapse and reconstruction of Monowai submarine volcano, Kermadec arc, 1998-2004
Wright, Ian C.; Chadwick, William W., Jr.; de Ronde, Cornel E. J.; Reymond, Dominique; Hyvernaud, Olivier; Gennerich, Hans-Hermann; Stoffers, Peter; Mackay, Kevin; Dunkin, Miles A.; Bannister, Stephen C.
JOURNAL OF GEOPHYSICAL RESEARCH-SOLID EARTH 113 (B8): Art. No. B08S03
JUN 5 2008
====

Nocturnal feeding of Pacific hake and jack mackerel off the mouth of the Columbia River, 1998-2004: Implications for juvenile salmon predation
Emmett, Robert L.; Krutzikowsky, Gregory K.
TRANSACTIONS OF THE AMERICAN FISHERIES SOCIETY 137 (3): 657-676 MAY 2008
====

Buoyancy regulation by hatchery and wild coho salmon during the transition from freshwater to marine environments
Weitkamp, Laurie A.
TRANSACTIONS OF THE AMERICAN FISHERIES SOCIETY 137 (3): 860-868 MAY 2008
====

Feeding patterns and predation potential of scyphomedusae in a highly productive upwelling region
Suchman, Cynthia L.; Daly, Elizabeth A.; Keister, Julie E.; Peterson, William T.; Brodeur, Richard D.
MARINE ECOLOGY-PROGRESS SERIES 358: 161-172 2008
====

Spatial overlap and trophic interactions between pelagic fish and large jellyfish in the northern California Current
Brodeur, R. D.; Suchman, C. L.; Reese, D. C.; Miller, T. W.; Daly, E. A.
MARINE BIOLOGY 154 (4): 649-659 JUN 2008
====

Population structure and energetics of the bopyrid isopod parasite Orthione griffenis in mud shrimp Upogebia pugettensis
Smith, Andrew E.; Chapman, John W.; Dumbauld, Brett R.
JOURNAL OF CRUSTACEAN BIOLOGY 28 (2): 228-233 MAY 2008
====

Influence of the Columbia River plume (USA) on the vertical and horizontal distribution of mesozooplankton over the Washington and Oregon shelf
Peterson, Jay O.; Peterson, William T.
ICES JOURNAL OF MARINE SCIENCE 65 (3): 477-483 APR 2008
Adaptive coloration, behavior and predation vulnerability in three juvenile north Pacific flatfishes
Ryer, Clifford H.; Lemke, Jena L.; Boersma, Kate; Levas, Stephen
JOURNAL OF EXPERIMENTAL MARINE BIOLOGY AND ECOLOGY 359 (1): 62-66 APR 28
2008

New Books (as of August 12) at Guin Library

Interested in checking out any of these new books? Visit the Guin Library website at: http://osulibrary.oregonstate.edu/guin/booklist.htm where you can put holds on any desired material. When the books come off of the New Books Shelf in approximately two weeks, any requested items will be sent to you.

AUTHOR Marshall, Don B.
TITLE Oregon shipwrecks
Call # F877 .M361 1984

TITLE Oceanography and marine biology.
Call # GC1 .O375 v.46

TITLE African water resource database : GIS-based tools for inland aquatic resource management.
Call # HD1699.A1 A3548 2007 v.1 & v.2

TITLE Global Trade Conference on Aquaculture : 29-31 May 2007, Qingdao, China : [proceedings]
Call # HD9450.1 .G56 2007

TITLE Comparative assessment of the environmental costs of aquaculture and other food production sectors : methods for meaningful comparisons.
Call # HD9450.5 .C65 2007

TITLE Study on environmental changes in the Sagami Sea and adjacent coastal area with time serial comparison of fauna and flora 1. Marine organism (brown algae and animals (sponges - annelids))
Call # QH188 .K65 no.40

TITLE Study on environmental changes in the Sagami Sea and adjacent coastal area with time serial comparison of fauna and flora 2. Marine organism (Animals (Arthropods - Chordates))
Call # QH188 .K65 no.41

TITLE Study on environmental changes in the Sagami Sea and adjacent coastal area with time serial comparison of fauna and flora 3. Living organism and soil of coastal areas.

New Books (as of August 12) at Guin Library - continued

AUTHOR Krebs, Charles J.
TITLE The ecological world view / Charles Krebs.
Call # QH541 .K667 2008

TITLE The ecology of juvenile salmon in the northeast Pacific Ocean : regional comparisons
AUTHOR Grimes, Churchill Bragaw.
Call # QL638.S2 E36 2007

TITLE Catalog of Oregon seabird colonies
AUTHOR Naughton, Maura B; Pitkin, David S; Lowe, Roy W; So, Khemarith J. and Strong, Craig S.
Call # QL684.O7 C38 2007

TITLE A reference guide to gulls of the Americas; sponsored by the Roger Tory Peterson Institute and the National Wildlife Federation.
AUTHOR Dunn, Jon, 1954-
Call # QL696.C46 H675 2007

AUTHOR Hill, Susanne Elaine Braun.
TITLE Reproductive ecology of Weddell seals (Leptonychotes wedelli) in McMurdo Sound, Antarctica
Call # QL737.P64 H64 1987

TITLE Case studies in fisheries self-governance
AUTHOR Townsend, Ralph E.
Call # SH1 .F539 no.504

TITLE Small satellites for earth observation : selected proceedings of the 5th International Symposium of the International Academy of Astronautics, Berlin, April 4-8, 2005
AUTHOR Röser, Hans-Peter
Call # TL796 .I56 2005

Personnel News and Notes

New and familiar faces around HMSC

Casey Benkwitt works for NOAA's Fish Ecology division as a Fisheries Biologist contractor in Ric Brodeur's lab. Born in Rochester (NY), growing up in northern New Jersey, and attending college in Maine, Casey is an east coaster who still has family there and takes no gruff about her misunderstood home state. "I loved growing up in New Jersey – it was great being so close to New York City, in addition to plenty of beaches, woods, (and shopping malls)," says Casey. "New Jersey definitely doesn't deserve the bad reputation that it often gets!"

Casey was an Environmental Studies and Sociology major with a minor in Biology at Bowdoin College, and discovered HMSC last summer when she came as an REU intern to do research on juvenile Chinook feeding behavior under the mentorship of Ric Brodeur. "I've always been interested in marine biology and wanted to try out living on the west coast," says Casey, "so I was really excited when I found out that I could come back and get a job here."

A week after her graduation in May 2008, Casey moved back out to Newport, where she is now working on a gear comparison study to determine which net best catches juvenile salmon prey in the ocean. "It's exciting that I get to do some field work and different types of lab work in addition to analyzing and writing up the results," says Casey. "I am planning on going to grad school within the next few years so I want to explore as many different aspects of research as possible in order to decide what my specific interests are."

Casey enjoys playing ultimate frisbee, going to the beach, trying to surf, skiing, snowboarding, scuba diving, and pretty much anything that involves being outdoors. She loves the relaxed atmosphere around Newport and HMSC, commenting on how welcoming a community it is, and the seemingly endless supply of coffee, donuts, and cookies. "Also, I absolutely love living right next to the ocean," she says, "though I'm not sure how I will handle the notorious winter rain and lack of snow."

Jennifer Pini is a volunteer in Scott Baker's Cetacean Conservation and Genetics Lab. Born in Lyon, France, Jennifer went to the Oceanology Center of Marseilles for college, where she earned her bachelor's degree in Marine Science and Environment and where she is currently pursuing a master's degree in Oceanology with a speciality in Marine Biology and Ecology. Since July, her work in Baker's lab has been to put together data from sex, haplotypes

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Personnel News and Notes *(continued)*

and SPLASH information (Structure of Populations, Levels of Abundance and Status of Humpbacks) in order to learn more on Humpback whales.

"I have always been interested in marine mammals, especially in killer whales, and I have always wanted to come to America," says Jennifer, who jumped at the chance for a summer internship where she could contribute to research in her area of interest. "Working in Scott Baker's laboratory and at HMSC is a great opportunity for my future," says Jennifer, who credits the other people in the CCGL lab for helping make her experience so positive. She will return in France at the end of August to do the second year of her Master's degree.

Jennifer has numerous hobbies, including tennis, diving, skiing, travel, and learning new languages such as Spanish and Japanese. She says she has enjoyed getting to see the beauty of Oregon and its wildlife. In addition to her love of marine mammals, she is also fascinated by corals and has a tropical aquarium back in France which she enjoys taking care of.

Crystal Rink is the new lab manager/technician for Mark Camara's USDA shellfish genetics lab at HMSC. She was raised in Klamath Falls, "over the mountains, in the dry and warm/hot southern end of the state." She graduated from Oregon State University with a bachelor's degree in Microbiology and completed her master's degree in Molecular Microbiology at Johns Hopkins University School of Public Health in Baltimore, MD.

Before coming to HMSC, Crystal was working in Salt Lake City, UT for Idaho Technology, Inc. Founded in Idaho Falls, ID, the company started out making PCR instruments in a corner of a potato-farming equipment facility, but quickly outgrew the facility and moved to Salt Lake City. During her time there, she worked on a variety of projects including developing assays for detection of SNPs causing human diseases, development and testing of assays to detect agents of biological warfare (including Anthrax and Ebola) and assays to detect respiratory viruses (including influenza and SARS). During her last two years with Idaho Technology, Crystal ran clinical trials for our biological warfare assays. Crystal says she was attracted to the position at HMSC because it allowed her to get back into the laboratory, and learn and develop new techniques. Her first projects will focus on optimizing additional microsatellite assays and developing a 'reverse' microarray.

Crystal enjoys Italian cuisine, watercolor painting, going to concerts, and walking/hiking, and is the owner of "one very spoiled cat." When asked about her impressions of Newport, she says "I love the ocean and the beach, however I could do without the wind, rain, and fog. So moving to Toledo was probably a smart idea."

Two degrees of separation from Olympic gold

Few people can say they have an Olympic gold medal winner in their family, but that is exactly what Clare Reimers and Waldo Wakefield discovered last week after their nephew Andrew Byrnes, a member of the Canadian men's rowing team, won gold in Beijing.

Clare explains that Andrew, son of her sister Terry and Jim Byrnes of Ithaca, New York, was born in Toronto and lived there until he was 5 when his parents moved back to the U.S. Andrew went to Bates College and has a Masters degree in Engineering from U. Pennsylvania, and now lives in Victoria where he trains with the Canadian eight-man team. "We are very proud of his achievements," says Clare.

And so are we all, now that we can say we know someone who knows someone who came home from Beijing with a gold medal!

HMSC Happenings

HMSC team raises over $1,500 in battle against cancer

Congratulations and thanks to Nikki Atkins of NOAA-NWFSC for leading the fundraising effort and organizing a team to represent HMSC on the track at Newport's 2008 Relay for Life event on August 1-2. Weekly soup kitchens during the month of July generated $400 in donations to the American Cancer Society, which boosted the total amount of money raised by individual team members to nearly $1,666. Overall, the Newport Relay for Life raised $100,000 for the battle against cancer.

Nikki reports on the amazing contributions of participants at this year's Relay, including our top walker Denise Parker (NOAA-NWFSC) with 5.5 hours on the track and somewhere around 17 miles walked - some of it barefoot! Andrew Claxton came in second with 3.5 hours and about 11 miles. Other walkers who helped ensure that we had someone on the track for the entire Relay were Nikki Atkins, Rebecca Baldwin, Al and Jennifer Cramer, Leah Feinberg and Jay Peterson. We are small but we are mighty!

HMSC Happenings

Hatfield Students Organization puts on its own "Olympiad"

Thanks to all the competitors and spectators for making the 1st Annual HsO Olympics a success!! We had six teams compete this year, in various events, including the wheelbarrow race (with hands in boots), sponge aquarium race, tug-of-war, and multi-part survival suit relay. After an afternoon of competition, laughter, mud and more than a little sabotage.... the top three teams were:

First Place: "Not Above Cheating" (Itchung Cheung, Scott Baker, Nancee Hunter, Ken Hall, Casey Benkwitt)

Second Place: "Muddy Waders" (John Chapman, Jack Chapman, Joe Jensen, Kurt Montgomery, Rithy Bein)

Third Place: "Four Ringers -- Plus Jose" (Jose Marin Jarrin, Ali Dauble, Mattias Johansson, Dafne Eerkes-Medano, Angie Sremba)

Medals were presented to the top three teams thanks to Ali and her late night creativity. Runner up teams were:

Totally Camp: Ariel Camp, Vivian Lin, Nicole Goehring, Amanda Colton

The 'Puses: Hannah Waters, Laura Van Thiel, Lanaya Fitzgerald, Norma Vasquez, Caitlin White

The Jackson 5: Jennifer Jackson, Julia Unrein, Crystal Rink, Anjanette Baker, Mara Spencer

Start practicing now for next years World Championships held right here at HMSC. Additional photos will be available for viewing on the HsO website shortly.

Field research experience for local youth on natural resources crew

Perhaps you noticed (left to right:) Jack Chapman, Joe Jensen, Curt Montgomery, Jessie Anderson, Sarah Cordell Courtney Prozinski and John Weaver loading up or washing up in the southeast courtyard of the east wing of HMSC this summer. They were members of the Newport Summer Natural Resources Crew organized by the Community Services Consortium, and they were helping on three HMSC projects.

Their biggest job was to survey Yaquina Bay burrowing shrimp populations for John Chapman (HMSC), Brett Dumbuald (ARS, USDA) and Ted DeWitt (US EPA). This work required them to be out on every daylight tide lower than +2 in many of the sloppiest mudflats. They were here to load up some days at 5:00 AM. Their data will be used to determine whether burrowing shrimp populations of Yaquina Bay have changed since the late 1990s. This project couldn't have happened without them.

They also collected thousands of ghost shrimp for Judy Miller, a Harrisburg High School teacher who got to work with John Chapman on burrowing shrimp parasites this summer in an assignment supported by the MJ Murdock "Partners in Science" program. Judy's research (cryptoniscan recruitment to experimentally receptive bopyridan isopod crustacean females with tide and ocean conditions) required scores of parasitized ghost shrimp

but the parasite occurs in only 0.5% of all hosts. Judy would not have gotten very far without their massive help.

They also dug mud shrimp occasionally for Caitlin White (NSF, REU intern) for her project with Brett Dumbauld and John Chapman. Three members of the crew (Jack, Joe and Curt) made their final appearance as ¾ of the Muddy Waders team in the HsO Summer Olympics, where they won silver.

SeaFest draws largest attendance yet

What a fabulous day SeaFest turned out to be! According to our estimates, this year's open house and festival on Saturday, June 28th received more than 4,500 visitors. Many of the comments we received suggested this was perhaps the biggest and best SeaFest ever! The weather was spectacular, and probably played a large part in our record turn-out.

A huge thank you to all who participated, including the scientists who worked tirelessly to bring great new exhibits and ideas to the event, members of the SeaFest planning committee and our incredible army of volunteers, Ship Operations staff for their wonderful support of activities at the dock, and HMSC facilities crew and other helping hands who carried the heavy load of setting up tents, tables, providing outdoor water and electricity hook-ups, and other logistical support.

SeaFest could not happen without the financial contributions of OSU and agency units at HMSC and key community sponsors (see sidebar), and of course, the support of the HMSC business office to process everything during the already busy fiscal year closeout period.

We had a record-high participation of 34 community exhibitors (not including kids zone) and a full house with Science Zone exhibitors in the Barry Fisher Building. The Visitor Center was jam-packed throughout the day, with special exhibits on robotics and wave energy drawing adding to the mix of stimulating displays.

The Kids Zone booth exhausted their "ocean passport" supply, but had plenty of other activities inside and out to keep younger visitors enthralled. The lawn was a great spot to enjoy the music, and we had a fabulous line-up with Sons of the Beaches, Clean Slate, and Ladyz n the Barley.

Radio station KNPT operated a live remote from SeaFest, doing on-the-air interviews with visitors and exhibitors about all the things to see and do at SeaFest. Afternoon crowd-pleasers included the U.S. Coast Guard Search and Rescue exercise on Yaquina Bay and David Specht's demonstration of the EPA hovercraft careening around the parking lot.

Out at the dock, visitors enjoyed tours on OSU's research vessels *Wecoma* and *Elakha*, rides on the Oregon Rocket (courtesy of Marine Discovery Tours), and interactive exhibits put together by ODFW's Marine Resources Program staff. These included a full-size ROV on deck and an underwater camera mounted on a mini ROV in the bay, offering visitors a glimpse of the rich invertebrate life on the Research Dock's pilings.

Staff was on hand to help kids dissect sardines and anchovies and answer questions about several interesting specimens on display, including marine mammal skulls, deep-water viper fish and a brown cat shark. ODFW counted more than 560 SeaFest visitor interactions, counting only those contacts where one of their biologists answered a question or otherwise interacted with the public.

More than a few people were surprised at the variety of shellfish available in and around Yaquina Bay. Many kids and adults learned first-hand how to properly measure and sex a crab. And amazingly, only one little finger was pinched by the Dungeness and rock crabs in the water table.

HMSC and the entire Newport community really has an event to be proud of in SeaFest! Thank you so much Lisa Mulcahy and Ken Hall.

SeaFest 2008 Sponsors

Host Institutions

OSU-HMSC Director's Office
OSU-Coastal Oregon Marine Experiment Station
OSU-NOAA Cooperative Institute for Marine Resources Studies
OSU-Oregon Sea Grant
ODFW Marine Resources Program
NOAA Alaska Fisheries Science Center
NOAA Pacific Marine Environmental Lab
NOAA Northwest Fisheries Science Center
US EPA, Western Ecology Division, PCEB
USFWS – OR Coastal Wildlife Refuge Complex

Community Sponsors

Confederated Tribes of Siletz Indians
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Elizabeth Street Inn * Oregon Coast Aquarium * TLC Federal Credit Union
Bangkok Thai Restaurant * Best Western Agate Beach Inn * Hallmark Resort
* La Quinta Inn * Mariner Square/Ripley's
Believe It Or Not! * Panini Bakery * Safeway * Starbucks

Thank you for your support!

Lisa Mulcahy served as the SeaFest 2008 Outreach / Event Coordinator, a position created through the AmeriCorps LINKS program of the Northwest Service Academy (NWSA). The HMSC has been fortunate to work with such highly qualified people through AmeriCorps/NWSA over the years, leading to several other positions based at HMSC, including for Oregon Sea Grant and the Oregon Coast Refuge Complex of the US Fish and Wildlife Service. For more information about AmeriCorps opportunities, as a service member or sponsor, visit:

www.northwestserviceacademy.org

Photos courtesy of Nancy Jane Reid and Ken Hall

Official Marine Protected Areas blog announced

The World Commission on Protected Areas (WCPA) has been working on a Marine Plan of Action to develop communication across the world on Marine Protected Areas (MPAs). In an effort to best facilitate communication about MPAs, WCPA is launching The Official MPA Blog. Users can utilize the blog system by using the site as a news feed into other systems such as iGoogle and Yahoo, searching through the news feed for particular subjects, searching through structured archiving for old postings, and emailing stories of interests to friends and colleagues directly from the web system. To access the blog, visit officialmpa.blogspot.com

Public comment sought on proposed new Outer Continental Shelf (OCS) Oil and Gas Leasing Program

The Minerals Management Service (MMS) has come out with draft rules for alternative uses of the ocean. This has implications for Oregon in offshore (past 3 miles) energy development. There are also some potential implications to aquaculture, specifically in existing structures (oil rigs) becoming aquaculture facilities aka "rigs to reefs". Details are available at: www.mms.gov

The Request for Information regarding the proposed development of a new five-year program for was published in the Federal Register (73 FR 45065) on August 1, 2008. MMS is seeking public comment until September 1, 2008. The public may submit comments via any of the following methods:

- email to 5yearRFIcomments@mms.gov;
- MMS online commenting system https://ocsconnect.mms.gov/pcs-public, keyword "5-year";
- or by mail to: Five-Year Program Manager Minerals Management Service (MS-4010) 381 Elden Street Herndon, VA 20170

Submitted by Kaety Hildenbrand, OSU Marine Fisheries Extension Agent. For copies of comments prepared by Oregon Wave Energy Trust (OWET), Lincoln County and the Fisherman Involved in Natural Energy (FINE) committee, contact: Kaety.Hildenbrand@oregonstate.edu

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PEBB
BENEFIT BOARD

FREE WORKSITE HEALTH SCREENINGS

DATE: October 29 & 30, 2008

LOCATION: Barry Fisher Room in Guin Library
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Non-fasting Health Screening:
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541-867-0137

For more information go to http://www.oregon.gov/DAS/PEBB

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