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BMSC Public Education Program Receives Michael Smith Award

The BMSC public education program - a program aimed at illuminating the mysteries of underwater ocean life, has earned a national promotion of science award for its efforts. The Public Education Program of the Bamfield Marine Sciences Centre (BMSC) has been awarded the prestigious Michael Smith Award from the Natural Sciences and Engineering Research Council (NSERC).



"The quality of science education offered at Bamfield is second to none," said Dr. Nigel Lloyd, Executive Vice-President at NSERC who awarded the \$10,000 prize in a special ceremony held during the Bamfield Marine Science's Centre's annual Visitor's Day. "Turning kids on to science is more important than ever. We need to encourage the next generation of young people to consider scientific careers if we are to ensure that Canadians continue to benefit from the social and economic benefits related to discovery and innovation."

Continued on page 7

BMSC Welcomes Music By the Sea

On the weekend of July 21st, the world was introduced to Music by the sea; an international music school and festival of four world-class concerts held in BMSC's Rix Centre for Ocean Discoveries. With music ranging from classical solo and chamber music to sophisticated jazz and folk music, concertgoers were well rewarded after long journeys from Port Alberni, Ucluelet and the Mainland.

The first concert on Friday night began with the arrival of the Honourable Iona Campagnolo, Lieutenant-Governor of British Columbia and at sunset, the spectacular pre-concert fanfare: performance of "Amy by the sea", which featured a haunting symphonic duet between Amy Horvey on trumpet in a rowboat in the Bamfield Inlet and chimes on the balcony of the Rix Centre. In total there were twelve musicians who lavished their talents on the audience, including performances by Victoria's internationally renowned solo guitarist Michael Waters.



His vision is to bring the most promising talented young musicians from around the world to study and perform at the Bamfield Marine Sciences Centre.

Music by the Sea was organized and directed by Christopher Donison, composer, conductor, pianist and lecturer. A piano student of Winifred Wood, Donison graduated in piano performance from the School of Music, at the University of Victoria. He was also Music Director of the Shaw Festival in Niagara-on-the-Lake, Ontario, for ten years. His vision is to bring most promising talented young musicians from around the world to study and perform at the Bamfield Marine Sciences Centre for a "life-changing experience" in Summer 2007.

For more information about Music by the Sea, please visit www.musicbythesea.ca

DIRECTOR'S MESSAGE



With this issue, Bamfield Marine Sciences Centre is re-establishing a newsletter to contact our researchers, students, alumni and others who have enjoyed life and learning here, and keep them abreast of developments at the Centre. For some of you, this may be the first indication of our change in name and focus, from marine biology to marine sciences. We will try to keep you up to date on new facilities, current activities at the Centre, and news about other alumni.

Our Visitors' Day this year was highlighted by a visit from Dr. Nigel Lloyd, Executive Vice-President of NSERC, who presented the Michael Smith award (for promotion of science outside the school system) to Anne Stewart and the Public Education program

(see photo and story, p. 1), and presented a "Friends of NSERC award to Bob, Dolores and Jim Bowker, a local fishing family who have helped provide specimens to numerous research workers over the years (see photo and story, p. 7). At least, those presentations were the highlight for me; many of our visitors, however, might claim that the highlight was the humpback whale thrust-feeding in the inlet just in front of the Rix Centre - much more interesting than speeches! And a good illustration of the richness of the biota we have to work with.



Photo by Siobhan Gray

The village of Bamfield has always had a strong arts program. We may be the Marine Science Centre, but the reception area of our Rix Centre for Ocean Discoveries (see story, p. 8) was the site of a first-rate music program in July, when BMSC joined Chris Donison in sponsoring Music By The Sea, a series of 4 performances of folk, classical, jazz and popular music by world-class musicians. The opening performance was attended by Her Honour, the Honourable Iona Campagnolo, Lieutenant-Governor of British Columbia, an excellent testimony to the quality of the performances.

Our primary functions, however, are still teaching and research in marine sciences. Our success in those functions has been recognized by increased funding from NSERC and our parent universities. Check out our website, or come see for yourself the changes that have taken place in our facilities and activities. If you like what you see, consider a donation towards the 40% of our budget that we must raise.

BMSC Welcomes Dr. Dick Peter as acting director

BMSC is pleased to welcome Dr. Dick Peter, its new acting director in August 2006. Dr. Peter comes to us from the University of Alberta, where he has been a professor of Biological Sciences since 1971 and acted as Dean of the Faculty of Science at U of A from 1992-2002. He is the recipient of numerous awards in science and education including the Outstanding Leadership in Alberta Science Award in 1998.



"I have always felt a strong connection with Bamfield. The Bamfield Marine Sciences Centre is a rare gem and very important resource to its member universities" Peter stated. "As director, I feel it is an important contribution to facilitate opportunity for students, researchers, and public education."

Dr. Peter earned his BSc at the University of Calgary in 1965, and went on to complete his PhD at the University of Washington in 1969. During his term as the Dean of Science at the University of Alberta, Peter was integral in the restructuring of many of the undergraduate programs and in the formation of new student scholarships for undergraduate and graduate students. He also campaigned for the development of further funding for U of A faculty research and enhanced relations with U of A Science Alumni by initiating alumni awards and the newsletter "Science Contours".

Alkaline tide turns for dogfish

How do you feel after a big steak? Stuffed and sleepy? Or perhaps more alkaline? After guzzling a protein-rich meal, many mammals experience a phenomenon known as the alkaline tide; when stomach cells secrete acid to aid digestion, they pump their surplus bicarbonate ions into the bloodstream, leading to a rise in blood alkalinity. But how does feeding affect blood pH in other types of animal? Chris Wood (CRC, FRSC) a physiologist at McMaster University, has discovered alkaline tides in an elasmobranch fish for the first time.

To find out whether fish have alkaline tides, working at the Bamfield Marine Sciences Centre, Wood and his colleagues Makiko Kajimura, Tom Mommsen, and Pat Walsh studied a protein-munching species, the Pacific spiny dogfish, a shark that feasts on bony fishes and invertebrates. They are also uncooperative animals and don't feed well in captivity. Chris and his group fitted the sharks with feeding tubes.

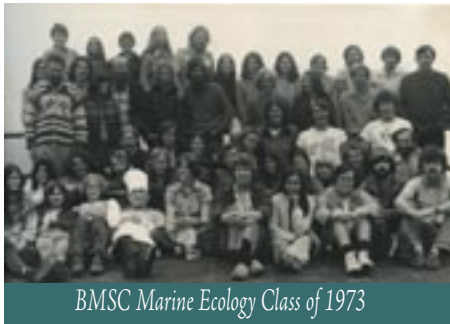
Continued on page 5

Chris Wood a physiologist at McMaster University, has discovered alkaline tides in an elasmobranch for the first time...



BMSC Alumni

Since our humble beginnings as a “field station” in 1972, we’ve grown in to Canada’s premier coastal research and teaching facility. The BMSC Alumni Association’s mission is to foster enriching life-long connections between BMSC alumni, students and staff.



BMSC Marine Ecology Class of 1973

Over the years, we have inspired scientific discovery and touched thousands of people. People like Marilyn Johnstone, our first alumna to contact the BMSC alumni association. She was a student of Phycology with Louis Druehl, and Marine Ecology with Barb Beasley in 1997. She is now a Program Analyst for the University Research and Strategic Investment for the Government of Alberta.

“...my experience at Bamfield has given me a genuine curiosity in all things related to ocean biodiversity. The knowledge that I gained from the courses and my fellow students continues to enhance my life.” - Marilyn Johnstone, BMSC alumni 1997.

Alec Dale took Principles of Aquaculture and Biology of Marine Birds in 1989 and is now the Senior Policy Advisor in the Environmental Sustainability Strategic Policy Division for B.C. Ministry of Environment.



BMSC Phycology Class of 1997

Feature Alumni:

Heather Washburn (BMSC alumni 1975) lives in Port Alberni with her husband *Curt Smecher (BMSC Alumni 1975)*, dog Ruddy, and two cats Grappler and Poett. They have been in Port Alberni for six years; Curt is Chief of Staff and Anaesthetist at West Coast General Hospital. Prior to coming to Port Alberni, they lived in Port Moody for many years.

This year Heather and Curt celebrate both their 30th Wedding Anniversary, and the wedding of their son Graeme and daughter-in-law to be Stephanie. Graeme is heading off to McGill in the fall to start on his Masters in Electrical Engineering. Graeme’s sister Erin (B.A. 2004) is married and presently works at SFU: his twin brother Alec (B.Comp.Sci. 2005) is a freelance programmer who periodically takes off to Europe, laptop in backpack. All three kids graduated from SFU and call the Lower Mainland area their home.

Heather’s present abode is a beautiful historical old house in Port Alberni. A critical shortage of gardeners, landscapers, chefs, housekeepers and handymen mean that she is becoming a Jill of (several) trades, master of none.

Her background in desktop publishing has resulted in a variety of projects in Port Alberni, notably the 50th Anniversary Calendar and several years as newsletter editor for the local garden club. Present endeavors include managing publicity for two upcoming Bamfield events -- Music By the Sea in July and the 2006 Mushroom Fest in October. She recently appeared on tv locally heading up an assault on Scotch Broom on the hillside beside West Coast General Hospital.

When not in Port Alberni, Heather spends a lot of time in Bamfield where she and Curt have been building a house on the west side. Diving and kayaking are favourite activities while in this beautiful seaside village. After seven years of plastic shelving, Heather lives in heartfelt anticipation of finishing the Bamfield kitchen this summer.

Two of her secret pleasures are slug-hunting by flashlight, and turning over the compost to see who’s living there.

-by Heather Washburn

If you are a former student, researcher, instructor, TA or staff member, we would love to hear from you. Let us know where you are today, share the memories of your Bamfield experience and help us develop with your suggestions. Please visit our website at: www.bms.bc.ca/alumni/ or e-mail us at alumni@bms.bc.ca. We look forward to hearing from you, and welcome you back!



John J.G. Boom (Boomer) April 14, 1952-February 25, 1996

John Boom, or “Boomer” as he was affectionately called, was a student of Phycology at BMSC in 1974 and teaching assistant at Simon Fraser University. John obtained his Masters of Science degree in molecular biology from Simon Fraser University in 1984, after which he worked in Dr. Bruce Brandthor’s molecular lab. John then became the Research Coordinator at the Bamfield Marine Sciences Centre in 1993. Among his many accomplishments, John helped construct the dive shed and floats and he designed the large aquarium used for filming the BBC program: “Life at the edge of the sea. John Boom died at sea” in 1996.



BMSC Tent Facilities 1973

BMSC's graduate students have been busily working on research, teaching, and writing as the summer field season is quickly evaporating. However, many graduate student volunteers have generously lent considerable time and effort towards managing the kayak fleet and organizing weekly Friday afternoon socials for the benefit of everyone at the Sciences Centre. Earlier this summer several graduate students participated in a confocal microscope workshop to promote use of the equipment that has been installed in the Rix Centre for Ocean Discoveries. Both the Rix Centre and the Fluid Dynamics Laboratory have provided invaluable new research and office space for BMSC's graduate students to work in. By early next year the GSS is hoping to have a designated office space in the Rix Centre for the many short-term graduate students we are fortunate to have work here. For information about graduate research programs at BMSC visit www.bms.bc.ca/grads/people.html.

Alexandra Eaves is the president of the BMSC Graduate Student Society

Volunteers Help Marine Protected Areas

Baeria Rocks Ecological Reserve is a little known marine protected area (MPA) right here in Barkley Sound. Although the Reserve was initially set up as a jurisdictional challenge by the province, the primary role of the reserve is to protect nesting seabirds and to preserve rich intertidal and sub-tidal communities.

Anne Stewart is the new "volunteer ecological reserve warden" for Baeria Rocks and is trying to help raise awareness about the reserve and promote sustainable and sensitively appropriate research.

Since very little research has been done in the reserve to date, a logical starting place was to do some basic inventory work, and at the end of May, an excursion of volunteers from the Bamfield Marine Science Centre met BC Parks personnel from Tofino at the Reserve and began work after a hiatus of nearly thirty years.



Tom Bird and his team of divers did biodiversity surveys below water and an inter-tidal team did preliminary biodiversity inventory work on shore. The BC Parks people erected signs and surveyed Black-Oyster Catcher nests. A big thank you to all of the BMSC volunteers, it would not have been possible without you.

Please note that the Friends of Ecological Reserves has some limited scholarship funding for graduate student research in Ecological Reserves and to date there has been little done in Marine Ecological Reserves.

BMSC acquires cedar carving

BMSC has displayed a mask carving by Huu-ay-aht First Nation member Ed Johnson Sr. in the Rix Centre for Ocean Discoveries.

Ed Johnson began carving at the age of nine, and soon became the student of elders Wes Williams and Charlie Mickey who taught Johnson the art of Hu-ay-aht design and totem carving. Over time Johnson mastered the art of mask and canoe carving and believes his artistic objective is to bring the traditional carvings of the Nuu-chah-nulth territory back to life. Ed Johnson's art can be seen in worldwide in private collections.

Johnson's carving represents Komokwa; King of the undersea world. First Nations oral history explains that if one could swim to the house of Komokwa under the sea, and brave the sea lions that guard it, you would acquire great wealth. His piece was carved from old-growth cedar.



18th-20th Aug -Pelagic Birding Tour

Vancouver Island Birding & Nature Discoveries is offering a pelagic birding tour for August 19th for eight to twelve people. The group would arrive at the Bamfield Marine Centre the afternoon of the 18th and leave after breakfast on the 20th. Accommodation in a dorm-style lodge, all meals and transportation to birding site are included in the price of \$335.00.

The vessel will follow the Hake fishery to allow for sightings of pelagic birds, such as albatross, petrels, shearwaters, and others.

For those who wish to participate in the vessel tour only, the price would be \$200 and would include lunch during the tour.

As this tour is just being arranged, it is not on our website (www.birdingbc.ca). Please contact Diane Sampson at info@birdingbc.ca or 1-888-757-8778 for more details by August 1st.



Dr. Christopher Wood

He pumped a flatfish repast into their stomachs and took blood samples from the fish to search for evidence of an alkaline tide. He saw a marked increase in blood pH after three hours, peaking around 6 hours and returning to pre-feeding levels by 17 hours. Levels of bicarbonate in the blood rose and ebbed in a similar manner - the hallmark of a classic alkaline tide.

We know very little about nitrogen metabolism in elasmobranchs, so the Wood group also examined nitrogen excretion after he fed the dogfish. Chris notes that 'Unlike bony fish that constantly need to excrete salt in order to maintain their bodies at a lower salt concentration than the sea, dogfish keep their blood and tissues at an osmotic concentration close to seawater.' One way to achieve this is to hang on to organic molecules like urea, the nitrogenous waste from a protein-rich diet. But dogfish are sporadic feeders, gorging themselves about twice a week, so their nitrogen reserves are scarce.

Chris et al were curious to know if dogfish conserve nitrogen from their diet to make urea or excrete it in ammonia, which is much cheaper to produce. By measuring the ammonia and urea excretion of the tube-fed dogfish, they found that the sharks retained virtually all the nitrogen from their food.

This nitrogen conservation suggests that dogfish can produce enough urea to maintain the correct osmotic concentration, despite their irregular feeding habits.

"Unlike bony fish that excrete salt...dogfish keep their blood and tissues at an osmotic concentration close to seawater"

Dogfish may also benefit from their alkaline tide. Mammals counteract the alkaline tide by hoarding acid-generating carbon dioxide in their blood. But the Wood team didn't see carbon dioxide levels escalate in fed dogfish, which suggests that their blood pH rises unchecked. He suspects that the alkaline tide has knock-on effects for the sharks' metabolism, and may even kick-start urea production.

Adapted from Inside JEB

Unlocking the mysteries of the sea: How do marine communities cope with stress?

One single tide pool can contain a spectacular diversity of plants and animals. And interactions between these species take a variety of forms: sea stars will eat mussels, barnacles can overgrow seaweeds, and kelp provide habitat for fish. These relationships can be strong or weak and positive or negative, depending on the context. Cumulatively, all these interactions construct a community and an entanglement of direct and indirect associations between species that are important to understand.

Spencer's research focuses on ecosystem complexity because it is believed to be a stabilizing force in communities. In other words, Spencer says, "communities with more elaborate webs of interacting species are thought to be better able to remain intact even under stress." So he experiments with real, and very speciose, intertidal communities in Barkley Sound near the Bamfield Marine Sciences Centre. These natural communities are subjected to perturbations that mimic likely extinction and invasion events and fluctuations in species abundances. And from these manipulations he can quantify the strength of the interactions between each species in the community. For example, by increasing or decreasing the abundance of purple urchins in a study plot, it is possible to gauge the effect of that urchin species on each of the other community members.



Spencer in the field

These experiments and Spencer's corresponding studies in the US and New Zealand are confirming that communities are characterized by weakly interacting species, but revealing that the mean strength of the interactions between all community members is not generally facilitative (positive) or inhibitive (negative) as previously thought. Instead, both positive and negative interactions between species are equally important for communities. Also contrary to some expectations, there is no relationship between community diversity and the strength of species interactions. Meaning complexity alone does not appear to stabilize a community, it is the distribution of the strengths of interactions between species that is most important for community structure.

"Ecosystem stability requires a balance between weak and strong as well as positive and negative species interactions," Spencer says. A balance that appears to be generalizable across communities from a variety of ecological contexts. Such generality advances our ability to predict the consequences of changes humans are making in natural systems and suggests that complex species interactions could be incorporated into further studies to answer new questions about the ecosystem level manifestations of change.

Spencer Wood is a PhD student in the lab of Dr. Jonathan Shurin, Department of Zoology, UBC

BMSC BOOK DRIVE

The library is collecting textbooks and educational reference books for Better World Books, an organization that supports worldwide literacy by providing funding and/or books to such non-profit organizations such as Books For Africa and Room to Read. Better World Books also sells books online, donating 100% of their profits to literacy partners. For more information on Better World Books visit www.betterworldbooks.com. If you would like to donate books, please visit the Library or send them to:

Library
Bamfield Marine Sciences Centre
Bamfield, B.C.
V0R 1B0

A Lesson for all seasons: 30th Anniversary of BMSC's Fall Program

This year marks the 30th anniversary of the BMSC's fall program. At the time, the courses were instructed by Dr. Louis Druehl, Dr. Peter Frankboner, Dr. John McInerney and Dr. Brian Hartwick and had 38 students enrolled! Today the fall program is still going strong, and the students are just as inspired by this transformative experience as ever! Samantha Magnus, a recent fall program student (2005) has written the following article which speaks to her experience last fall.

Biology is the study of life and how life works. Fall Program students work. Never in my life have I worked so hard, learned so much, nor had so much fun. Whether we were elbow-deep in tide-pools, knee-deep in estuarine muck, or waist-deep in surge channels, we were deeply transformed at BMSC. While usual university programs challenge our abilities as students, here we were challenged as scientists. This is not an easy transition to make, but every fall program student becomes a scientist equipped with meaningful memories and valuable lessons. I'd like to share three lessons I learned from the five courses of Fall Program 2005:

Everyone has their surprises. Marine biology provides the opportunity to study extraordinary creatures. At BMSC, this applies not only to the flora and fauna of the ocean, but also to people. Students may share their enthusiasm for biology, but all have different academic and personal histories and accordingly diverse perspectives. Another student always knew more than I, and yet very often the best ideas stemmed from ignorant questions. I learned from listening. Don't discount any person, they can (and will) surprise you.



Everything will take longer than you expected. Sometimes you run out of seawater tanks, waterproof paper, disk space, seaweed, anaesthetics or Petri-dishes, but you will always run out of time. When you need to juggle a full course-load with your four-month research project: try to keep it simple and try not to feel guilty for taking more time than you planned.

The overlooked deserves a look. Have you ever been excited about the reproductive cycles of red algae, the physics of copepod swimming, or dynamics of larval ecology? We learned to appreciate the phenotypic plasticity of kelps, the sinuoids of nudibranchs and the appetites of urchins, but not from textbooks. We discovered universes of complexity around us, and we did it first-hand. Our experiences at BMSC not only fostered ideas and insights in science, but inspired us as human beings. I am amazed by life and features of life I never would have noticed before: the fleshy articulations of a single cell of *Codium fragile*, the spooky power of Pycnopodia, or the waves of beating cilia on an oyster gill.

Many memories characterize my experience at BMSC: watching ships leave the inlet at breakfast, living by the tide charts, laughing at geeky jokes, late nights in the lab, the drama of scientific research, wearing rubber boots to class, and sharing good times with friends. We learned from terrific teachers, amazing assistants, and fantastic fellow students, and most importantly from the ocean herself. To anyone who loves to learn, wants to grow, and is up for a ride, I recommend the Fall Program. The lessons you learn will leave you both a better scientist and a better person.

BMSC Devonian Library 25 Year Anniversary

In April 2006, the Bamfield Marine Sciences Centre Devonian Library entered its 25th year of providing scientific literature and resources to its students and researchers. Built in 1982 from funding provided by the Devonian Group of Charitable Foundations of Alberta and the Alberta government, the library continues to be a unique gem tucked away in a remote village on the Pacific Northwest coast.

Our collection currently includes more than 4880 marine, coastal and life sciences books and over 16,000 reprints. We have over 200 journal titles, and currently subscribe to 26 scientific journals such as *Science*, *Nature*, *Marine Biology* and *Marine Ecology Progress Series*. The library also houses an extensive collection of rare tropical and temperate shells and coral from around the world, which were generously donated by Ms. Hazel Jones, and an impressive series of seaweed presses dating back to 1883. In addition, a number of maps, charts, aerial photographs, historical archives and electronic resources are available 24 hours a day.

“...the library continues to be a
unique gem tucked away in... the
Pacific Northwest”



Included in our holdings are many rare books and documents. The special collections currently totals more than 300 rare books dating as far back as 1776, including a priceless first edition copy of *Report on the Scientific Results of the H.M.S. Challenger* written in 1887 and one of 53 copies in the world's libraries of *Narrative of the Circumnavigation of the Globe by the Austrian Frigate Novara* written in 1863. Many of the books in our collection are not found in the catalogues of any other libraries in the world and are irreplaceable.

Although rich in historic and archival materials, the Devonian library strives to be on the cutting-edge of library and research services. We currently provide high-speed Internet to students and researchers and access to 38 web-based life sciences databases for literature searches. We also offer inter-library loan and same day in-house document request services to BMSC users. At present, our library catalogue is undergoing a substantial upgrade, which will allow it to be published on the web for improved service and easier access.

Whether you come to read up on the latest in genetic research, search through rare historic marine and zoology documents or marvel at the panoramic view of Barkley Sound, all visitors to the Devonian Library must appreciate its unique and valuable place at the Bamfield Marine Sciences Centre.

To learn more about the Devonian Library please visit the homepage at:

<http://www.bms.bc.ca/library/> or contact the librarian at library@bms.bc.ca.

Continued from p. 1

Named after Dr Michael Smith, who won the Nobel Peace Prize in 1993 in chemistry, the award honors groups or individuals who make an outstanding contributions to the promotion of science in Canada outside the regular school system.

Dr. Rich Palmer (U of A) nominated the public education program for this award which was presented on June 20th in BMSC's Rix Centre for Ocean Discoveries, while visitors enjoyed the sunshine, the panoramic view of Barkley Sound and even a visit from a feeding humpback whale at the mouth of the inlet.

Each year, BMSC's public education program reaches out to more than 4,000 children, young adults and adults, offering experiential learning opportunities that are without rival. Students and teachers from western Canada take field trips to the centre, participate in video-conference labs, and learn in the classroom through OceanLink, popular marine science web site for youth, and OceanNews, an ocean science newspaper and learning package for middle school learners and teachers.



"The team is delighted with the national acknowledgment of their hard work, passion and enthusiasm for science" praised Dr John Holmes, acting director of BMSC and University of Alberta professor emeritus. "As part of our commitment to community we are involved in stewardship and conservation projects as well as facilitating innovative and extremely successful volunteer work experiences for young scientists."

Bamfield Marine Science Centre (BMSC), located in Barkley Sound on Vancouver Island, offers a unique research environment to Canadian scientists and students. Run by a consortium of five universities (U of A, Simon Fraser, UBC, U of C, and UVic), BMSC has attracted world-class research biologists, ecologists and oceanographers for almost 35 years, pioneers pushing back the frontiers of knowledge in marine and coastal science.

Thank you...

On November, 29, 2005, the BMSC Public Education Program received a \$1,000.00 donation from Labatt Breweries of Canada. BMSC would like to thank and acknowledge Labatt for their generous donation.

The Labatt's area of focus for giving is on developing leadership for young adults. Partial proceeds of the donation will go towards providing a small bursary to all the participants of the Spring 2006 Marine Biodiversity Youth Forum.

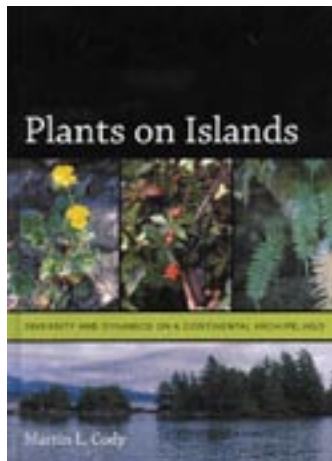
New this summer: Plants on Islands

Released this summer, Martin L. Cody's *Plants on Islands: Diversity and Dynamics* on a Continental Archipelago is the culmination of almost a quarter-century of research on the island biogeography of plants in Barkley Sound, much of which was done at the Bamfield Marine Sciences Centre.

Cody has gathered extensive data on the diversity, dynamics and distribution of about three hundred species of plants on over two hundred islands to examine the validity of Island Biogeography Theory. *Plants on Islands* also examines island biogeography phenomena such as: island relaxation to lower equilibrium species numbers post-isolation, plant distributions variously limited by island area, isolation and climatic differences, adaptation to local abiotic and biotic environments within islands, and the evolution of different island phenotypes.

Dr. Martin Cody is a professor of Biology at the University of California, Los Angeles. He has co-edited: *Biogeography of Islands in the Sea of Cortez* (2002), *Long-Term Studies of Vertebrate Communities* (1996), *Ecology and Evolution of Communities* (1985), and *Habitat Selection in Birds* (1975).

To see Martin Cody and other researchers BMSC publications, please visit <http://www.bms.bc.ca/library/>.



NSERC recognizes local fishing family

NSERC (Natural Science and Engineering Research Council) honored Bob, Delores and Jim Bowker for their interest and help in the advancement of Canadian research. The Bowker family was nominated by BMSC's Dr. Chris Wood who recognized their important contribution to Canadian research. The Bowkers have shared their local fishing knowledge and fish species to both BMSC researchers and students.



Waves and Currents is published by the Bamfield Marine Sciences Centre

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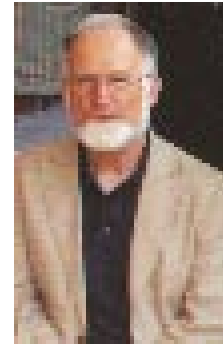
RETIREMENT

Dr. Rob DeWreede

UBC researcher, professor and BMSC instructor Rob DeWreede recently retired from over three decades of work in temperate and tropical locations. He worked in both Hawaii and the Philippines where he established carrageen producing seaweed farms. In British Columbia, he studied the demography and biomechanical properties of many kelp species.

Dr. DeWreede has a long history of teaching at both UBC and BMSC. A favorite among students and faculty, he regularly instructs botany, phycolgy and marine ecology courses at both schools and has supervised many undergrad, graduate and PhD students. Dr. DeWreede serves as a member of WCUMSS management council and the BMSC representative at UBC.

In honor of his retirement, a symposium was held in Vancouver this summer by his former undergraduate and graduate students including his first student, Wendy Nelson, who traveled from New Zealand to give her presentation and her best wishes to Rob.



“He’s very knowledgeable and will attempt to answer all questions to the best of his abilities....he strongly cares for students and enjoys interacting with them” UBC undergrad student

BMSC’S RIX CENTRE FOR OCEAN DISCOVERIES FEATURED IN DESIGN QUARTERLY

Design Quarterly, a magazine dedicated to showcasing B.C.’s architects and interior designers featured the unique design of BMSC’s Rix Centre for Ocean Discoveries in its winter 2005 issue. With over 1200 m² of conference, classroom and research space dedicated to marine and coastal research, the Rix Centre has become a valuable addition to the Bamfield Marine Sciences Centre. The unique architecture has captured the natural beauty of the ocean with its scallop-shaped roof and ethereal jellyfish inspired hanging lights. In addition, the building inspires its visitors with a panoramic view of Barkley Sound and the mountains of central Vancouver Island.

The Rix is ideal for a memorable conference or concert venue, and had been used for functions such as Music by the Sea, the Pacific Ecology and Evolution Conference and even a wedding in August. It is equipped with a kitchen, large meeting rooms and state-of-the-art video and audio systems.



The Victoria-based company de Hoog & Kierulf Architects completed the project in the spring of 2005. The construction of the building was made possible by the generous donations of Dr. Donald B. Rix, chairman of the Board of Directors of MDS Metro Laboratory Services. It is Dr. Rix’s vision and the endeavors of the Bamfield Marine Sciences Centre to provide world-class research and teaching facilities to inspire discovery, innovation and excellence in marine and coastal sciences.



Western Canadian Universities Marine Sciences Society