Inside...

Spotlight on Pacific Island Sanctuaries

Counting Whales in Hawai`i

Discovering Hawai`i’s Remote Coral Reefs

Hawaiian Monk Seals

Dianne Meester: Star of the Sea

Exploring the West Coast in a Yellow Submarine

Capitol Hill Oceans Week
Congress had a lot of foresight when they passed the National Marine Sanctuaries Act in 1972. A key part of that legislation called for establishing Sanctuary Advisory Councils of local community members to advise and make recommendations regarding the management of sanctuaries. Representatives from local businesses, educators, scientists, fishermen, environmentalists, maritime industries and a host of others all have a seat at the table in helping us with the complexities of how to best protect these special places. Now, over thirty years later, the vision of those elected officials has come to fruition. Presently, more than 200 individuals at 10 sanctuaries and a coral reef reserve advise on a wide-scope of scientific, educational and policy issues.

A key part of each council is the chair. Chairs volunteer their time, like all advisory council members, assisting their councils through the often controversial and confusing waters of resource management. Many chairs dedicate enormous amounts of time and have spent years volunteering for their sanctuary. Three years ago, recognizing that collectively the chairs represented a very knowledgeable group of community leaders, we convened our first advisory council chairs meeting. Recently, I joined the chairs and several other council members at their annual meeting to meet with these citizen supporters of sanctuaries and learn more about what issues are of concerns at their local sites. I was most impressed by these special individuals’ commitment to serving their local communities. They come from all walks of life but all shared a common goal to ensure that everyone will have the opportunity to enjoy, learn and benefit from the rich diversity of marine life, spectacular ocean vistas and maritime history found within sanctuaries for many generations to come. Our advisory council colleagues are charting new paths in the best tradition of American civic service. You will learn more about one such individual, Dianne Meester, in this issue.

During their time together, the chairs learned about the various issues at each other’s sanctuaries and provided advice on what issues would benefit from national action. These issues included oil, gas and mineral activities, marine debris, fishing impacts (including expanded research), exotic species, cultural practices and vessel traffic. We are examining these and other issues identified by the participants to determine what, if any, actions can be taken by the sanctuary program. Most participants were amazed at how many areas of commonality there are among the sanctuaries, which are so different in many other respects. I am looking forward to reporting on our progress to the council members on these issues at next years meeting.

The National Marine Sanctuary Program is unique in government in how we involve the public in our operations. This reflects our strong philosophy of actively involving local communities in protecting and managing the public resources within sanctuaries for all Americans. National marine sanctuaries contain wonders beyond description. However, it’s the people like our advisory council members who are working to help sustain and bring these wonders to life for all of us to enjoy that really make sanctuaries such a special place.

Sincerely,

Daniel J. Basta, Director
National Marine Sanctuary Program
Pristine in the world. Found nowhere else on the planet. Its waters are among the most Approximate a quarter of the marine species in the NWHI are green sea turtle and the endangered leatherback sea turtle. Including the endangered Hawaiian monk seal, threatened coral reefs in U.S. waters, are home to 7,000 marine species, the island of Kaua`i. The NWHI, which contain 70 percent of the 1,200 nautical miles past the most western main Hawaiian Islands (NWHI), a chain of islands and atolls extending to the remotest places on Earth. Imagine exploring underwater seamounts that humans have never laid eyes on before. Imagine experiencing, live, the excitement of discovering new marine life and observing tiny green sea turtles hatching from the sands and making a mad dash for the sea. Imagine doing all of the above without having to travel hundreds or even thousands of miles from civilization.

These are some of the experiences that await visitors of Mokupapapa: Discovery Center for Hawai`i’s Remote Coral Reefs. Opening this spring in Hilo, Hawai`i, the center will take visitors on an interactive, virtual tour of the Northwestern Hawaiian Islands (NWHI), a chain of islands and atolls extending 1,200 nautical miles past the most western main Hawaiian island of Kaua`i. The NWHI, which contain 70 percent of the coral reefs in U.S. waters, are home to 7,000 marine species, including the endangered Hawaiian monk seal, threatened green sea turtle and the endangered leatherback sea turtle. Approximately a quarter of the marine species in the NWHI are found nowhere else on the planet. Its waters are among the most pristine in the world.

Constructed with the support of NOAA’s National Marine Sanctuary Program and designed with the help of local artisans and cultural advisors, the Discovery Center will highlight the natural and cultural history of the Northwestern Hawaiian Islands, as well as what NOAA and other agencies are doing to provide lasting protection for this unique place. “The Northwestern Hawaiian Islands may be the largest predator-dominated coral reef ecosystem left in the world,” said Robert P. Smith, manager of the NOAA-administered NWHI Coral Reef Ecosystem Reserve, which encompasses 99,500 square nautical miles of the island chain. “The Discovery Center allows us to bring both the facts and flavor of this remote region to the people, without bringing the people to the place.” The reserve is the largest marine conservation area in the United States and the second largest in the world. It is in the process of sanctuary designation and may become the nation’s 14th national marine sanctuary.

Upon entering the Discover Center, visitors will be greeted by the sounds of the ocean and life-size replicas of sharks, including 20 students from the University of Hawai`i Service Learning Center, also saw a number of spinner dolphins and two Hawaiian monk seals.

A group of four relatives of the Hiu and Hee families from Niu Valley, stationed at Wa`imânalo Beach Park, were also pleased to be a part of the event. “I kept reading about it in the newspaper, so I [brought] the others along,” said Hennin Hiu.

This year’s volunteers, many of whom were participating for the fourth or fifth time, recorded information about the whale populations and behaviors they witnessed. The data will be used to corroborate research findings related to the humpback whale population. It can also be used to examine how humpback whales use specific parts of the islands as breeding, calving, nursing and resting areas.

Each viewing site was assigned a volunteer group leader who underwent a mandatory two-hour training session about how to collect data and about humpback whale behaviors. Researchers screen data collected during the count for consistency before it is entered into a database for further analysis.

Although the census does not claim to provide scientifically accurate results regarding abundance and distribution patterns...
Dianne Meester’s contribution to the success of Channel Islands National Marine Sanctuary and its advisory council cannot be emphasized enough. Experience with planning for the County of Santa Barbara, a natural ability to calmly and fairly handle controversial public issues, superior communication and leadership skills and a passion for the sanctuary -- these qualities and more are what Dianne generously brought to the sanctuary in her term as Sanctuary Advisory Council chair.

—Michael Murray, Channel Islands National Marine Sanctuary Advisory Council coordinator

As assistant director of planning and development for the county of Santa Barbara, Dianne Meester will tell you she doesn’t have a “direct connection” to the ocean and Channel Islands National Marine Sanctuary (CINMS).

But as chair of the Channel Islands advisory council through some of the sanctuary’s most important times, she has had a very direct effect on the success of the public process for sanctuary management issues.

Until she was named to the council at its inception in 1998, Dianne said she “didn’t know much about the sanctuary.” She’s an avid diver and often used the coastline, but said she didn’t get out to the Channel Islands much.

“I like seeing them, and I like knowing they’re there. There is a great benefit to be gained from public resources—just knowing they’re there.”

Dianne’s tireless participation and leadership on the council helps insure that the sanctuary will “be there” into the future.

Dianne holds a B.A. in environmental studies from the University of California Santa Barbara and completed coursework for a master’s degree in city and regional planning at Cal Poly San Luis Obispo.

She was one of 20 original council members representing a variety of community interests in advising sanctuary management. She came to the council as the Santa Barbara County representative. Working with the county since 1984, Dianne said she “offered a regulatory government perspective rather than scientific perspective.”

As chair of the council from late 2000 through 2002 she guided the council through management plan review and the community-based marine reserves process.

Under Dianne’s skilled leadership, the council handled the controversial issue of advising sanctuary management and the state of California on establishment of a network of “no-take” marine reserves within CINMS.

Advice from the council laid the foundation for what recently became the establishment of the largest network of marine reserves on the west coast of the United States.

Dianne calls the experience “a remarkable example of a collaborative public process…open and transparent.”

“I was impressed with how far the sanctuary was willing to go to get public input,” she said. “I wouldn’t have expected the federal government to have engaged in such an extensive process in terms of scientific input, socio-economic study and community involvement.”

“The sanctuary took the comments of the public to heart, and considered what a decision really means to users.”

“The staff did an excellent job of educating the members and didn’t expect us to already be experts,” she said. They understand that duties at the county keep me really busy, and they’re always available.”

“I’ve never been so well supported by such a small staff,” she said. “And I run a department.”

Each council represents the unique and varied communities that have an interest in a sanctuary. The Santa Barbara/Ventura area is known as being environmentally conscious, but, adds Dianne, “an area with a lot of strong interests.”

“We also have a strong fishing community, and business people who value the quality of life here.” She describes the community as “highly educated, involved and very active. The council chair must deal with a variety of personalities, issues, viewpoints and undercurrents.”

Reflecting on being a part of a unique community process for federal government, Dianne said, “The Sanctuary Advisory Council is a great concept. It’s democracy at work, with a good representation of the community.”

Dianne recently attended the National Sanctuary Advisory Council Chair and Coordinators Meeting in Santa Barbara, where participants from the 13 national marine sanctuaries cooperatively tackle challenges.

“It’s pretty incredible that a federal program supports such valuable interaction,” she said. “We share information, perspectives and ways to handle issues and organizational topics.”

With the “hometown” pride of ownership and community stewardship, they also share the unique aspects and compelling charm of each of their sanctuary “treasures,” through photos, videos and descriptions.

Appropriate to her background and expertise, Dianne has a plan.

“I decided after just the first national meeting that my goal is to make it to every sanctuary,” she said.

It’s a goal that reflects her now well-deserved “direct connection” to the ocean and to the family of Sanctuary Advisory Council members across the country.
New Discovery Center  (Con’d from pg. 2)

jacks and a manta ray swimming overhead. Colorful murals depicting ocean scenes will dazzle the eyes and a 2,500 gallon aquarium will entice visitors to look closer for the mysterious creatures hidden among the corals. A large map will give visitors a sense of the immense scale of this vast area of atolls, reefs and small islands a world away. Visitors will also have the opportunity to learn about the Kumulipo, the Hawaiian Story of Creation. In addition, the center will feature a kiosk offering real-time NOAA weather information and marine forecasts. Interpretive text for all exhibits will be in English and Hawaiian.

Thanks to the involvement of the local community and NOAA’s many partners, including the University of Hawai`i at Hilo, the Discovery Center promises to be a place where visitors and local community members can connect with and understand the special region that is the Northwestern Hawaiian Islands. 🐳

Ocean Count Volunteers  (Con’d from pg. 2)

of humpback whales around the main Hawaiian Islands, it serves as a useful tool for supplementing scientific information gathered from other research activities. The count also serves to promote public awareness about humpback whales and shore-based whale watching activities.

During the February count, sanctuary partner Science and Technology International conducted an aerial survey of the southeastern shore of O`ahu using a hyperspectral imaging system, which can see whales beneath the ocean’s surface.

The first Sanctuary Ocean Count was conducted in February 1996 on O`ahu, with approximately 150 volunteers. In 1999, the Big Island (Hawai`i) was added to the effort. Kaua`i came on board in 2000. To date, the count covers 60 sites, with an enlistment of over 2,000 volunteers.

Each winter, from approximately December to May, a portion of the endangered North Pacific humpback whale population migrates from their feeding grounds in Alaska to engage in breeding activities in Hawai`i’s warm waters.

“Aside from the numerical findings, the Sanctuary Ocean Count is an important education and outreach project for the Sanctuary,” said Sanctuary Ocean Count Coordinator Christine Brammer. “It provides a unique opportunity for visitors and residents to learn about humpback whales and their habitat while also contributing to ongoing research.”

Volunteers and sanctuary staff are already looking forward to next year’s Sanctuary Ocean Count. For more information, visit hawaiihumpbackwhale.noaa.gov. 🐳

Newsplash

One Fish, Two Fish, Red Fish, Blue Fish - It’s time once again to strap on the dive gear and participate in the Reef Environmental Education Foundation’s Great Annual Fish Count. Held during the month of July at sanctuaries around the country, this volunteer program helps to track fish abundance and diversity in sanctuaries. Over 50,000 surveys have been conducted to date! To learn how to volunteer and about sanctuary public events associated with the count, please visit REEF’s Web site at: www.reef.org.

Fun on the “Pineapple” Island - Hawaiian Islands Humpback Whale National Marine Sanctuary will be participating in the 11th Annual Lana`i Pineapple Festival on July 5. The Island of Lana`i may no longer be covered with pineapples, but a visit to one of the least visited Hawaiian Islands is like stepping back in time. The day involves cooking contests, pineapple eating contests, entertainment, and an onshore fishing tournament. For more information, please visit: hawaiihumpbackwhale.noaa.gov.

Celebrate Samoa’s Ocean Culture Island Style - Fagatele Bay National Marine Sanctuary is hosting its first Ocean Festival in Pago Pago, American Samoa, on August 8. For more information, please visit: fagatelebay.noaa.gov.

Sailing Into the Past on Lake Huron - Thunder Bay National Marine Sanctuary and Underwater Preserve will host the third annual Thunder Bay Maritime Festival August 15-17. Held along the historic Alpena riverfront, the festival will feature reenactments of 19th century sailing life, maritime history displays, arts and crafts, and entertainment. For more information, please visit: thunderbay.noaa.gov.

Journal Releases Sanctuary Science Issue - The Marine Technology Society (MTS) Journal’s Spring 2003 issue (Vol 37, No. 1) is dedicated to Science, Technology and Management in the National Marine Sanctuary Program. To learn more about the articles within the issue and how to order single issue copies, please click on the “publications” icon on the MTS Web site at: www.mtsociety.org.

Olympic Coast’s Traveling Road Show - A series of community open houses will be held on the Olympic Peninsula and Puget Sound region in late September to educate local communities about Olympic Coast National Marine Sanctuary. The events will feature exhibits and presentations about the wonderful marine life and habitats found in the sanctuary. They will also introduce the public to the upcoming management plan review that will begin in 2004.
There is no blaring klaxon, and no one shouts “Dive! Dive! Dive!” when this particular submarine slips beneath the waves. Its occupants—a pilot and a passenger—are well aware of what is happening as seawater envelopes their craft. They can see for themselves what’s going on. Much to their delight—and advantage—this sub, the Delta, has windows.

Known as the “jeep of deep sea submersibles,” the two-person Delta allows marine scientists to get up close and personal with the creatures and habitats they study, often at depths down to 1,200 feet. Last fall, the National Marine Sanctuary Program employed the sub to conduct underwater surveys of two Pacific sanctuaries during its Sanctuary Quest expedition. Use of the Delta, owned and operated by Delta Oceanographics, enabled researchers to gather information that will aid in the management of sanctuary resources—information that would have been more difficult and time-consuming to obtain another way.

Dan Howard, a biologist with Cordell Bank National Marine Sanctuary in California, was one of the scientists who plumbed the depths of the ocean in the yellow, 3½-foot-wide, 15½-foot-long vessel. In September and October 2002, he joined veteran sub pilots David Slater, Chris Ijames and Joe Lilly for a series of dives within that sanctuary.

Their primary mission: to carefully maneuver along Cordell Bank, a submerged rocky island located about 52 miles northwest of San Francisco, and collect baseline data about its habitat types and the fish and invertebrates that live on and around the bank. Another objective of this habitat characterization and biological assessment effort was to survey the adjacent continental shelf and slope, and to document any derelict fishing gear.

Together, Howard and pilot would make their way down to the 4½-mile-wide, 9½-mile-long undersea formation. In just a few minutes, they would reach the top of the bank, some 120 feet below the ocean’s surface. But they would travel deeper still. The bank’s base is another 280 feet down. Even before reaching the bottom, the Delta always proved its worth, operating below SCUBA depth in an area of the Pacific that can be inhospitable to other research platforms, including ship-tethered robot subs, or ROVs (remotely operated vehicles).

“Because of strong currents and rocky pinnacles in the Cordell Bank area, it’s difficult to work with ROVs,” said Howard. “Even in good conditions, it’s really hard.”

Having an actual person in the vessel, instead of just a video camera, also gives the Delta an advantage over ROVs.

“Identifying fish on video is difficult, so the observer down in the submersible is very important,” said Howard. “They have to know their critters.”

What did Howard see? The list includes “twenty different kinds of rockfish, sharks and rays, octopus, a carpet of dazzling invertebrates, some derelict gillnets” and even “a Frisbee sitting on the bottom.”

“Sea lions would buzz us occasionally,” Howard added. Despite having done thousands of dives in the Delta, sub pilot Slater was still moved by what he saw through the porthole. Indeed, he never tires of the underwater experience.

“While in a submersible, I often feel that sense of privilege that comes from viewing areas of our planet that only a very, very few are fortunate to see,” said Slater. “I enjoy watching the slow moving creatures drift past the ports. I’m always up for the search for what organisms or geology is important for our observers to see, film and photograph.”

He also finds the experience working with the sanctuary program fulfilling.

“We work with an outstanding group of scientists that share a professional enthusiasm for adventure and discovery,” said Slater. “The marine sanctuaries are the crown gems of our national undersea environments, containing an abundance of benthic marine life. They are spectacular diving sites.”

This from a man who has seen artifacts on the Lusitania and “gold coins shimmering through the murk” on another sunken ship.

In all, the research team, including scientists from NOAA Fisheries in Santa Cruz, the California Department of Fish and Game and Washington State University, along with Delta pilots Slater, Ijames and Lilly, completed 31 dives in seven days.

A month later, in November 2002, the Delta and its support ship, the Seattle-based Velero IV research vessel, headed down the California coast for a four-day exploration of the deep waters of the recently designated marine reserve areas within Channel Islands National Marine Sanctuary. Monterey Bay National Marine Sanctuary plans to work with the Delta this year.

Having worked with the sub twice in the past two years, Dan Howard is a fan of its crew and capabilities. “The Delta allows us to do things we couldn’t do any other way.”
What pinniped lives primarily in the waters off the Hawaiian archipelago and has two names, both of which describe it perfectly? Answer: The Hawaiian monk seal. Its Hawaiian name, “`Ilio-holo-i-kaua`a,” means “dog running in the rough seas.” The word “monk” describes this particular seal because it leads a solitary life, much like a Benedictine monk. Also, sometimes it has a fold of skin on the back of its head that resembles a monk’s hood.

Unfortunately, the Hawaiian monk seal is the most endangered seal in the United States. Over the last three decades the population has declined 60 percent and only about 1,300-1,400 seals remain in the world. Most seals are found in the Northwestern Hawaiian Islands (NWHI).

Beach counts of monk seals in the NWHI remained essentially unchanged during the 1990s, but declined in 2001. Monk seals face many threats, including entanglement in marine debris. Shark predation, limited food resources and male seal aggression toward adult female seals and young seals of both sexes combine to make survival even more difficult. However, shifts in oceanographic conditions (El Niño events, for example) may improve monk seal prey availability and thus enhance their survival.

NOAA is working to protect the Hawaiian monk seal and bring it back from the brink of extinction. Each year scientists from the Honolulu Laboratory of NOAA Fisheries’ Marine Mammal Research Program (MMRP) establish field camps in the NWHI to monitor the seals’ population. NOAA’s Hawaiian Islands Humpback Whale National Marine Sanctuary and NWHI Coral Reef Ecosystem Reserve, which encompass areas where monk seals live and forage for food, support NOAA Fisheries by educating the public about monk seals and what individuals can do to help protect them. In fact, protection of monk seals was one of the driving forces behind the creation of the reserve.

The public can help protect Hawaiian monk seals by taking a few simple steps when encountering the animals. Because monk seals need undisturbed rest to recuperate from foraging at sea, people should remain out of their sight, if possible. People should also remember that seals are wild animals and stay at least 150 feet away from mother seals and pups (a mother seal may abandon her pup if harassed.), and generally 100 feet from all other seals. Because domestic animals can transmit diseases to the seals and act aggressively towards them, it is also important to keep dogs and other pets away.

The good news: There has been a recent increase in the number of monk seals being born in the main Hawaiian islands, which NOAA experts hope is part of a long-term trend.

Critter Files: Hawaiian Monk Seal

| Scientific name:                     | Monachus schauinslandi   |
| Max. length:                        | 7 feet (3.5 meters)      |
| Max. weight:                        | 600 lbs (250 kg)         |
| Max. lifespan:                      | 25-30 years             |

Distribution: Hawaiian Archipelago and Johnston Atoll. Major breeding sites are in the Northwestern Hawaiian Islands, specifically Kure Atoll, Midway Islands, Pearl and Hermes Reef, Lisianski Island, Laysan Island, French Frigate Shoals, Necker Island and Nihoa Island. Hawaiian monk seals are also occasionally found in the main Hawaiian Islands.

Diet: Fish, cephalopods (e.g., octopus, squid) and crustaceans (e.g., crab, lobster)
Status: Endangered

Notes: The Hawaiian monk seal is the most primitive living species of seal and one of few seal species living in warm tropic waters. Adult females are slightly larger than males. Females fast for 4-6 weeks when nursing their pups. The Hawaiian monk seal molts its skin every year, a process that takes about 14 days. Monk seals can remain underwater for up to 20 minutes.
Lawmakers, Ocean Experts Gather for CHOW

On June 11-12, hundreds of ocean experts, advocates and lawmakers will gather together in Washington, D.C. for Capitol Hill Oceans Week (CHOW) 2003, a bi-partisan series of educational meetings and events highlighting our oceans and coasts. Co-hosted by the National Marine Sanctuary Foundation (NMSF), CHOW is one of the most important annual events for exchanging knowledge and ideas about ocean issues and policies.

World-renowned undersea explorers Jean-Michel Cousteau, Dr. Sylvia Earle and Dr. Robert Ballard, and the Chairman of the White House’s Council on Environmental Quality, Jim Connaughton, are among the featured participants at this year’s symposium.

“Now in its third year, Capitol Hill Oceans Week is intended to build bridges among the various ocean constituents, as well as to place ocean issues prominently before our nation’s leaders,” said NMSF Executive Director Lori Arguelles. “Our objective is to make progress nationwide in areas of common ground, with the goal of exploring and protecting America’s ocean and Great Lakes treasures.”

CHOW 2003 will give participants the opportunity to continue discussions and dialogues sparked by last year’s event, which focused on emerging ocean technology, education and ocean literacy, and the challenges facing the coral reef environment. This year, representatives from government, private industry, nonprofit groups and academia will focus on the latest ocean discoveries, the future of ocean exploration and managing marine areas. A member of Congress will open each panel discussion with an overview of the topic. Exhibitors from industry, academia, nonprofit organizations and government agencies with an interest in ocean issues will join the symposium on June 12 for the Ocean Technology Fair.

Capitol Hill Oceans Week 2003 kicks off June 10 with a tribute dinner honoring Senator Ernest F. Hollings of South Carolina and Congressman Jim Saxton of New Jersey. Each will receive the National Marine Sanctuary Foundation Leadership Award in recognition of their longstanding commitment to ocean issues and for their roles in introducing the Oceans Act of 2000. In addition, NMSF will also present its first Volunteer of the Year awards to Gordon Bennett and Alan Brooks. Bennett has worked for more than ten years as both a beach watch volunteer and a SEALS volunteer for the Gulf of the Farallones National Marine Sanctuary. Brooks is chair of the Olympic Coast Sanctuary Advisory Council, working tirelessly to elevate the profile of that sanctuary.

Congressional co-hosts of CHOW 2003 include members of the Senate Committee on Commerce, Science and Transportation, the House Committee on Resources, the House Committee on Science and the House Oceans Caucus. Other partners include the U.S. Department of Commerce, Bell South, AT&T, the National Fish and Wildlife Foundation, the American Petroleum Institute, the Consortium for Oceanic Research and Education, the National Marine Manufacturers Association, the National Ocean Industries Association and the Sea Grant Association.

Be sure to check for CHOW '03 updates on the Web at www.nmsfocean.org.