**Marine Mammal Institute’s tracking of blue whales makes a splash**

Oregon State University’s Marine Mammal Institute is featured in the latest (March) issue of National Geographic magazine and in “Kingdom of the Blue Whale”, a new television documentary airing on the National Geographic Channel this month. Through the camera lens of award-winning photographer Flip Nicklin and others on the team, beautiful and astounding images document Bruce Mate’s January 2008 expedition with colleague John Calambokidis of Cascadia Research Cooperative to the blue whales’ breeding and calving grounds in an area known as the Costa Rica Dome.

The research trip filmed by the National Geographic Channel crew began in September of 2007, when Mate and colleagues first tagged 15 blue whales off the coast of California and tracked them by satellite. Three months later, their journey to relocate them ended at the “dome”, an area off the Pacific coast of Mexico where two ocean currents converge, providing optimal habitat conditions for the whales. “We discovered that the Costa Rica Dome is a key location for calving, breeding and feeding,” Mate said. “Based on John Calambokidis’ photo identification photos, we were able to track individual whales during multiple years.”

**Innovations**

**Demonstrating the future of seafood marketing**

Pilot project allows consumers to “meet the fisherman” and track origins of fish before purchase

Since mid February, customers at Portland’s New Seasons Markets have been able to scan their package of Oregon albacore tuna and see who caught it and where, who processed it, and how.

PacificFishTrax is a pilot marketing project designed to link seafood consumers with the fishermen who catch the fish and the seafood industry that processes that fish between ocean and dinner table.

Brainchild of the Community Seafood Initiative (a partnership of the OSU Seafood Laboratory in Astoria and ShoreBank Enterprise Pacific of Ilwaco, WA), PacificFishTrax was designed and developed by project manager Wendy Yorkshire, working with Oregon Sea Grant Extension seafood and fisheries specialist Jeff Feldner, also a longtime local fisherman. Funding was provided by the Oregon Innovation Council.

The PacificFishTrax kiosk sits on top of a small freezer. When a customer selects a package of Oregon albacore from the freezer and scans it, a video introduces the fishermen who caught the fish, the company that processed it, and scans it, a video introduces the process of production.

Science on Tap at Nyea’s Irish Pub in Nye Beach

Fisheries biologist Laurie Weitkamp talks salmon at Thursday, April 2 event in Newport

Pacific salmon are the indisputable icon of the Pacific Northwest and inhabit most of our local creeks and rivers. But how much do you really know about the six species of Pacific salmon--how pink, chum, sockeye, Chinook, coho and steelhead differ from each other biologically or economically, or why hatcheries are controversial?

Don’t miss this opportunity to learn about Pacific salmon biology, economics, and the issues that keep these fish in the headlines. Laurie will cover the biological traits that unite them, but also discuss how each species conducts in life in a slightly different way, including their economic importance. You’ll also learn about the major issues that concern Pacific salmon today, ranging from management to habitat impacts to salmon-eating killer whales.

Dr. Laurie Weitkamp is a salmon biologist with NOAA Fisheries’ Northwest Fisheries Science Center, based in Newport.

Sponsored by the Friends of HMSC, Science on Tap brings informative presentations on various topics out of the lecture hall and into the relaxed environment of the neighborhood pub or cafe. This is a family-friendly event with food and drink served off the regular menu. Seating opens at 6pm; lecture begins at 7pm. For more information, please contact Ken Hall at 541-867-0234.
Notes from the Director

Activities in marine labs often slow down a bit in winter, but not so this year. The state of Oregon has provided stimulus funding to the University for deferred maintenance projects, and Randy Walker has been working hard to move several HMSC projects forward. We will be seeing paving of some parking lots, renovation of the education wing, a new seawater treatment system for the west wing and visitor center, and retrofits of our main building for earthquake safety, among other projects. We may also see new funding from the federal stimulus package, and are working on proposals and ideas.

In January, I participated in the American Society of Limnology and Oceanography meeting in Nice, France, along with four of our 2008 REU interns and Clare Reimers, who has recently been named a Fellow of the American Geophysical Union. This trip allowed me to make brief stops and presentations in Lisbon, Portugal and Cornwall, England to develop collaborations on wave energy research. Since receiving US Department of Energy funding for the Northwest National Marine Renewable Energy Center (NNMREC) last fall, we have been working to implement this center along with colleagues at in Corvallis and the University of Washington.

HMSC is also planning all our upcoming activities; we are in the middle of evaluating some 220 REU intern applications for this summer’s program. SeaFest planning is getting started, so mark your calendars for Saturday, June 27, and watch for opportunities to volunteer.

Finally, the January visit by Dr. Steve Brandt, the new Oregon Sea Grant director, serves as a reminder of one of the great strengths of the Hatfield Marine Science Center – our organizational diversity. Not only do we have seven different state and federal agency activities on our campus, but within OSU, we have many departments and also an alphabet soup of different organizations; COMES, CIMRS, MMI, NNMREC, and Sea Grant. Steve’s visit was a great opportunity for him to learn about HMSC as well as to gain intimate knowledge of all of Sea Grant’s activities here, ranging from management of the Visitor Center to youth education programs to research and outreach. OSU is fortunate to have Steve leading the Sea Grant team.

HMSc Academic Programs News

Research Experience for Undergraduates program builds on success

This summer will mark the 6th year of the National Science Foundation-sponsored Research Experience for Undergraduates (REU) program at Oregon State University.

Judging from the 220 applications received by the Feb. 16 deadline (up 28% from 2008), this year’s crop of applicants are facing more competition than ever. Twenty students will be selected to conduct independent research under the mentorship of Hatfield Marine Science Center and College of Oceanic and Atmospheric Sciences (COAS) faculty during a 10-week period this summer.

Half of the students will be based in Corvallis and the other half in Newport for the duration of the program. In addition to their research projects, the student interns will attend weekly seminars and participate in the Markham Marine Science Research Symposium on June 16 and SeaFest on June 27. The students will also tour the H.S. Hinsdale Wave Research Lab in Corvallis, spend a weekend at the H.J. Andrews Experimental Forest, and take part in the COAS 50 year anniversary celebration at Da Vinci Days in July.

Titled “From Estuaries to the Deep Sea”, the joint HMSC-COAS program is known for the broad range of marine science research interests it supports and the diversity of students that it attracts. The program has also earned a strong reputation from the success of its many “alumni” presenting the results of their summer research projects at scientific meetings around the world.

This past year, 14 REU interns from the 2008 summer cohort were invited to present research findings and posters at conferences from San Francisco to Nice. Norma Vazquez (Mentor Michael Banks) presented at the 2009 American Society of Limnology and Oceanography Aquatic Sciences Meeting in Nice, France.

continued on next page
REU breeds success  continued from previous page

Americans in Science Conference in Salt Lake City, Utah. Norma not only presented, but also received an undergraduate best poster award.

Hannah Waters (Mentor Rob Suryan) and Caitlin White (Mentors John Chapman and Brett Dumbauld) presented their research at the 19th Annual Argonne Symposium for Undergraduates in Science, Engineering and Mathematics at the Argonne National Laboratory in Illinois.

And presenting their research projects at the Fall 2008 American Geophysical Union Meeting in San Francisco were: Emily Colin (Mentor Zanna Chase), Joel Craig (Mentor Pete Strutton), Rosalinda Fortier (Mentor Jack Barth and Kipp Shearman), Sam Kanner (Mentors Jim Lerczak and Kipp Shearman), Ben Klein (Mentor Miguel Goni), Molly Lindle (Mentors Anthony Koppers and Bob Duncan), Lauren Colwell (Mentors Anthony Koppers and Bob Duncan) and Kiya Wilson (Mentors Nick Pisias and Bob Duncan).

Awards, Scholarships, and Fellowships

The Hatfield Marine Science Center is pleased to announce our 2009 opportunities for a variety of scholarships to assist students in research and other scholarly endeavors that are linked to HMSC. These scholarships and awards are the result of generous financial gifts from donors to the HMSC over many years.

HMSC Summer 2009 Housing Scholarships

Students taking summer courses at the Hatfield Marine Science Center are eligible to apply for housing scholarships, which provide free or reduced-rate housing on-site for the duration of the summer term in which they are enrolled. Application deadline: May 30, 2009

Markham First Year Student Award

One-time funding of up to $10,000 to support an incoming first year graduate student who plans to be resident at HMSC after the first academic year in Corvallis. Application deadline: March 16, 2009

Joan Crebbin Memorial Fellowship

Up to $3,000 for qualified graduate students, with preference to those involved in marine science public education programs as interns, and to students whose major study emphasis is marine biology, particularly mammals. Application deadline: April 13, 2009

Holt Marine Education Fund Award

Up to $6,000 to support an undergraduate or graduate student project with outcomes benefiting marine education. Application deadline: April 13, 2009

Walter G. Jones Fisheries Development Award

Funding in the amount of $1,300 to support academically qualified graduate student pursuing research which contributes to fisheries development. Application deadline: April 13, 2009

Cecil and Martha MacGregor Scholarship in Marine Science

Up to five scholarships to cover housing expenses for undergraduate students in residence at the HMSC during summer 2007. Application deadline: May 30, 2009

Mamie Markham Research Awards

Several awards, up to $10,000 each, to support graduate student research in marine science at the HMSC. Application deadline: April 13, 2009

Lylia Brucefield Reynolds Scholarship

Up to $1,000 to support a graduate student in residence at HMSC. Application deadline: April 13, 2009

Anja Robinson Fellowship

Up to $800 to support graduate student research in shellfish aquaculture. Application deadline: April 13, 2009

Bill Wick Marine Fisheries Award

Up to $4,000 to support graduate student research in fisheries ecology, food processing, economics, or marketing. Application deadline: April 13, 2009

For detailed information, including application requirements, for each award, please refer to the HMSC website at http://hmsc.oregonstate.edu/awards.html

Visitor Center accepting applicants for Summer 2009 Internship Program

Summer internships in the HMSC Visitor Center run from June 19 to Sept. 7, 2009. Responsibilities include: 32 hours per week in interpretive duties; primarily Yaquina estuary public tours, auditorium and informal demos, and floor coverage during volunteer shift change or closing; 8 hours per week on student projects; additional student time for completion of project is expected. Closing date for applications is April 3, 2009

REU NEWS

COAS REU intern Kiya Wilson presenting her summer research project at the 2008 AGU meeting in San Francisco.

Best research poster award winner Norma Vasquez and HMSC Academic Program Manager Ichung Cheung at the SACNAS meeting in Salt Lake City.

Caitlin White and Hannah Waters got to tour the Argonne Tandem Linac Accelerator System facility while at the Symposium.

Page 3
Testing the waters for offshore aquaculture

Findings from a 2008 HMSC forum investigating the potential for offshore aquaculture in the Pacific Northwest suggest that shellfish may offer the most promise in helping meet a growing demand for fresh seafood while creating alternative jobs for the state’s battered fishing industry.

OSU Fisheries and Wildlife professor Chris Langdon, who coordinated the public forum last Fall, says the development of a new shellfish industry has fewer social, political and environmental obstacles than other alternatives, and could be complementary to existing and future enterprises.

“Scallops and mussels can grow well in Northwest waters and since there is very little commercial harvest, they wouldn’t create competition with an established industry,” said Langdon, who directs the Molluscan Broodstock Program (MBP) at Hatfield. "In fact, a scallop or mussel fishery could result in a synergistic opportunity for crabbbers or other fishermen with limited seasons. They have the boats, the skill and the manpower to make such an enterprise conceivable.”

Several obstacles have to be overcome before a new industry could be established, says Langdon, including engaging industry and community leaders, developing a culturing system that can survive the rugged Pacific Ocean, adapting effective breeding and growing techniques, creating a viable business model, and evaluating potential environmental impacts.

A three- to four-year demonstration project would be an ideal way to analyze the pros and cons of establishing a new venture.

Oregon’s only major marine aquaculture effort today focuses on oysters, which are grown commercially in a handful of coastal estuaries. OSU established the MBP in 1995 to work with the West Coast oyster industry to improve the commercial success of Pacific oysters through breeding selection.

Langdon says similar aquaculture practices could be applied to rearing sea scallops and mussels, though they would be grown offshore instead of in estuaries. Mussels and scallops usually are grown on long-lines or in lantern-nets in the United States and in many other countries. In New Zealand, for example, the annual farm-gate value of green-lipped mussels cultured in nearshore waters is more than $100 million.

Oregon had a sizeable population of scallops in the 1980s, but a lack of regulation over their management led to an over-harvest from which they have yet to recover. Nevertheless, their one-time success suggests that they can and will grow in the waters off Oregon.

“You should be able to adapt commercial oyster hatcheries to produce the larvae and seed, but offshore grow-out systems that can survive the rough ocean are not presently available in the Pacific Northwest,” Langdon said. “The question is whether you can do all this and compete economically with China, which has a huge shellfish aquaculture industry and cheap labor. We don’t know the answer, which is why we need a demonstration project.

“We would need to know such things as how often long-lines or lantern-nets have to be cleaned to prevent fouling,” he added. “We need to know if sea birds or other creatures would take a predatory interest in cultured shellfish. We can guess at the outcomes, but we won’t know until we try.”

Michael Morrissey, director of OSU’s Seafood Laboratory in Astoria and the Food Innovation Center in Portland, says consumers are willing to pay a premium for fresh, local seafood.

“Chile and Peru, which have similar water temperatures to Oregon, have active scallop industries,” Morrissey said. “Scallops are a high-end seafood item that could be an attractive aquaculture option.”

Langdon helped coordinate the offshore aquaculture forum in the fall because, he says, the timing is right to at least explore the potential of developing a new industry. The world’s population growth is creating unmet demands for seafood and the United States increasingly is importing products because its capture fisheries are at or above sustainable limits.

“The Northwest fishing industry historically has not been supportive of raising marine fish through aquaculture practices,” Langdon said, “but scallops, mussels and other shellfish may create opportunities for their participation without being a threat to their livelihood. The industry will have to decide whether offshore aquaculture represents an unwelcome competitor, or an alternative way to pursue a livelihood.”

Ocean Observatories Initiative moves forward

The vision of a networked array of ocean and seafloor monitoring instruments off the coast of Oregon and Washington providing real-time data to marine scientists moved a step closer to reality with the recent appointment of Tim Cowles, a professor in OSU’s College of Oceanic and Atmospheric Sciences, as program director for the $400 million Ocean Observatories Initiative (OOI).

Cowles will coordinate the activities of the initiative, which seeks to enhance fundamental understanding of the biological, chemical, physical and geological processes of the ocean and address several challenging scientific problems, including the ocean’s role in climate change.

The effort will launch and maintain an array of ocean and seafloor monitoring tools, including cabled moorings, buoys, autonomous underwater vehicles – both propeller-driven and gliders – and a unique seafloor observatory network spanning a tectonic plate off the Pacific Northwest coast.
Ocean Observatories Initiative

“The initiative was designed to install the infrastructure required to support 20-30 years of innovative research,” Cowles said. “Going out on a cruise gives researchers a two- to three-week snapshot of one area. This combined observing system will give us a coordinated, ongoing look at how large regions of the ocean work, providing us more insight into the Earth’s dynamics.

Cowles said recent events along the West Coast, including hypoxia events resulting in marine “dead zones” and increasing harmful algal blooms, illustrate the importance of understanding biological responses to different perturbations in the ocean’s physical processes.

The Ocean Observatories Initiative, known as the OOI, entered formal planning stages in 2000 after more than a decade of discussions and meetings within the oceanographic research community. The National Science Foundation has funded the process and the program now consists of three different “scales” of observatory elements – coastal, regional and global. These components include:

- Coastal moorings and autonomous underwater vehicles off the Oregon coast and the central Atlantic coast;
- A regional scale, seafloor network of instruments and moorings on the Juan de Fuca tectonic plate;
- Global scale, deep-ocean buoys at three high-latitude locations – the North Pacific, the North Atlantic, and the Southern Ocean.

“These elements will be linked into a single integrated network through satellite communications, fiber optic cables and sophisticated software,” Cowles said, “providing data access to scientists, teachers, students and policy makers.”

The program is scheduled to begin its five-year construction phase in 2010, and then have a 25-year operational phase.

Much of the initial focus of the project will be on the ocean and seafloor off the Pacific Northwest coast. The new monitoring efforts at the coastal and regional scales will allow scientists to observe the area in an unprecedented way and use it as an analog for understanding other systems around the world, according to Cowles.

The University of Washington is coordinating the major cable seafloor observatory off the Washington and Oregon coasts, while the Woods Hole Oceanographic Institution and OSU are designing the “Endurance Array,” a series of moorings, gliders and other instrumentation that will feed data into that cable system as well as directly to laboratories on the Oregon State campus and the university’s Hatfield Marine Science Center in Newport.

The global moorings at three high-latitude, deep ocean locations will be installed by Woods Hole and the Scripps Institution of Oceanography. They are designed to detect climate signals through continuous monitoring of ocean conditions.

“We’ll start putting instruments into the ocean in July of 2010,” Cowles said, “and the data should begin to flow within 12 months.”

That data will include ocean temperatures, salinity, dissolved oxygen and carbon dioxide content, chlorophyll levels, wave heights, current directions and velocity, and meteorological measurements, including wind. The instruments also will monitor the ocean’s biological responses. All of the data will be shared, not only with the scientific community, Cowles noted, but “anyone with an Internet connection.”

The Ocean Observatories Initiative is coordinated and managed through the Consortium for Ocean Leadership, an organization of oceanographic research institutions.

Reimers named AGU Fellow

Clare Reimers, an Oregon State University professor of chemical oceanography based at the Hatfield Marine Science Center, has been elected a fellow of the American Geophysical Union.

The international scientific organization focuses on the understanding of the Earth and space, and promotes research, education and outreach in fields including geology, oceanography, atmospheric sciences, hydrology, and seismology.

Acceptance to the AGU as a fellow is restricted to less than one-tenth of one percent of the association’s members.

On the faculty of OSU’s College of Oceanic and Atmospheric Sciences, Reimers’ research has focused on the biogeochemistry of ocean sediments and the development of chemical sensors for quantifying ocean chemical distribution and fluxes. Most recently she received attention for her efforts to develop long-term power sources for ocean sensors that harness energy from marine sediments and phytoplankton.

These power sources are similar to batteries but they are fueled with decaying plankton and catalyzed by bacteria. “The ocean is rich in microorganisms adept at shuttling electrons to fuel cell electrodes,” Reimers said.

Reimers also is leading a research program aimed at developing the capability to assess from ocean observatories how the benthic component of the coastal carbon cycle may vary over time and contribute or respond to human impacts and climate variability. Her studies have been funded by the National Science Foundation, NOAA, the Department of Defense and other sources.

Reimers will be honored at the association’s general assembly May 24-27 in Toronto, Canada.
Tracking the blue whales

That suggests that some migrate there from elsewhere and we would like to know where that is. These are incredibly important finds about blue whales, which we know so little about. As best we know, feeding during the winter is quite unusual for baleen whales.

Their goals were to discover whether this area – which actually is closer to Acapulco, Mexico, than Costa Rica – served as a feeding, breeding and/or calving area, and whether the whales that congregate there come exclusively from the California population.

An adult blue whale can grow to the length of a basketball court and weigh as much as 25 large elephants combined. Its mouth could hold 100 people, though its diet is primarily krill; its heart is the size of a small automobile. Scientists say the blue whale is the largest creature to ever inhabit the Earth – and it is one of the loudest animals in the sea, capable of making sounds equivalent to those of a jet engine, though at frequencies below human hearing.

Yet despite its enormity and vocal strengths, the blue whale remains one of the most mysterious animals in the sea. It is rare, it spends most of its time beneath the water, and its dives are deep. There once were nearly 10,000 blues along the Pacific coastline, but a century of whaling took its toll and that number has been reduced by some 75 percent. Though daunting, that pales in comparison to the Antarctic, where the population is less than 1 percent of what it was a century ago, when 250,000 blue whales populated its waters.

“The technology is improving every year and the tags we have developed at Oregon State have been critical to our success in tracking these animals over great distances and long periods of time,” says Mate. “They have allowed us to describe their seasonal distributions and define their critical habitat.”

The documentary features captivating underwater video of blue whales feeding, diving and interacting, as well as computer-generated graphics that illustrate the whales’ biology, communication and migration. The special also employs the National Geographic “Crittercam,” an integrated video recorder and data logging system deployed by Calambokidas and his associate, Erin Oleson of Scripps, that offers a whale’s-eye view of their life, including rare footage of a blue whale gulping krill.

Another star of the magazine article and film is the R/V Pacific Storm, the retrofitted fishing vessel which has served as the Marine Mammal Institute’s flagship research vessel since 2006. Much of the blue whale tracking, tagging and identification work was conducted from this vessel and the smaller, rigid hull inflatables it carries.

The 96-minute documentary film “Kingdom of the Blue Whale,” narrated by Tom Selleck, will air again on Tuesday, March 17 at 2pm on the National Geographic Channel.

PacificFishTrax

the customer to the fisherman who caught that fish, the boat he was on, the area off the Oregon coast where the fish was caught, the processor, and how the fish was subsequently processed.

The idea for the kiosk first emerged out of the Collaborative Research on Oregon Ocean Salmon (CROOS) project, an Oregon State University Coastal Oregon Marine Experiment Station (COMES) project that originally set out to track salmon using bar codes to determine their river of origin.

“We realized that it wasn’t just scientists who were interested in this information,” said Feldner, who is also a member of the CROOS project. “Those who eat the seafood are also interested in who’s catching their fish and where it comes from.”

Similar traceability processes are already in place and almost mandatory in Europe, requiring detailed tracking for food safety and sustainability issues. But the PacificFishTrax project focuses on the human dimension, putting a human face on where that fish came from and providing a rare connection between consumer and fisherman.

People like the fact that the kiosk connects the fish with a real face behind it,” says Feldner. “They’re fascinated with the ‘who,’ ‘where,’ and ‘how.’”

One of the kiosks was also set up in the Lincoln County Extension Service Office in Newport, just so people could try it out. The response has been great.

“People who try it out are jumping up and down,” says Feldner. “They like the idea and the design. But the big thing is the fishermen and being able to spotlight them and the work they do to put food on peoples’ tables.”

So far three Newport fishermen are featured in the kiosk, Paul Stannard, Tom Nelson, and Jim Conrad, along with fish processor Bob Aue.

According to Feldner, the PacificFishTrax kiosk has enormous potential to not only demonstrate where consumer seafood originates, highlighting the human factor in the process, but also to collect information from the end-user, providing a natural feedback loop.

For instance, brochures on the kiosk point consumers to the PacificFishTrax website where they can obtain additional information or, by filling out a more detailed questionnaire, receive a $2 coupon good at the New Seasons Market for any canned Oregon albacore product, thanks to the Oregon Albacore Commission.

Plans are already underway to use the kiosk this summer with other species and products – salmon, sable fish, ling cod, and halibut.

After their run in Portland, the two demonstration kiosks will ultimately make their way to a variety of locations and meetings throughout Oregon, continuing to educate, inform, and connect consumers, fishermen, and the local processes from which both groups benefit.
Films, presentations, and discussions highlight natural resource issues

Friends of HMSC and Oregon Sea Grant team up with community partners on public education events

On Monday, April 27, the HMSC will host a presentation and discussion on the growing problem of marine debris, a concern among marine biologists and others who have seen the harmful impacts of floating plastics and derelict fishing gear on ocean wildlife.

Among the invited presenters/panelists are OSU Fisheries and Wildlife Professor Selina Heppell, an expert on sea turtles, and Kim Raum-Suryan of the OSU Marine Mammal Institute, who has been documenting entanglement impacts on Steller sea lions. Also presenting are Anna Cummins and Markus Erikson of the Algalita Foundation, who sailed from Long Beach, California to Hawaii on a “junk raft” of 15,000 plastic bottles and other debris to draw attention to the problem.

Co-sponsored by the Oregon Coast Aquarium, Oregon Shores Conservation Coalition, and the Surfrider Foundation, the evening event takes place in the Visitor Center auditorium, starting at 6:30 pm.

The HMSC has also been hosting a monthly Monday night film series on water resource issues, co-sponsored by the Lincoln Soil and Water Conservation District, OSU’s Institute for Water and Watersheds. Two films remain in the series:

- On April 13, we screen Liquid Assets, a 90-minute film exploring the history, engineering, and political and economic challenges of maintaining the nation’s infrastructure for drinking water, wastewater, and stormwater.

- On May 11, we screen Celilo Falls and the Remaking of the Columbia River, a 29-minute documentary by Sea Grant producer Joe Cone. Through rare historic films and photographs, the film tells of the life at Celilo as it once was, and the cultural, social, and political forces that brought about its end, signaling a new era in the relationship between people and nature.

Both films begin at 6 pm and will be followed by discussion. For more information about these events, please call 541-867-0234.

HMSC participates in National Teach-in on climate change

Over 150 students from eight high schools in Lincoln, Benton and Linn counties filled the Hennings Auditorium on February 6th, gathering to hear about both scientific and policy aspects of climate change. Sponsored by the HMSC in collaboration with Lincoln County School District, the “Oregon Climate Dialogue” event was organized to provide a forum for young people to ask questions and voice their opinions about projected increases in temperature, storm intensities, sea level rise, and massive ecosystem scale changes that scientists predict will be the result of global warming.

The students heard presentations by former Oregon Secretary of State Bill Bradbury (now serving on Oregon’s Global Warming Commission) and NOAA Fisheries biologist Bill Peterson about regional impacts of climate change on both land and in the ocean. The speakers were later joined by Jessica Hamilton, Natural Resources Policy Advisor to Governor Kulongoski, on a panel to answer questions asked by student representatives from each school and by other audience members.

The 2-hour event was recorded by Toledo High School’s video production class, under the direction of teacher Peter Vince, for broadcast on local cable television (Channel 4 on Charter), where it is still being aired. The HMSC wishes to thank Ruth McDonald, Lincoln County School District Community Resources Liaison, and Jack Nickerson, Sustainability Coordinator for the Linn-Benton-Lincoln Educational Services District for their partnership support of this event.

Portland Audubon Society visits HMSC on an “albatross adventure”

A group from the Portland Chapter of the Audubon Society visited the Hatfield Marine Science Center during a special weekend field trip in October, venturing offshore with Assistant Research Professor Rob Suryan for a rare pelagic bird-watching opportunity.

After a Friday afternoon tour and overview of research programs at HMSC, the visitors enjoyed a dinner presentation by Suryan, who led them on a virtual tour of albatross colonies and an “albatross-eye view” of their ocean wanderings from his satellite telemetry studies throughout the North Pacific.

With 19 of the world’s 22 albatross species classified as threatened, public education about the bird populations and the challenges they face is important, says Suryan. He has been working with Marine Public Education Specialist Bill Hanshmaker on a new exhibit at the HMSC Visitor Center to highlight some facts about the long-lived
pelagic bird-watching trip
(continued from previous page)

birds, such as the mortality risk presented by certain commercial fishing operations and from ingesting surprising amounts of plastic while foraging at sea.

Setting out before sunrise on Saturday on a chartered boat for the pelagic bird-watching part of the trip, the group was forced to turn back to port due to unfavorable weather conditions. Conditions improved on Sunday, enabling them to reach an area 15 miles offshore where dozens of seabird species including the albatrosses could be seen up close.

Dr. Suryan offered species identification help and more information about reproduction and feeding behaviors. The experience was a real treat for the visitors, especially those in training for their master birder certification, said trip organizer Steve Engel, Adult Education Coordinator for Portland Audubon Society.

Suryan’s research and conservation work on endangered albatrosses, which has garnered international news media coverage, is featured at an upcoming event at the HMSC on March 13-14 (see sidebar).

Dr. Rob Suryan photographs an Abatross chick at a breeding colony on Torishima Island, Japan.