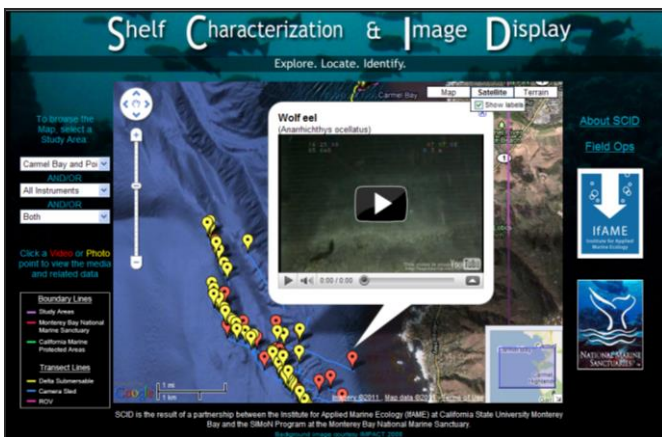
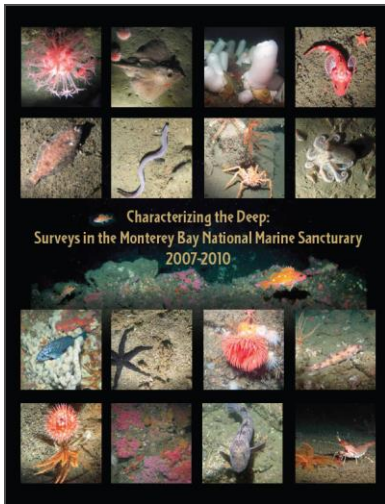


**Distinguished
Professorship****ROV Surveys
on
Two Coasts**

Since 2007 the Rote Professor has been leading students from CSUMB and other campuses on research cruises around the country. Using remotely operated vehicles (ROVs) the team has collected thousands of digital still photos and hundreds of hours of video, including studies in new Marine Protected Areas (MPAs) throughout California and research on the impact of bottom trawling in California and the Gulf of Maine. Photos have graced magazine covers (left) and video is viewable on-line (below).



James W.

ROTE

Distinguished
Professorship

Ongoing Marine Research



Missions to the *Aquarius* Undersea Laboratory

www.aquarius.uncw.edu

Twice in the past three years (Nov 2008 & Oct 2010) the Rote Professor has lead CSUMB students on missions to *Aquarius*. Located in the Florida Keys, *Aquarius* is the only research facility of its kind on Earth. Each mission the team lived under water for 10 days and dived for up to 9 hours a day. The research conducted on these two missions advanced our understanding of coral reef fishes and the outreach efforts touched millions of people around the world.

Distinguished
Professorship



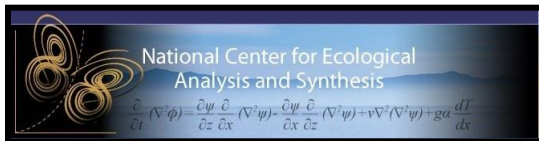
Science Communication (Fall 2009)

The second Rote Seminar focused on the communication of science to policy makers, the media, and the general public. Students from CSUMB and other campuses worked together for a semester culminating in a workshop with journalists from the national media. The seminar will return in Fall 2011.



Distributed Graduate Seminar (Fall 2008)

The first Rote Seminar in 2008 was conducted as part of a Distributed Graduate Seminar through funding from the National Center for Ecological Analysis and Synthesis. Lead by CSUMB, eight campuses from around the country (across 5 time zones) studied ocean management in NOAA's National Marine Sanctuary Program together for a semester. The semester culminated in a "Grand Synthesis" meeting at which the students produced a peer-reviewed publication (below) and developed a curriculum package based on the seminar for future courses.



Marine Sanctuaries Conservation Series ONMS-10-02

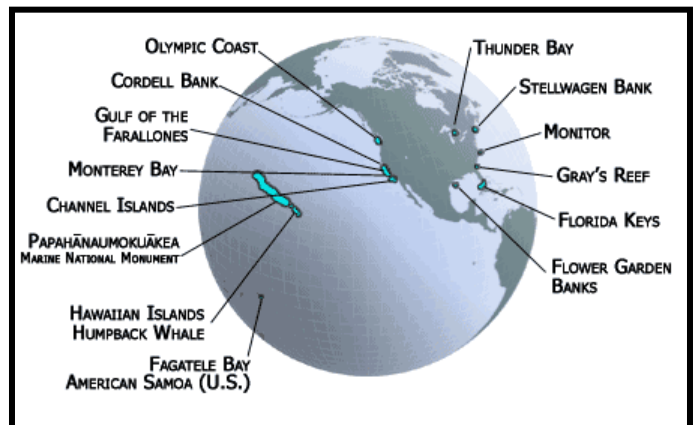


**Examples of Ecosystem-Based Management
in National Marine Sanctuaries: Moving
from Theory to Practice**


U.S. Department of Commerce
National Oceanic and Atmospheric Administration
National Ocean Service
Office of Ocean and Coastal Resource Management
Office of National Marine Sanctuaries



May 2010



Monterey Bay National Marine Sanctuary Symposium • Sanctuary Currents 2010



Voices of Hope

Science and Innovation for the Ocean

Human activities are taking their toll, causing many challenges for the ocean. Come hear from experts engaging in creative and cutting-edge science and technologies to help solve critical problems facing the environment. They bring us new hope for the future of our ocean.

FREE EVENT
Saturday, April 10, 2010
California State University,
Monterey Bay University Center,
Seaside

Program of Events

8:00 - 8:45 a.m. Registration
8:45 - 9:00 a.m. Welcome

9:00 - 9:25 a.m. Fishermen & Conservationists Changing the Way They Do Business: The Central Coast Groundfish Project
Michael Bell, The Nature Conservancy

9:25 - 9:50 a.m. Is the Future Really in Algae?
Dr. Jonathan Trent, NASA Ames Research Center

9:50 - 10:15 a.m. EcoViz: Connecting Mass Audiences to Ecosystems Using 3D Visualization
Dr. Fred Watson, California State University Monterey Bay

10:15 - 10:40 a.m. Break

10:40 - 11:05 a.m. Moving From Ecosystem Science to Ecosystem Action Through Integrated Ecosystem Assessments
Dr. Phil Levin, Northwest Fisheries Science Center, NOAA Fisheries Service

11:05 - 11:30 a.m. Sequestering CO₂ in the Built Environment
Dr. Irene Conquist, Calera Corporation

11:30 - 11:55 p.m. Small Business Stashes CO₂ Emissions
Tom Bowman, Bowman Global Change


12:00 - 2:00 p.m. Lunch, Posters and Exhibits

2:00 - 3:00 p.m. Ricketts Memorial Lecture:
From "You've Got to Be Kidding" to "Ah-Ha!"
Hope for Our Oceans Through Insight and Innovation
Dr. Rikki Kuitak, California State University Monterey Bay

3:00 p.m. Poster Awards

For more information, visit <http://montereybay.noaa.gov/symposium2010/welcome.html> or contact Liz Lowe at (831) 647-4255 or liz.lowe@noaa.gov
Major Sponsors: Institute for Applied Marine Ecology, California State University Monterey Bay, NOAA's Monterey Bay National Marine Sanctuary, Cooperative Association of Monterey Bay Area Communities, Monterey Bay Aquarium, Monterey Bay Sanctuary Foundation, Save The Earth

Monterey Bay National Marine Sanctuary Symposium • Sanctuary Currents 2011



Ripple Effects

The Far-Reaching Impacts of Local Ocean Research

The diversity of marine life in Monterey Bay has attracted an unparalleled cluster of world-class research institutions, making our region a hotspot for both wildlife and ocean science. Join us to learn about some of the ground-breaking work our research community is doing using incredible tools such as undersea robots and electronic satellite tags. They're unraveling mysteries about great white sharks, the northward invasion of Humboldt squid and new species living on the slopes of little-explored seamounts. Their work is having an impact far beyond Monterey Bay, helping inform ocean science and management policies both nationally and internationally.

FREE EVENT

Saturday, April 9, 2011
California State University,
Monterey Bay
University Center, Seaside

Program of Events

9:00 a.m. Welcome

9:15 - 9:40 a.m. Creatures of Habit:
California's Unique White Shark Population
Dr. Salvador Jorgensen, Research Scientist,
Monterey Bay Aquarium

9:40 - 10:05 a.m. From Robots to Plankton -
Monterey Bay as a Window to the Future
Dr. James C. Ballingham, Chief Technologist,
Monterey Bay Aquarium Research Institute

10:05 a.m. - 10:30 a.m. Humboldt Squid in the
California Current
Julia Stewart, Graduate Candidate, Hopkins Marine
Station of Stanford University

10:30 a.m. - 11:00 a.m. Break

11:00 - 11:25 a.m. Davidson Seamount:
An Internationally Famous Deep-Sea Feature in Your
Own Backyard
Dr. Andrew DeVogele, Research Coordinator,
Monterey Bay National Marine Sanctuary

11:25 - 11:50 a.m. Ocean Management in California:
From Managing Abundance to Managing Scarcity
Fred Kneib, Trustee, California Ocean Science Trust;
Author, Marine Life Management Act; Former
Speaker pro Tempore, California State Assembly

11:50 - 12:30 p.m. Lunch

12:30 p.m. - 2:15 p.m. Research Posters

2:15 - 3:00 p.m. Ricketts Memorial Lecture
The Biology of Giant Kelp: Implications for
Kelp Forests and Beyond
Dr. Michael S. Foster, Professor Emeritus,
Marine Landing Marine Laboratories

3:00 - 3:15 p.m. Poster Awards

For More Information: Visit <http://montereybay.noaa.gov> or contact Liz Lowe at (831) 647-4255 or email liz.lowe@noaa.gov
Sponsors: Institute for Applied Marine Ecology, California State University Monterey Bay, Monterey Bay National Marine Sanctuary, Monterey Bay Aquarium, NOAA's Southwest Fisheries Science Center, Santa Cruz Lab, Save The Earth

This series brings renowned speakers to campus annually to provide lectures on a variety of subjects related to the interface of science and policy. Speakers have included Congressman Sam Farr (D-California) and Dan Basta (Director of the National Marine Sanctuary Program).

Recently the Rote Lecture Series has teamed up with the Monterey Bay National Marine Sanctuary to present the annual Sanctuary Currents Symposium. These symposia are held at CSUMB and are open to students, faculty, and the public. They feature a number of speakers that present current issues in marine science and policy in the region, and beyond.

Distinguished Professorship

The Rote Equipment is awarded annually to a graduate student in the CWSP program. This grant allows students to purchase equipment for their thesis research projects. Upon completion of their research, the equipment remains in the department for future use by students.



2009 Recipient: Erin Stanfield

Erin used her Rote Research Grant funds to purchase an underwater photosynthetically active radiation (PAR) quantum light sensor. She uses this to study cyanobacterial harmful algal blooms (CHABs) in Pinto Lake near Watsonville. The results of this study will assist regional municipalities and the regional water quality control board to better understand the factors driving the formation of CHABs and to formulate the most effective management strategies for toxic CHABs.



2010 Recipient: Scott Toews

Scott has used his Rote Research Grant funds to purchase molecular analysis laboratory equipment (for gel electrophoresis) as well as equipment used in his field data collection, using SCUBA. This project explores the role of habitat in structuring genetic variation in populations of black surfperch *Embiotoca jacksoni*, within Monterey Bay. This research will contribute to understanding the mechanisms that drive genetic diversity and help estimate the impact of proposed management actions that may fragment critical subtidal habitats.

The 2011 recipient will be announced in May, upon selection amongst submitted research proposals