

# Seawords

February, 2002 • Volume XVI • Number 2



Among its many activities at UH, MOP is also a focal point for various research activities. Here are a list of some that are currently being done. We will be covering some of these in greater detail in future issues of *Seawords*. For any questions or concerns, please contact Dr. Sherwood Maynard at 956-8433.

#### **Harbormaster Survey**

A \$60,000 grant was received from the Hawaii Division of Aquatic Resources (DLNR) to canvas harbormasters and boat captains to determine usage patterns in waters of the Hawaiian Islands Humpback Whale National Marine Sanctuary.

#### **Naval Shipwreck and Aircraft Wrecksite Management Plan for Hawai'i**

A \$40,000 grant from the U.S. Naval Historical Center was received to use archival methods to update an inventory of U.S. naval shipwrecks and aircraft wrecksites in Hawaiian waters. Based on this inventory a management plan will be developed for appropriate preservation and conservation actions.

#### **Hawaiian Humpback Whale Research Bibliography**

An award of \$40,000 was received from the Hawai'i Division of Aquatic Resources to create a computerized, annotated bibliography of scientific research publications related to humpback whale biology and conservation in Hawai'i.

#### **Whale Education Interns**

\$10,000 from the Hawaiian Islands Humpback Whale National Marine Sanctuary (NOAA) to support educational and outreach programs including sanctuary ocean account projects using interns from the University of Hawai'i Marine Option Program.

#### **Native Fishery Observer Training**

\$52,000 to help prepare natives of Western Pacific region to enter and graduate from the standard Hawai'i Longline Observer Training Program offered by the National Marine Fisheries Program Honolulu Laboratory.

#### **Biotechnology Internship Program**

MOP also received \$10,000 from the Hawaii Department of Labor and Industrial Relations to place students into local biotechnology firms and prepare them for relevant employment by adding industry-based practical experience to their degree preparation.

#### **Sea Turtle Stranding Project**

\$181,000 from the National Marine Fisheries Service to conduct a stranding and salvage activity that responds to, and when necessary, salvages dead, injured, or diseased marine turtles stranded on the island of Oahu.



## Celebrate 30 Years of MOP

**Saturday, March 9th, 2002**

**6:00 to 9:00 p.m.**

**The Waikiki Aquarium**

Please join MOP students, staff, alumni, friends, and supporters in a night of celebration and reunion.

The Waikiki Aquarium is located along the Diamond Head side of Waikiki Beach at 2777 Kalakaua Avenue, Honolulu. Parking is available on the street near the Aquarium and at Kapiolani Park.

The Aquarium exhibits will be open for evening viewing. The event will also feature guest speakers, pupus, Hawaiian music, and door prizes. No alcohol will be permitted at the function.

Your voluntary donation (suggested \$25 per person or \$10 for students) will help cover the costs of the events.

Any additional contributions we receive are tax deductible and will benefit ongoing academic programs of the Marine Option Program systemwide. Donations should be made payable to "The UH Foundation" and mailed to:

**The Marine Option Program, University of Hawai'i**

**Attention: MOP 30th Year Celebration**

**2525 Correa Road, HIG 214**

**Honolulu, HI, 96822**

Note: because of restrictions in our contract with the Aquarium, no funds or payments can be taken in during the event. For more information, contact the Mānoa MOP office at (808) 956-8433; e-mail <mop@hawaii.edu>; or MOP's website at <<http://www.hawaii.edu/mop/>>

Mahalo

Jeff Kuwabara (Mānoa MOP Alum, 1995)

**Seawords**  
**Volume XVI, Number 2, February, 2002**

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Seawords is a monthly newsletter of the Marine Option Program at the University of Hawai'i. Opinions expressed herein are not necessarily those of the Marine Option Program or of the University of Hawai'i.

## UH Mānoa MOP Events

- |                     |   |
|---------------------|---|
| February 13th       | Introduction to QUEST. 5:00 p.m.  |
| February 15th       | QUEST application is due. Materials for QUEST can be found at < <a href="http://www.kmec.uhh.hawaii.edu/quest.htm">http://www.kmec.uhh.hawaii.edu/quest.htm</a> > |
| February 16th       | Whale Watch fieldtrip on the <i>Navatek</i> . 11:00 a.m. to 2:00 p.m.   |
| February 18th       | Presidents' Day (Holiday).  |
| March 2nd or 16th   | A tour of Oahu aquaculture farms by the Aquaculture Development Program. Date will finalized soon.  |
| March 8th           | Abstract Deadline for MOP Symposium and for the Ng Scholarship.   |
| March 9th           | MOP Celebration. For 30 Years! Waikiki Aquarium. For more information, contact Jeff Kuwabara at < <a href="mailto:kuwabara@hawaii.edu">kuwabara@hawaii.edu</a> >. |
| March 25 to 29th    | Spring Recess.  |
| March 26th          | Prince Jonah Kuhio Kalaniana'ole Day (Holiday).   |
| March 29th          | Good Friday (Holiday).  |
| April 13th and 14th | MOP Student Symposium.  |
| April 19th and 20th | SOEST Open House.   |

## Windward CC MOP EVENTS

### Tuesday, February 12th, 2002

Video on Underwater Research in Big Island  
12:30-1:30 p.m. Imiloa 111

### Wednesday, February 13th, 2002

Talk on "Careers in Underwater Research"  
by Dr. Paul Haberstroh of UH Hilo  
12:40-1:20 p.m. Imiloa 111

### Wednesday, March 6th, 2002

Honouliuli Water Recycling Plant, 2:00-3:30 p.m.

### Thursday, March 21st, 2002

Hyperbaric Facility (Kuakini Hospital), 2:15-3:30 p.m.

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web: <<http://www2.hawaii.edu/mop/>>

**UH Hilo** ..... Telephone: 974-7544  
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web: <<http://www.uhhmop.hawaii.edu/>>

**Leeward CC** ..... Telephone: 455-0286  
e-mail: <[fstanton@hawaii.edu](mailto:fstanton@hawaii.edu)>

**Kauai CC** ..... Telephone: 245-8251  
e-mail: <[bushnell@hawaii.edu](mailto:bushnell@hawaii.edu)>

**Honolulu CC** ..... Telephone: 847-9824  
e-mail: <[gopalk@hcc.hawaii.edu](mailto:gopalk@hcc.hawaii.edu)>

**UH West Oahu** ..... Telephone: 454-4715  
e-mail: <[hodgson@hawaii.edu](mailto:hodgson@hawaii.edu)>

**Windward CC** ..... Telephone: 235-7389  
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web: <<http://www.wcc.hawaii.edu/MOP/default.htm>>

**Maui CC** ..... Telephone: 984-3203  
e-mail: <[donnabro@hawaii.edu](mailto:donnabro@hawaii.edu)>  
web: <<http://www.coralreefs.hawaii.edu/mccmop/mop.html>>

## Anna Toy Ng Memorial Scholarship

Established in 1987 by MOP alumna Elizabeth Ng to honor her month and to recognize exemplary MOP students for their marine scholarship, ocean stewardship, and participation and personal investment in MOP. Nominees must be MOP students in good standing. Nominators may be MOP students, staff, alumni or project mentors. Deadline for receipt of nomination is March 15th, 2002. Awardee announced at annual MOP Student Skill Project Symposium, April 13th, 2002, to be held at UH Mānoa. Forms are available from MOP Coordinators. Help honor and encourage tomorrow's marine community leaders.

## QUEST 2002

QUEST, which stands for "Quantitative Underwater Ecological Surveying Techniques", is an intense summer course held every year at UH Hilo, where students acquire a wide range of coral reef surveying and analytical skills. Application deadline is February 15th. For more information, contact your MOP office or visit: <<http://www.kmec.uhh.hawaii.edu/quest.htm>>. QUEST is open to non-MOP students on a space availability basis. The course takes place during the last two weeks of May.



**For more information on MOP events contact your local MOP office. Pre-registration is required for all field trips.**

## UPCOMING EVENTS AROUND HAWAI'I

### Kaho'olawe Marine Volunteer Opportunities

The KIRC Ocean Program has many ways for folks to get involved and volunteer to support the Kaho'olawe marine reserve apart from just crewing aboard *Hakilo*! On Saturday, February 9th, there will be a reserve patrol and ulua tagging with scientists from NOAA Southeast Fisheries Science Center. On Monday, February 22nd, there will be a moorings survey. If you are interested in helping, please contact Samantha Whitcraft, Ocean Program Manager, Kaho'olawe Island Reserve Commission at 811 Kolu St., #201, Wailuku HI 96793; phone: 243-5889. The commission's web page is: <<http://www.state.hi.us/kirc>>.

Capt. Lindsey is also looking for people with solid boating experience to crew aboard *Hakilo* on Wednesday, February 27th. It's an all day mission (starting at 7:00 am) that includes logistics support for a limu survey at Hakioawa in the morning and a reserve patrol in the afternoon. Please e-mail <[clindsey@kirc.state.hi.us](mailto:clindsey@kirc.state.hi.us)> if interested.

### BioResearch Product Faire 2002 Thursday, February 21, 10:00 am to 3pm Campus Center Ballroom, UH Mānoa

The exposition, which is travelling across the country, offers you an excellent opportunity to see the newest in biotechnology products. For more information, visit the web site at <<http://www.biotradeshow.com>>.

### Kolea Migration Mysteries Hawai'i Audubon Lecture

February 18, 7:00 p.m. to 9:00 p.m.  
The Kolea (Pacific Golden Plover, *Pluvialis fulva*) is Hawai'i's most visible native animal, yet many mysteries surround this familiar bird. Chaminade University, Henry Hall, Room 109. For more information, call Linda at 528-1432.

### The Pacific Symposium for Science and Sustainability February 8th to 10th, Honolulu, HI

The Pacific Symposium for Science and Sustainability provides a unique educational experience by bringing high-school students from Hawai'i and other Pacific Islands together to explore their common interest in the sciences. The symposium includes field trips and social events along with the presentation of papers. Expenses for the entire weekend will be paid for those Hawai'i students and teachers selected to participate in the Symposium. For more information, visit the Hawai'i Academy of Science web page at <<http://www.hawaii.edu/acadsoci>>.

### Captain's License Course

The Maritime License Center is offering Coast Guard approved captain's license courses April 15th to May 17th, July 8th to August 9th, and September 30th to November 1st. For more information, call 836-0352.

### Waikiki Aquarium Educational Classes & Activities

Preregistration is required for all activities. Please call Mark Heckman or Carol Hopper in the Education Department for registration materials. Phone: 923-9741, Monday to Friday, 8:00 a.m.- 5:00 p.m. For more information on these events, visit the Waikiki Aquarium's web site at: <<http://www.waiaquarium.org>>.



#### Exploring the Reef at Night

February 9th, Saturday, 6:30-9:00 p.m.  
February 23rd, Saturday, 6:00-8:30 p.m.  
February 24th, Sunday, 6:00-8:30 p.m.

Experience the reef at night with Aquarium naturalists, getting wet up to your knees as you explore from the shore. Coral reef ecology, reef conservation and shoreline safety are covered. Minimum age 5 years, youngsters must be accompanied by an adult. Registration: \$12/adult, \$10/child (\$10/8 members).

#### Ka'ena Point Coastal Hike

February 24, Sunday, 8:00 a.m.-3:00 p.m.

Naturalists Ray Tabata of UH Sea Grant and Dr. Carol Hopper of the Waikiki Aquarium guide this 5-mile roundtrip hike at the Ka'ena Point Natural Area Reserve. This rugged coastline features fascinating geology, unique native coastal plants, and more. For adults, 16 years and older. Participants provide own transportation. Registration: \$10/person (\$8 members). Preregistration is required and class size is limited.

#### Educator Workshop: Marine Alien Species in Hawai'i

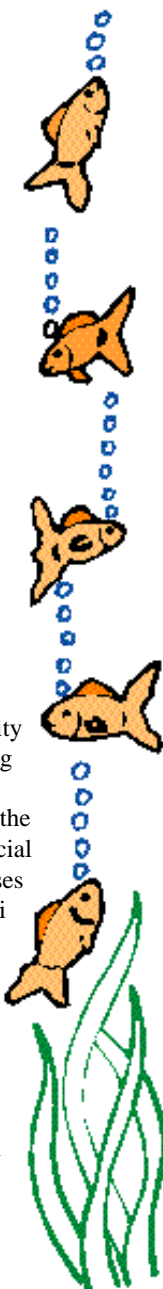
February 9, Saturday, 8:00 a.m.-1:00 p.m.

Experts from Hawai'i's scientific community bring local teachers up-to-date on the biology, impacts and issues surrounding marine alien species on Hawaiian reef and shores. Aquarium educators share materials and ideas for incorporating the topic into classroom lesson plans in science and other subjects. Registration: \$10/person. Preregistration is required and class size is limited.

### The Great Whale Count Volunteers Needed (on Maui)

February 23rd, 2002

Volunteers Invited to Participate in The Great Whale Count. The Great Whale Count is part of The Great Maui Whale Festival, a series of whale-related events taking place throughout the month of February. Other events include a 5K/10K Run for the Whales on Saturday, February 9, a Parade of Whales on Saturday, February 16, a Keiki (Children's) Whale-a-thon on Saturday, February 16 and Whale Day, a free all-day family celebration at Kalama Park in Kihei on Saturday, February 16. For more information about these events and a free schedule, please call the Pacific Whale Foundation at (808) 249-8811 or 1-800-942-5311 or visit <<http://www.pacificwhale.org>>.



# Opportunities for Summer, 2002

## Conservation Internships

Eighteen years or older volunteers for short and long term positions through SCA in exchange for training and experience which furthers their educational, career, or personal goals. Serve in some of the wild and wonderful national parks, forests, refuges, and other natural and cultural resource areas across the country. Gain experience by working alongside of conservation professionals in the field or office. Internship runs from May 1st to July 31st. The application deadline is March 1st, 2002. For more information or to apply, contact SCA Conservation Internships, PO Box 689 River Rd, Charleston, NH 03603-0550; Phone: (603) 543-1700; e-mail: [internships@sca-inc.org](mailto:internships@sca-inc.org). The organization's website is <http://www.sca-inc.org>.

At the Mānoa campus of the University of Hawai'i, information can be obtained from UH Career Services, Student Services Ctr 212F (check their file cabinet, Position #E093). Booklets can also be viewed at the Environmental Center, Krauss Annex 19.

## Digital Media Initiative

Pacific Islanders in Communications (PIC) announces its Digital Media Initiative. With special funding from the Ford Foundation, PIC seeks to cultivate a cadre of Pacific Island producers and digital media production professionals who can impact cultural and environmental preservation efforts in the Pacific. PIC will offer scholarships for a five-week on-site training to be held from July 22 to August 23, 2002 on the island of Maui, Hawai'i at Maui Community College. Applications are due March 1st, 2002. For more information, contact RaeDeen Karasuda, Digital Media Project Coordinator, at (808) 429-7166 or (808) 591-0059 or e-mail [rbkarasuda@hotmail.com](mailto:rbkarasuda@hotmail.com).

## Woods Hole, Massachusetts Sea Education Association

June 30 - August 2, 2002

Research at SEA is an Oceanographic Research Experience for Middle and High School Teachers that affords you the opportunity to explore the oceanic environment while learning about the scientific research process first-hand. For more information, visit <http://www.sea.edu/SEA2000/Admission2000/Teachers.htm>.

Woods Hole also offers an 8-week course in the summer. Students address a wide range of oceanographic research topics at sea, based upon their own interests. Information can be found at <http://www.sea.edu/sea2000/admission2000/academiccatalog.htm>.

## Duke University Integrated Marine Conservation Program

The Duke University Marine Laboratory is offering an unparalleled educational opportunity from July 8 to August 9, 2002. Duke's Integrated Marine Conservation Program teaches the principles necessary for the conservation and preservation of the coastal and oceanic environment. The focus is on interdisciplinary problem solving — using natural and social science theory to resolve real world environmental problems. Students will leave the class with an appreciation of the policy process, as well as with a grounding in the fundamentals of marine conservation. Applications are due April 1st. For further information, visit <http://www.env.duke.edu/marinelab/mlterm2.html>; phone (252)504-7502; e-mail: [ml\\_admissions@env.duke.edu](mailto:ml_admissions@env.duke.edu).

## Summer Opportunity for Science Teachers

NSTA has created a program to train a cadre of teachers to become WebWatchers. This cadre will research and select web sites which can be integrated into science curricula, and will share their research with other teachers through the NSTA web site.

The workshops this summer are open to all fulltime K-6 teachers, who teach science as part of their curriculum, and fulltime grades 7-12 science teachers. Each workshop will last 11 days, and participants will receive a stipend and per diem. Travel and lodging will be covered as well. The grades K-6 workshop will be held June 24 to July 5, 2002. The grades 7-12 workshop will be held July 15 to July 26, 2002. The application is only available on-line at <http://www.scilinks.org/nsfinstitute/application>. For more information, visit the NSTA website: at <http://www.nsta.org> and type in "webwatchers" in the searchbox. The deadline to apply is March 1, 2002. If you have any questions, e-mail Mark Davis at [mdavis@nsta.org](mailto:mdavis@nsta.org), (703) 312-9222.

## Hawai'i Youth Conservation Corps

The Youth Conservation Corps (YCC) is a hands-on summer learning experience aimed at educating Hawai'i's youth on the many conservation issues that threaten Hawai'i's unique environment. Students are mentored by and work alongside some of Hawaii's premiere conservation leaders while building friendships with other students who desire to protect and restore our paradise. Application for Team Leaders is February 25th. General applications are due March 18th. For more information, visit <http://www.hawaiiycc.com>.

## Friends of He'eia Internships

The Friends of He'eia State Park, a Windward nonprofit environmental education organization are looking for undergraduate students for Summer 2002 as interns:

### Environmental Education Internships:

Duties include teaching and supervising classes in various disciplines such as marine biology, ethnobotany, geology, and environmental preservation. Stipends (\$500 per semester) and/or possible independent study credit hours are available. Hours will vary. Preference given to sophomore or above standing with natural science background or similar experience. Enjoyment of outdoors and children a must.

### Water Quality Monitoring Internships:

Duties include collecting water samples from He'eia Stream (monthly as well as other times needed), field and laboratory analysis of specified parameters; GIS mapping of the stream; etc. Interns also provide community education through community restoration days and presentations about the project. Interns work with project coordinator and advising professor as well as Friends program staff. Stipends available as well as possible independent study credit. Variable hours (dependent on monitoring and laboratory schedule); approximately a commitment of 12 + hours per week.

Training is provided, but interns need basic qualifications in the following: Minimum of one semester of chemistry + laboratory; and basic knowledge of scientific & laboratory procedures. For more information, call 247-3156.

## American Fisheries Society

### Hutton Junior Fisheries Biology Program

The Hutton Junior Fisheries Biology Program is designed primarily to develop interest in the fisheries profession among under-represented minorities and women and provides high school students with a professional mentor and a summer-long, hands-on experience in fisheries science. A scholarship of up to \$3,000 is provided to students accepted into the program. The deadline for mentor and student applications is March 1, 2002. More information and application materials are available on the AFS website at: <<http://www.fisheries.org/Hutton.shtml>>. If you have any questions about the Hutton Program, contact Jan Lubeck at (301) 897-8616, ext. 206 or by e-mail to <[jlubeck@fisheries.org](mailto:jlubeck@fisheries.org)>. Note that AFS membership is not required to apply as mentor.

## Carribbean Marine Research Center Diving Operations Internships

The Center, located on Lee Stocking Island, Bahamas, is looking for an undergraduate or recently graduated marine biology (or related) student with an interest in diving operations. For more information, contact Jeremy Heywood at e-mail: <[jheywood@cmrc.org](mailto:jheywood@cmrc.org)>.

# Letters from Joe in the Antarctic

**Note: Joe Tegeder, UH Hilo MOP and MAH alumnus, has spent the last few months on a scientific trip to the Antarctic. Joe is now pursuing a Master's Degree at the Stennis Space Center, University of Southern Mississippi. Joe's personal website is at: <<http://ocean.otr.usm.edu/~jtegeder>>. His thesis is entitled "Interannual variability of nutrients and the seasonal production of phytoplankton in the Southern Ross Sea, Antarctica."**

**Here are some selections from his e-mails to MOP.**

December 22nd, 2001

Hello all,

My instruments are deployed. Yeah. I went out in the small boat again to help with the deployment of the mooring from there. To do that, I had to get dressed up in this suit....Mustang Suit. I look like I'm an X-wing Fighter going to fight the darkside...

Anyway, we have one more station to do for water samples and then we will begin breaking the ice channel into McMurdo. I am looking forward to that.

Take care. Joe.

*continued on page 7*



Me and Mt. Erebus!

# Sunken Aviator Rescue Boat in Keehi Lagoon

by Lauren Collins

On November 8th, 2001, Hans Van Tilburg and Megan Moews, dove on the *Bali Hai*, a 63-foot military AVR, or Aviator Rescue Boat. This ship has been resting at the bottom of Keehi Lagoon since sinking at its moorings on February 28th, 2001. Hans was asked by the ship's owner, David Ford, to do a dive on the boat to investigate its current condition.

Due to an unresolved conflict about what should be done with the boat, it is still resting at the bottom of the lagoon. The conflict has its roots in the state of Hawai'i's Division of Boating and Ocean Recreation Director's desire to see the ship impounded as a useless old wooden vessel, and the owner's desire to see the ship raised and restored for its historic value.

The state has ordered that the ship be seized and impounded because the owner owes the state roughly \$500 in fees and fines at Keehi Lagoon Harbor. Among these charges is the one for \$11 a day for having a boat "submerged without a permit." The decision whether to raise the ship or not is still pending.

Dennis Smith, a marine surveyor hired by the state, has said in an internal report to the state government, that the AVR had no historic value and could not be salvaged. His testimony is a major point in the state's arguments for impounding the ship. However Smith's report also stated that the report could not be used in a legal proceeding.

In terms of the National Register of Historic Places,

the *Bali Hai* is significant because, as the regulation reads, the ship is "associated with events that have made a significant contribution to the broad patterns of our history." The Navy, Army, and Air Force used boats such as the *Bali Hai* during World War II. The AVRs, or crash boats, picked up survivors from aircraft crashes as well as stranded sailors. The *Bali Hai* itself also appears to have served in combat during World War II, judging by repaired bullet holes.

Hans suggested that the ship is also historically important because it embodies "the distinctive characteristics of a type, period, or method of construction." In particular, the ship is an example of the work of naval architect Jean Emil Buhler and of the Miami Shipbuilding Corporation.

At the time Ford purchased the boat, he had no idea that it was once a military vessel, or that someday it

would end up causing this kind of a controversy. This ship is the only fully intact example of this design. In addition, not only is the *Bali Hai* an AVR, of which only 520 boats were built, but it also utilizes a V-drive, of which only 81 were built. According to the Miami Shipbuilding Corporation, the boat is the last of its kind in the United States. David Ford believes that the boat is the last one of its kind left in the world. The majority of the ships were destroyed or disposed of after the war. The Navy did not keep any of them.

Upon completing the dive, Hans said that he found the marine life in the vessel to be at a minimum. There were some worm or crab holes in the sediment, but not much was growing on the vessel interior itself. Overall, he found that the site "seems fairly stable, slowly reaching equilibrium with the local environment." Most of the damage



The *Bali Hai* soon after sinking at its moorings in Keehi Lagoon. The boat has since sunk completely and is currently "submerged without a permit."

to the ship was found to be located in the forward cabin area and in the engine area. Hans recommended taking out the engines before lifting the vessel.

Ford believes it would be possible to salvage the *Bali Hai* without further damage. He noted how fragile artifacts such as World War II aircraft and vehicles are being salvaged all over the world on a regular basis from depths of up to 200 feet.

Many maritime museums across the country have expressed interest in the craft, especially the Defenders of America Naval Museum, located in Kemah, Texas. Transferring the title of the ship isn't as easy as one would expect. The fact that the boat is currently impounded complicates the salvaging of the vessel. The state historic preservation division is normally in charge of the state owned historic resources. It is unable to act, however, since they and the Hawai'i Division of Boating and Ocean Recreation, are under the Department of Land and Natural Resources, and it was that department's decision to seize the boat and dispose of it.

Across the country there are approximately 70 historic naval ships and boats that have been restored and are memorials to the crews that once manned them. None of these vessels was designated as a historic national landmark or established as a museum as soon as it was found. They require extensive work before the Department of Interior will bestow the National Historic Landmark designation.

Most historic naval vessels have to replace, repair and restore large portions. There are generally two types of museum displays. One is the replica, which is where the components are recreated in whole or the original parts are less than 40% of the vessel. The other type is a restored vessel. That is where 40% or greater of the display is original (or contains components from another identical unit of the same type that is available from another source).

There are two basic types of 'restored' artifacts. A unit that is not capable of operating is considered to be a static display. A fully restored vessel is completely operational, as was the original vessel. According to Dennis Murphy of the Society of Naval Architects and Marine Engineers he feels that the *Bali Hai* is "well within the 40% category and would make a good candidate for a full restoration project." Now, however, it waits at the bottom of the lagoon for decisions to be made.

*The Star-Bulletin* ran a story on the *Bali Hai* on May 23, 2001, which can be found at <http://starbulletin.com/2001/05/23/news/story6.html>.



December 24, 2001

Hello everyone.

I just wanted to wish you all a Merry Christmas and Happy Holidays. It was a hot day today. We also hit the ice today for the break in. It is amazing. Penguins are everywhere. This picture was taken on the Helicopter deck today during a ship wide photo-op! It was really funny.

There are mountains and ice all around us. I only hope that Santa can find me down here. We have stockings (or socks) on the railings outside of our rooms and we just finished decorating cookies. Yes, I did help and I even made sure that they had the good icing (you know the kind...the stuff that is really bad for you). Tomorrow they are planning on having a ship-wide gift exchange, Turkey Dinner and the movie "A Christmas Story."

Well, that is it from here. I am still hoping to see Orcas any day now.

Merry Christmas. Joe.

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Here is a picture of Kevin Mahoney (UH Hilo MOP alum from 1995) and me on top of Observation Hill, a 750-foot cinder cone overlooking McMurdo Station.



# UH Mānoa MOP Orientation, Spring 2002

by Lauren Collins

On Wednesday, January 16th, a number of new as well as old faces gathered in HIG 216 at the Manoa campus for a brief orientation to MOP, for a list of spring activities, and for a lot of delicious snacks.

Sherwood Maynard, MOP director at UH Mānoa, began by explaining what skills and experiences students will leave the Marine Option Program with.

The MOP certificate is analogous to a minor. Because UH Mānoa has no undergraduate degrees in the ocean sciences, the MOP certificate is the next best option. It's also a great program for anyone who is interested in learning more about the ocean, whether they are primarily interested in the physical sciences, the social sciences, or the humanities.

Over the last thirty years, MOPers have come from a wide range of backgrounds and majors. Students take at least 16 credits in ocean-related classes, and carry out an internship or project in an area of their interest.

The MOP certificate demonstrates a few things, one of the most important being that the student who receives it was able to take classroom and lab skills and apply them to a real world situation. The certificate shows that the student had experience with the ocean, and had enough initiative and interest to acquire some real hands-on experience.

The projects and internships that students chose to undertake are as diverse as the students themselves. A quick browse through the past issues of Seawords will show students working on limu, coral reefs, pollution, sunken ships, whales, and deep-sea currents.

There are many job opportunities that come through the MOP office and these are compiled on a clipboard that can be found in HIG 215. Students are not just limited to those many jobs either. They can think up their own projects and get the added experience of writing a proposal to make clear their idea.

The Marine Option Program offers a variety of other assistance to students as well. The meeting room, HIG 215, is also known as the MOP study center. Here, there are places to study and relax, three computers that students are free to use, storage cubicles and mailboxes that are available to students.

There are all kinds of magazines and periodicals that MOP subscribes to. The most recent can be found in a black display carousel near the entrance. If any earlier issues are desired, they can be found just a few doors down in HIG 213, also known as the MOP library, which also contains many books that can help when doing research.

A variety of fieldtrips and workshops will also be held throughout the year that allow students to investigate and learn. Any suggestions and input are highly welcomed. MOP fieldtrips will visit Hanauma Bay, an aquaculture farm, a whale watch trip, and a circumnavigation of the Ala Wai, our dear and exceptionally polluted canal.

In addition to these field trips, MOP also sponsors various educational opportunities. A scuba diving certification course is also being offered through MOP as well as marine organism identification classes that will be enormously helpful to prospective QUEST candidates. (QUEST, or the Quantitative Underwater Ecological Surveying Techniques course, is offered through UH Hilo in May).

Even if students missed the orientation meeting, it is still possible to join MOP at any time. If you're are interested, just come to HIG 215 and fill out an application. Up to 6 credits are accepted from a non-UH school that can be applied to the certificate. Although most MOP students are juniors and seniors, freshman are very welcome, so any one with a love for the ocean that wants to take it to the next level should definitely at least stop by and find out more.



Participants at the Spring 2002 UH Mānoa MOP orientation meeting discuss what they are hoping to get out of become a MOP student. Jessica Brayton, the new UH Mānoa MOP Student Coordinator, is second from the right.



# Two UH Mānoa Science Fellowships

## Harold T. Stearns Fellowship

Undergraduate and graduate students in the Geology and Geophysics Department may apply yearly for Harold T. Stearns Fellowship funds to support research in fields that Dr. Stearns was active in researching

The deadline to apply for the fellowship is April 1, 2002. Application forms are available from the SOEST Student Services Office, POST 701C. Applicants are required to describe the research, its methodology and significance, and include a proposed budget. Requests for up to \$1,000 will be considered. Applicants must also obtain a letter of support from an advisor or other faculty member and attach it to the application form. (The faculty member will monitor the research.) Submit the application and letter of support to Leona Anthony, POST 701C (mailbox in POST 722).

Recipients of the Stearns Fellowship are required to present, within one year, an oral summary of their results at a regularly scheduled meeting of the Geology Club, or other public forum. For more information please contact Paul Wessel at phone: 956-4778 or e-mail: <wessel@soest.hawaii.edu>.

## William T. Coulbourn Fellowship in Marine Geology

The William T. Coulbourn Fellowship in Marine Geology is offered yearly to deserving undergraduate or graduate students in the Department of Geology and Geophysics. The purpose of this award is to support student research in sedimentary marine geology. Both undergraduates and graduates may apply. Up to \$1,000 of these funds are available per year. The deadline to apply for the fellowship is April 1, 2002. Application forms are available from the SOEST Student Services Office, POST 701C.

Applicants are required to describe the research, its methodology and significance, and include a proposed budget. Applicants must also obtain a brief note of support from an advisor or other faculty member and attach it to the application form. (The faculty member will monitor the research.) Submit the application and letter of support to Leona Anthony, POST 701C (mailbox in POST 722). Recipients of the Coulbourn Fellowship are required to present, within one year, an oral summary of their results at a regularly scheduled meeting of the Geology Club, or other public forum. For more information please contact Paul Wessel at phone: 956-4778 or e-mail: <wessel@soest.hawaii.edu>.

January 6, 2002

Things are going well with my thesis. We successfully deployed two *in situ* moorings in the Ross Sea Polyna, and we will return in a month to recover the moorings.

I am confident that everything is going to work out great. On New Years Eve we had ice liberty from the ship we were on, the USCGC *Polar Star*.

Best wishes, Joe.



The U.S. Coast Guard cutter *Polar Star*, primary home for the research team while they work in the Antarctic.

February 1, 2002

Hello everyone,

I wanted to let you all know that I am back on board the *Polar Star* now. We will spend the next five days retrieving our moorings and sampling stations.

After that, my advisor and everyone else will go back to McMurdo Sound. I'll be staying on board to help with another project that will sample stations between here and Valparaiso Chile. That project is called SOFeX (Southern Ocean Iron Enrichment Experiment). Basically, scientists from several universities have added a lot of Iron into the water in the Southern Ocean to see how it effects production.

The boat that I am on will be the last ship to go along the enriched area to see the results.

Take care,  
Joe

More information on McMurdo Sound can be found at: <<http://scilib.ucsd.edu/sio/nsf/fguide>>.



## EMPLOYMENT

### Student Assistant at Kewalo Basin

Chad Yoshinaga is seeking a student assistant to work up to 20 hrs/week. Most of the work will be at Kewalo Research Facility. The pay is around \$7/hr. The job is mainly assisting with preparing field equipment and packing supplies for our Monk Seal field camps. The job is currently posted on the UH job listing. For more information, contact Chad at e-mail: <Chad.Yoshinaga@noaa.gov>; office phone: (808) 983-5717; cell phone (808) 222-1072.

### Assistant/Associate Professor Coastal Ecosystem Management

The University of Rhode Island invites applications for a nine-month, tenure-track Assistant Professor position in Coastal Ecosystem Management in the Department of Marine Affairs starting in the summer 2002. The department's webpage is <<http://www.uri.edu/cels/maf>>. The job description can be found at: <[http://www.uri.edu/human\\_resources/191224.htm](http://www.uri.edu/human_resources/191224.htm)>. Application is due March 4th, 2002.

### Geo InSight International, Inc Administrative Assistant

Geo InSight International, Inc. is accepting resumes for a full-time Administrative Assistant/Sales Coordinator for its Honolulu office. The successful applicant will be responsible for day-to-day office activities and administrative support to lead sales and technical staff. For more information, or to apply, contact Karyn Nolan, GIS/GPS Specialist, 2454 S. Beretania St., Suite 102, Honolulu, HI, 96826. Phone: (808) 941-2494; e-mail: <[knolan@geoinsight.com](mailto:knolan@geoinsight.com)>. Geo InSight's website is at <<http://www.geoinsight.com>>.

### Department of Health Student Intern

The Environmental Planning Office of Hawaii DOH is looking for a student intern to help with stream bioassessments throughout the State. If interested, contact Katina Henderson at phone: 587-4337; e-mail <[khenderson@eha.health.state.hi.us](mailto:khenderson@eha.health.state.hi.us)>.

### Moanalua Gardens Foundation Education Specialist

Applicant should have strong interest/background in environment of Hawai'i and native culture; enjoys working with teachers & children (grades 4-6). Send resume & references by February 11th, 2002 to Moanalua Gardens Foundation, 1352 Pineapple Place, Honolulu, HI 96819-1754.

### Aquatic Farms in Hawai'i Field Researcher

Aquatic Farms provides Scientific Support Services to the National Marine Fisheries Service Honolulu Laboratory. Position will involve efforts to document, remove, and analyze marine debris (primarily derelict fishing gear) damaging Northwestern Hawaiian Islands coral reef ecosystems. For general information about the program, visit: <<http://www.nmfs.hawaii.edu>>. For more information on positions that are available, contact Kathy Ciulla, Coordinator, at e-mail: <[officeafl@aol.com](mailto:officeafl@aol.com)>; phone (808) 239 2929; fax (808) 239 8436.

### Mauna Kea Ranger

Work with Mauna Kea Observatories Support Services on the Big Island. Duties include assisting with safety and emergency procedures and monitoring field activities in Mauna Kea. For more information, call Ron Koehler at 974-4205. There are four full-time positions and one part-time position available.

## VOLUNTEERING

### Field Sampling around Hawai'i

Chris Bird, a graduate student at the UHM Botany department, is investigating the intertidal habitat with a focus on urchins, opihi, and algae and their relationships to the physical environment. He is looking for volunteers from all the islands to assist with field sampling. These would be great projects for MOP students. For more information, contact Chris at e-mail: <[cbird@hawaii.edu](mailto:cbird@hawaii.edu)>

### Hanauma Bay Education Program

Volunteers are needed to staff beach desk and visitors' center. Duties include leading interpretive talks, answering general questions and promoting proper environmental etiquette. For information phone Jeff Kuwabara at 397-5840 or e-mail: <[hanauma@hawaii.edu](mailto:hanauma@hawaii.edu)>.

### Judges for Hawai'i State Science & Engineering Fair

The Hawai'i Academy of Science is recruiting scientists (including graduate students) to serve as judges at the Science & Engineering Fair, to be held April 1st to 3rd, 2002. For more information, contact Shiyana Thenabadu at 956-7930. Information on the Academy can be found at <<http://www.hawaii.edu/acadsci>>.

### Kaho'olawe Island Reserve Commission (KIRC)

There are many ways to volunteer at KIRC to support the Kaho'olawe marine reserve. For those who are interested and can dedicate at least two hours per week (in the office) we have various interesting projects, many of which would also include time in the Kaho'olawe Island Reserve, aboard *Hakilo*, or on the island itself. Please contact Samantha Whitcraft, Ocean Resources Manager at DLNR, at phone: 808-243-5889; e-mail: <[swhitcraft@kirc.state.hi.us](mailto:swhitcraft@kirc.state.hi.us)>. The commission's webpage can be found at <[www.state.hi.us/kirc](http://www.state.hi.us/kirc)>.

## SCHOLARSHIPS

### American Meteorological Society Scholarships

There are several different scholarships available, including an undergraduate, graduate and minority scholarships. Information and applications are available on the NWS office bulletin board or on the internet at <<http://www.ametsoc.org/AMS>>. Application deadline for most of these scholarships is the middle of February.

### SEED Scholarships at UH Mānoa

The SEED (Student Equity, Excellence and Diversity) office is offering a series of scholarships. Visit the SEED website at <<http://www.hawaii.edu/diversity>> and click on the scholarship button.

### Sigma Xi Grants-in-Aid of Research

These grants are open to graduate or undergraduate students and are judged on the basis of their scientific merit. Requests from all disciplines of science are eligible for consideration. Sigma Xi grant awards range up to \$1,000, with some special funds permitting larger grants in the fields of astronomy, eye or vision research and plasma research. For more information, see the Sigma Xi web site <<http://www.sigmaxi.org>> or send e-mail to <[giar@sigmaxi.org](mailto:giar@sigmaxi.org)>. Deadline for application is March 15th, 2002

### Postdoctoral Research Associates

The two positions involve molecular biology and/or toxicology background to work on coral genetics, biomarkers of environmental stress, metamorphic induction in coral planulae and coral reef ecotoxicology and the other on a project studying the effects of watershed discharges on coastal coral reef ecosystems. Both positions will be based at the University of Guam Marine Lab, but a portion of the research will be conducted in Palau and other sites in Micronesia. Both positions can be extended for 2 to 3 years. If interested, please contact Robert Richmond, Professor of Marine Biology Marine Laboratory, University of Guam, UOG Station, Mangilao, Guam 96923. Phone: (671)735-2188; Fax: (671) 734-6767; e-mail: <[richmond@uog9.uog.edu](mailto:richmond@uog9.uog.edu)>.

### Feldman Fellowship Brandeis University

A fellowship on rainforest conservation is offered through their Sustainable International Development (SID) program. SID is a community of concerned students and faculty drawn from around the world. The program's mission is to help build a new generation of development planners and policy makers for whom a global society free of poverty and environmental degradation is achievable.

Brandeis University offers a two-year Master of Arts Degree in Sustainable International Development that includes one year in residence at Brandeis and one year of practical training, fieldwork or advanced study. The university also offers tuition assistance. SID's teaching and research programs have gained international recognition over the past five years for their innovation in examining models of development for their achievements in reducing poverty and inequality, in raising quality of life, in enhancing the status of women, and in conserving the biodiversity of fragile environments. For more information about our program, please check out our website at <<http://heller.brandeis.edu/sid>>.

# CONFERENCES & CALLS FOR PAPERS



## Ocean Sciences 2002

February 11th to 15th — Honolulu, HI

The conference will take place at the Convention Center. Sponsored by the American Society of Limnology and Oceanography, the American Geophysical Union. For more information, visit <http://www.agu.org>.

## Solutions to Coastal Disasters Conference 2002

February 24th to 26th — San Diego, CA

Participants in the conference will exchange information relating to coastal disasters. For more information, visit <http://www.asce.org/conferences/cd2002/index.html>.

## Sustaining Seascapes: The Science and Policy of Marine Resource Management

March 7th and 8th, 2002— New York, NY

To be held at the American Museum of Natural History, For more information, visit the symposium website at <http://research.amnh.org/biodiversity/symposia/seascapes>.

## Phytoplankton Productivity

March 18th to 22nd, 2002 — Bangor, U.K.

The conference will include talks on the present state and the future of major topics in freshwater and marine plankton productivity. For more information, contact the organizers at e-mail: [conf2002@bangor.ac.uk](mailto:conf2002@bangor.ac.uk) or visit the conference web-site at <http://plankton-productivity.org>.

## Marine and Estuary Shallow Water Science and Management Conference

March 18th to 22nd, 2002 — Atlantic City, N.J.

The conference will focus on the point at which the ocean and estuaries first touch land. In addition to a rich environment, these areas are also heavily used by human beings. For more information, contact Ralph Spagnolo at e-mail: [spagnolo.ralph@epa.gov](mailto:spagnolo.ralph@epa.gov).

## Maritime World 2025: Future Challenges

April 3rd to 5th, 2002 — Greenwich, London, U.K.

The conference will focus on potential changes in the world economic and political scene over the next 25 years. For more information, e-mail: [enquiries@conferencebusiness.co.uk](mailto:enquiries@conferencebusiness.co.uk).

## Asia-Pacific Marine Biotechnology Conference

April 22nd to 26th, 2002— Honolulu

The conference, originally scheduled for October, 2001, will include papers on aquaculture biotechnology, algal biotechnology, photobioreactors, genetics, ecology and marine microbiology, marine natural products, environmental biotechnology and extremophiles. The conference will be held at the East-West Center at the University of Hawai'i. Visit the conference web site at <http://www.MarBEC.org/APMBC>. For more information, e-mail: [apmbc@marbec.org](mailto:apmbc@marbec.org).

## World Aquaculture

April 23rd to 27th, 2002 — Beijing, China

The annual meeting of the World Aquaculture Society. For more information, contact the organizers at e-mail [worldaqua@aol.com](mailto:worldaqua@aol.com).

## Our World-Underwater

April 26th to 28th, 2002 — Rosemont, IL

For more information, visit the conference website at: <http://www.ourworldunderwater.com>.

## Western Division of AFS (WDAFS)

April 27th to May 1st, 2002 — Spokane, Washington

The conference, entitled "Toward Ecosystem-Based Management: Breaking Down the Barriers in the Columbia River Basin and Beyond," will provide a major international forum for exchanging information and engaging in technical debates on a variety of issues related to the management of fisheries, aquatic, and riparian resources. The deadline for early registration is February 28th, 2002. Registration forms are available at <http://www.fisheries.org/wd>.

## Asia-Pacific Conference on Marine Science & Technology

May 12th to 16th, 2002 — Malaysia

Visit the conference website at <http://biology.um.edu.my/apcmst> for more information.

## Coastal Zone Asia-Pacific

May 12th to 16th, 2002— Bangkok, Thailand

The conference will focus on improving coastal zones, with an emphasis on Asia. Visit <http://www.vims.edu/czap>.



## North American Society for Oceanic History

May 15th to 18th, 2002— Honolulu, HI

The 2002 NASOH annual meeting, which is sponsored by MOP, will be held at the Hawai'i Marine Center. Registration cost for the NASOH/UH maritime conference is \$150 total for the whole conference and \$50 for single day. Military and student discounts available. For further information, contact Hans at (808) 956-2418; e-mail: [hkvant@hawaii.edu](mailto:hkvant@hawaii.edu). The conference web site is at [http://www2.hawaii.edu/mop/gmahcp/mop\\_symp2002.html](http://www2.hawaii.edu/mop/gmahcp/mop_symp2002.html).

## The Coastal Society 2002 Conference

May 19th to 22nd, 2002— Galveston, TX

The conference will explore interrelationships among the physical, ecological, cultural and political currents that converge at our nation's coast. Visit <http://www.thecoastalsociety.org/tcs18>.

## American Society of Limnology and Oceanography

June 10th to 14th, 2002— Victoria, B.C., Canada

The ASLO 2002 Summer Meeting will provide a forum for researchers to highlight recent advances linking the various sub-disciplines within limnology and oceanography and to examine the potential for new linkages with scientific disciplines beyond the aquatic sciences. For more information, visit <http://www.aslo.org/victoria2002>.



## AAAS Pacific Division Meeting

June 12th to 16th, 2002— Waimea, HI

The theme of this meeting of the American Association for the Advancement of Science is "Big Island Science." Visit an active volcano, study the night sky from a telescope at 7,000 feet, and examine botanical wonders, all under the guidance of expert scientists. Accommodations at Hawai'i Preparatory Academy will about \$70 per day, all meals included. Visit <http://pacific.aaas.org> for more information.

## Autonomous Underwater Vehicles, 2002

June 20th and 21st, 2002— San Antonio, TX

A two-day event for engineers involved in autonomous underwater vehicles. To submit an abstract, e-mail [AUV2002@ieee.org](mailto:AUV2002@ieee.org). For more information, visit <http://www.AUV2002.swri.org>.

## PACON 2002

July 21st to 26th, 2002 - Chiba, Japan

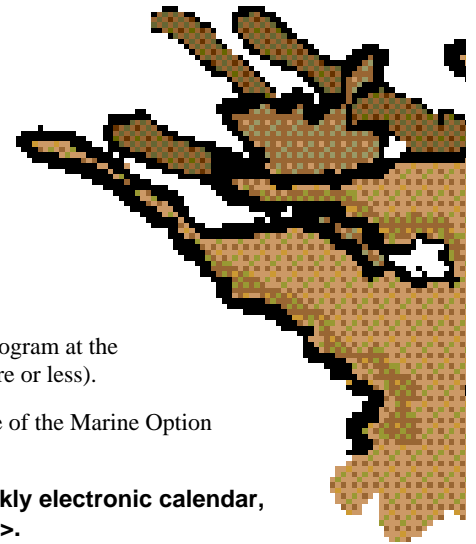
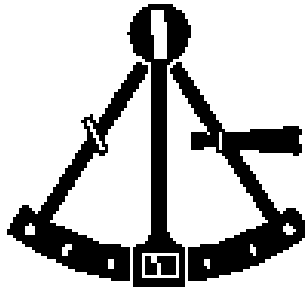
PACON is now accepting papers for next year's conference. Submission deadline is February 15th, 2002. For more information, contact PACON International, P.O. Box 11568, Honolulu, HI, 96828. Fax: (808) 956-2580; e-mail: [pacon@hawaii.edu](mailto:pacon@hawaii.edu). PACON's website is: <http://www.hawaii.edu/pacon>.

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*Seawords* is the newsletter of the Marine Option Program at the University of Hawai'i. It is published monthly (more or less).

Opinions expressed herein are not necessarily those of the Marine Option Program or of the University of Hawai'i.

**If you would like to subscribe to our bi-weekly electronic calendar, please e-mail us at <[seawords@hawaii.edu](mailto:seawords@hawaii.edu)>.**

Suggestions and submissions are welcome. Submissions can include articles, photographs, art work, or pretty much anything that would be of interest to the marine community in Hawai'i and around the world.

Our web pages are located at <<http://www2.hawaii.edu/mop>>.

Our e-mail address is <[seawords@hawaii.edu](mailto:seawords@hawaii.edu)>.

The *Seawords* staff are:

Brian Richardson (Editor),  
Lauren Collins (Assistant Editor),  
and Dr. Sherwood Maynard (*éminence gris*).

February 2002



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