The

# Western Shorefast

A joint newsletter of the Bonne Bay Marine Station and the Community-University Research for Recovery Alliance



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# Bonne Bay Marine Station

In 2002 Memorial University President Axel Meisen said: "The opening of the new marine station at Norris Point is one of the highlights in Memorial University's annual report for 2001-02. It will give faculty and students new means to be highly innovative and creative in their studies and work."

The construction of the \$3.2 million facility was funded by the ACOA, the Gros Morne Cooperating Association, the Province's Department of Industry, Trade and Rural Development and Memorial University and is operated jointly by the Gros Morne Cooperating Association and Memorial University.

Before this magnificent facility was built, marine biology research and teaching had been going on in Norris Point for more than 30 years.

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Join Darroch Whitaker for a birding hike during the Trails Tales and Tunes Festival. The spring birds are returning and Gros Morne is ringing with the songs of finches, chickadees and sparrows. Maybe you'll see a downy woodpecker!



Photos courtesy Dave Robbins

# Oral Histories of the BBMS

CURRA students Elizabeth Russell and Erin McKee contacted some of the researchers and students who spent time at the Bonne Bay Marine Station—here are their impressions.

## Frank Murphy

My involvement began in 1967 when I was a disgruntled teacher. I was finishing up my eighth year of teaching, and I wasn't happy with it and what I really wanted to do was go into biology, specifically marine biology. It was 1968 and in March of that year I met with Dr. Marshall Laird, who was the head of the biology department at Memorial.

McGill University was planning on setting up a marine lab on the west coast, in connection with what was called the IBP, the International Biological Program. He offered me the chance to be involved with that program and I took that chance, although I was not a graduate student.

I gained some experience that summer with Dr. Fred Aldrich in the Logy Bay Marine Lab and saw how things were done there.

Meantime, in the end of May, Dr. Laird told me that the department was in negotiations with somebody in Norris Point to buy a two-story house with 5 bedrooms, indoor plumbing, full basement, the whole kit and caboodle. As soon as the house was purchased and the title was cleared, they would begin to make renovations and modifications. The idea was that there had to be living space there for the individual who was in charge, and of course there also had to be lab space there.

The end of July, I contacted Dr. Laird who told me that the negotiations were complete, and that I should go out to Bonne Bay the next week and deliver the cheque to the people who were selling the house. So I packed up my wife and my three children, and we drove across the island. overnighting in Woody Point and crossing on the ferry the next morning. We did not completely finish our business that day, so I went back to St. John's and on the 25<sup>th</sup> of August we went to Bonne Bay again, my wife and I. We spent an hour with Mr. Clavton Organ, and finalized everything.

Then, in October, I met with Dr. Laird again, and we discussed some problems that the carpenter, Ben Knott, had run into out there.

I went on IBP payroll on January 1<sup>st</sup> of that year. McGill's part in this overall program was, they were looking at a study of

productivity in the Gulf of St. Lawrence, how much energy is captured from the sun by the plant plankton and how many of the animal plankton feed on the plant plankton, and so on up through the food chain. And their plan was to set up shore bases at Riviere du Loup, New Brunswick, Ellerslie in Prince Edward Island, and Bonne Bay, Newfoundland. In addition they had hired a 94foot coastal boat from Grand Bank, the Ambrose Foote, and whereas the rest of us would be working from a shore-based station, they would be doing what are called transects, going from Newfoundland over to Labrador and back, all the way up the Gulf. And they would be doing the same kind of work, basically, but they would be doing it offshore in deeper water.

In February we flew to Barbados, where McGill had a marine station where they carried out research. They brought all of us down there for two weeks, and trained us in the use of all of the procedures we had to follow, the forms we had to fill out and all else related to the project.

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## SPRING, 2010

#### THE WESTERN SHOREFAST



# 2008 Biology 3714 class on a field trip

Dr. Joe Wroblewski is a Professor (Research) at the Ocean Sciences Centre at Memorial University of Newfoundland in St. John's. He is also the Chair of the Interdisciplinary Graduate Program in Environmental Sciences at MUN. Dr. Wroblewski had a leading role in establishing the science basis for designating Gilbert Bay in Labrador as the first Marine Protected Area in Canada's subarctic coastal zone.

He teaches fisheries ecology and fisheries resource management with the viewpoint that fishers and their knowledge should be part of the management process.

For the past 8 years (2002-2009) Dr. Wroblewski has cotaught (with Dr. Dave Methven of UNB) a field course on estuarine fish ecology at the Bonne Bay Marine Station.

In June 2009 the CURRA Report "The Nearshore Fish Fauna of Bonne Bay, a Fjord within Gros Morne National Park" by Jens Currie, Joseph Wroblewski, David Methven and Robert Hooper was produced. The data presented here were collected by the students and instructors of the field course Biology 3714 (Estuarine Fish Ecology) taught at the Bonne Bay Marine Station during the years 2002 and 2008. The objectives of this report were to document the nearshore fish fauna within Bonne Bay and provide baseline information for conservation efforts.

Analysis of the fish fauna data collected during teaching the field course suggests that several fish species are resident year round within Bonne Bay. The faunal composition of Bonne Bay is diverse and contains the Laurentian North population of Atlantic Cod designated by COSEWIC as "threatened", as well as Striped Wolffish, listed under Canada's Species at Risk Act (SARA). There is a genetically distinctive population of redfish living in Bonne Bay.

A PowerPoint presentation showing the fish species living in Bonne Bay will be posted on the CURRA website [http://www.curra.ca].

# Ongoing Research in Bonne Bay



# CURRA-linked student studying fishery closures

Kim Olson, a Master's student in Geography, is conducting a study on fishery closures in the province. With a focus on voluntary closures, Kim will be spending her summer in the Bay of Islands and examining the voluntary snow crab and lobster closures in Bonne Bay and Trout River respectively. She will conduct interviews throughout the summer with community members, fish harvesters, and members of the private and public sectors to examine the processes that led to the closures and their link to the community.

Kim worked as an interpreter at the Bonne Bay Marine Station last year. She will be in the area until September. Part of the International Coastal Connections project, she is supervised by Dr. Chuenpagdee a CURRA coinvestigator.



Seals in Port aux Choix-Sebastien Caty

During the first few weeks of March, harp seals were coming ashore all along the coast of the Great Northern Peninsula to whelp. This was a very unusual occurrence for this area; most of the older residents cannot recall this ever happening in such numbers. For many of them, it was a real sign that the weather patterns are rapidly changing. The noise from the thousands of seals calling to one another kept many residents awake through the nights.

"If there's no ice in the Gulf or in the Straits, the poor things have to go somewhere to have their pups", said one resident of Port Saunders, "but they have such a human cry, it'd break your heart to hear them."

Typically, the whitecoats are weaned after 15-18 days, when they are able to survive on their fat stores. The females leave the pups shortly afterwards to mate.

Whitecoats have been spotted as far south as Norris Point, Rocky Harbour, Baker's Brook and Green Point in Gros Morne National Park.

DFO estimates that thousands of seals came ashore to whelp around the coastal communities on the Northern Peninsula. Theatre Newfoundland and Labrador's production of *The Oracle at Gros Morne*, a comedy-drama by Berni Stapleton commissioned by the CURRA, will have its world premiere on July 8, 2010 at the Gros Morne Theatre Festival's Warehouse Theatre in Cow Head, Gros Morne National Park.

The fish are gone and the people are heading to the mainland in droves, so she heads for the mountain. Gros Morne Mountain, that is, to look for answers or direction while her bewildered husband sits at home mending his rotting nets. They both ponder what all Newfoundlanders & Labradorians are asking these days: Will the fish come back? Will we be able to live, and make a living here in the future? Will our people come back? What's to become of us? Only one being will speak the truth – *the Oracle at Gros Morne* – that is, if her husband will leave her alone long enough to figure it out. Directed by Sarah Stanley with set design by Denyse Karn.



## CONGRATULATIONS KRISTEN

Congratulations to Kristen Lowitt who has been awarded a SSHRC J. A. Bombardier Canada Doctoral Scholarship. The scholarship is valued at \$35,000 per year for 3 years. Kristen is an Interdisciplinary Ph.D. student at Memorial and is a member of the Community University Research for Recovery Alliance (CURRA) team. Her Ph.D. research focuses on understanding how social, economic and ecological changes in communities around Bonne Bay may be influencing the food security and food provisioning practices of households, with a particular consideration of the role of fish in household food practices and dietary decisions.

Kristen has a background in local food and food security research projects with a Master of Environmental Studies degree from Dalhousie University.

Information on the J.A. Bombardier Graduate Scholarships is available at <u>http://www.sshrc.ca/site/applydemande/program\_descriptions-</u> <u>descriptions\_de\_programmes/fello</u> wships/doctoral-doctorat-eng.aspx' Bonne Bay Marine Station-continued from Page 1

Dr. Bob Hooper has probably seen more of Bonne Bay than any other resident, since he has performed thousands of dives over the past forty years for research and student instruction. He has been the Director of the Station for many years and has made an extraordinary contribution to the body of knowledge about seaweeds and marine algae. During the recent Bonne Bay meetings held by CURRA, Dr. Hooper made several presentations containing photos and anecdotes from the 40 years he has been studying the area and teaching courses. These presentations were received with delight, and provoked many questions during the discussions afterwards. Dr. Hooper will be appearing regularly on VOBB to address questions that residents may have about their Bay. The Bonne Bay Marine Station will offer 7 biology courses this summer and will host 3 national conferences in the fall, in addition to its regular interpretive and outreach activities, including *Celebrate the Sea Day* on May 22.

# CURRA Workshop: Value Chains and Fisheries

The Community-University Research for Recovery Alliance partnered with Charles Mather in Geography to host a graduate student/researcher/communi ty stakeholder workshop on Global Value Chains and Local Fisheries. The Workshop took place on April 12th and 13th on the MUN campus.

The global value chain framework is a key contemporary approach to understanding the dynamics underlying the production and consumption of food in an increasingly globalised economy.

Global value chain research has improved our understanding of commodity production and global exchange in significant ways. In particular it has provided insights into power dynamics along value chains, interactions between actors, and how chains are restructuring in the face of local and global processes.

There are many value chain studies on the production and exchange of fresh fruits and vegetables, and processed food products like coffee and cocoa. Yet there are far fewer studies on fish value chains.

The purpose of this workshop was to examine the potential contribution value chain analysis can provide to our understanding of Newfoundland and Labrador fisheries.

Visit the CURRA web site www.curra.ca for a full description of the event and stay tuned for the workshop report.

# Summer Schedule for the Marine Station

May 9	B3709 Marine Principles and Techniques begins	Dr. Hooper
May 10	Interpreter training begins	
May 14	TTT Festival begins	
May 22	Celebrate the Sea Day	
May 25	Trading Books for Boats begins	Allison Eaton & staff
May 30	B 4710 Marine Ecology begins	Dr. Connolly
June 20	B 3714 Estuarine Fish Ecology begins	Drs. Wroblewski and Methven
June 21	Discovery Day	Holiday
July 1	Canada/Memorial Day	Holiday
July 4	B4014 Biology of Boreal and Arctic Seaweeds begins	Dr. Hooper
July 16	Norris Point Come Home Year Celebrations begin	
August 1	B4912 Marine Mammals begins	Dr. Hood
August 22	B3709 Marine Principles and Techniques begins	Dr. Hooper

## Oral Histories of the BBMS --Elizabeth Russell & Erin McKee

#### Continued from page 2

#### Frank Murphy continued

The plumber was Mr. Reuben Samms, who lived next door and, before very long, we arranged that he would become a caretaker of the property. So he took on the responsibility of checking the place right through the winter, looking after the furnace, keeping an eye on the equipment and that sort of thing. And he had that position for as long as I was there and for a long time after. He and his wife Ada became very, very good friends with my wife and myself and also with Bob Hooper, and I think that still exists.

The *Ambrose Foote* came on the ninth of May and two fellows who were working on her were Fritz Axelson, from Denmark and Fikret Berkes, from Turkey.

We got some tanks made and our electrician hooked up a pump for us, he had what's called a float valve on the top, and on June first, 10:30 that night, we had seawater running into that tank. Over the next couple of months we built a couple of tables, and they were fibreglassed, with a drain on one end. We had plastic hoses with stopcocks, and we ran the water tank through these tables, so we had flowing seawater at all times there, and we were able to keep all kinds of things alive.

But I also used it as a water bath for a series of experiments that I was carrying out with my own work. That was the beginning of the seawater system out there and it remained in good functioning condition for years and years and years afterwards. It was probably there till they tore the station down. It worked really, really well. The pump'd break down occasionally, but nothing really serious because, in September we would haul up that pipe again, take up the pump, hose it all off in fresh water, and then store it properly in the shed for the winter.

We also had a very small wet lab in one little pantry area, sort of, down off the shed, and this fellow, Fikret Berkes, he spent weeks there. He was working on his PHD and he did an awful lot of his work there, got his beasties from the bay and did his work there, in that area.

Mr. Maynard, whose boat we used, he was a pretty smart man and he knew the routine perfectly. And we had also gone outside the bay at the beginning of the previous year, because my mind used to come up with all these mad schemes over the winter.

We had gone out to our 'station,' as we called it, and we dropped a buoy out there. We ran out 125 or 150 metres of cable and we put a floating orange buoy at the top of it. We would go out and just tie on to that buoy. So basically we were in the same spot every week, which gave us more uniform conditions. Mr. Maynard knew all of the ropes and between the two of us, we were able to get everything done quite satisfactorily.

My wife came out with me on one occasion and she helped out; and she helped me an awful lot in the lab. We used to go out at 6 o'clock in the morning, and we'd be back by 10:30 or 11 o'clock once we had the routine down. But it would take me the rest of the day then to do the filtering, divide the samples, some of them had to be frozen.

And then every now and then I had to take the samples from the freezer and put them into coolers with these freeze packs, drive down to Deer Lake, to the airport, put them aboard a plane, and actually watch while they went aboard the plane to see that they got aboard. This was a plane from Deer Lake to Montreal. Then I would drive back, phone McGill and say, yes the samples are on the way, and they would go to their airport and pick them up and bring them back for analysis. And that was just part of the routine.

In early April, I found out from my master's supervisor, Dr. Charles Davis, that MUN intended keeping the station as a permanent west coast station. They had bought it in 69; the arrangement was Memorial would buy the place and set it up. McGill would run their project out of there, through me. They would supply most of the equipment, especially all of the specialized equipment, and Memorial would provide ordinary things—like benches for the labs, one of these old house balances, a drying oven etc. Memorial also provided us with quite a number of books, so we built up a bit of a library. And so it was a completely cooperative undertaking. Dr. Laird at Memorial and Dr. Steven at McGill were in constant communication and I was in constant communication with both, because when I had to report to McGill, I also reported to Dr. Laird. It went extremely well, I must say; it worked out quite nicely altogether.

Mr. Murphy worked at the station until November 1972. His entire interview will be available on the CURRA web site.



Photo of Max Dunbar courtesy of Dougal Dunbar

# Dougal Dunbar spoke to Erin about the Dunbar connection to the BBMS.

My father, Dr. Max Dunbar, was a marine biologist at McGill and I worked with him on a ship out of Grand Bank for three summers running. The vessel *Ambrose Foote* was chartered by McGill University to conduct extensive biological programming in the Gulf of St. Lawrence from 1968-70.

Now, that was part of a larger program called the International Biological Program, to which my father had been appointed Director of Marine Productivity. The program was measuring marine biological data all over the planet in those years.

The Bonne Bay Marine station was one of at least a half a dozen marine stations that were operating that we would visit every two weeks or so as we traveled our circuit of biological stations in the Gulf of St. Lawrence. We'd collect their samples and then we'd take them up river to Rimouski area and they'd travel to Montreal for analysis at McGill.

# Oral Histories of the BBMS --Elizabeth Russell & Erin McKee

As a McGill marine biologist, he was the one who obtained the funding to apply for this whole program to be put in place. At that time he ran the Marine Sciences Centre at McGill and he had a lot of graduate students, many of whom actually worked as crew on the scientific side of the operation. The shore stations were all part of that same program. I suspect that he had contacts at Memorial and other universities throughout Atlantic Canada, and he would canvass them and see who would like to join in and become part of this program and Memorial ran the one at Bonne Bay.

When we came in on the *Ambrose Foote* we would also gather data from Bonne Bay itself and that was part of the work that we were all collectively doing: about 4 to 6 scientific crew, technical crew, and one or two people at the most I think in Bonne Bay or at any given shore station.

We had hydrographic equipment, which means that we were able to lower a wire in the water and, with sample bottles, collect temperature and salinity information, and in those years it was slow. It's amazing how it's done these days, it's real time, but in those years basically it had to be done by sampling the water itself and analyzing it after the fact. It was slow, and timeconsuming. You had to keep track of a lot of bottle numbers and all of the information.

We did some oxygen titrations on the ship: we had a lab on the ship, because that was the sort of timesensitive stuff that you couldn't leave for too long. But anything to do with salinity, or with nutrients- most of that data was actually analyzed at

#### McGill.

In the latter years we had what we called an S.T.D. which was a device, a probe, that was sort of an early, early advent of real-time sensors and it was lowered in the water and you could see the temperature on one graph and the salinity on the other graph, and that was pretty cutting edge stuff in 1970 I guess.

The other thing I can tell you about the Bonne Bay experience is that at the time we were there on the *Ambrose Foote*, Parks Canada from Ottawa were also there and they were doing the baseline surveys for the establishment of the park. So we helped them out by taking them out into the deepest part of the fjord and gathering scientific samples, biological samples as well as scientific data, which McGill later gave to them, but we gathered it.

We also towed plankton nets. That was a big part of our operation as well as recording the water data. So...nets to sample crustaceans and shrimp, and species in the upper layers of the ocean. We gave samples back to Parks Canada. We gave them a good deal of our material and they were pleased to receive it.

Sunset over Bonne Bay, 1960s



# Oral Histories of

Former student Pierre Ouijon writes:

I'm an Assistant Professor of Biology at the University of Prince Edward Island and a MUN graduate. I graduated with a PhD in Marine Biology after working for three summers in Bonne Bay.

I keep strong research links with my former supervisor at MUN (Paul Snelgrove), and less formal but very cordial links with Bob Hooper and the personnel of the Field Station. The beauty of the place is undeniable and personally, I remain very much attached to the place. I came from Chile, and didn't know much about Newfoundland or Atlantic Canada in general. However, I'm happy to have done all my work in Bonne Bay.

I was going to do marine biology in Memorial anyway but working at Bonne Bay introduced me to a very interesting habitat (the eastern part of the Gulf of St. Lawrence) that later became useful for my overall career goals: I currently work in PEI, which is somehow related to Bonne Bay as it is also part of the large Gulf of St. Lawrence.

I did work in the old field station from1999-2001, but that probably is not what you call "early days". In my days there, the field station was a house adapted for the purposes of teaching and research, complemented with a residence house (next door), and a wharfshed where a system of recirculating water was set.



station with the new facility. The old one had the limitations that you may expect from three buildings "adapted" to do research. But those were structural limitations only, as it was a wonderful environment to conduct research. I am one who can really speak about it because I really got the benefits of it, and I'm grateful for that. The new facility is exceptional as it has the space, the equipment and virtually everything that a superb research stations needs. I have been there for brief visits (for example as a TA in a course in my last year of PhD), and it felt well equipped and very comfortable.

There is no question that field courses are extremely valuable. No other type of course offers an eyeopener experience like they do. I teach such courses in my current university, and the style that I follow is some sort of combination of what I saw and learned from the field courses that Bob Hooper and Paul Snelgrove teach in Bonne Bay.

There is one personal experience that's very relevant: I met my wife over there. Even though she is from Nova Scotia and I'm from Chile, we both remain Newfoundlanders at heart, and that all started in Bonne Bay. We both remain attached to that place and hope to bring our two-year old daughter either this summer or next for a visit.

# The Scotties Thief of Gadd's Harbour

the BBMS--Elizabeth Russell

Local residents used to have horses that were employed in the winter and spring to bring firewood from the nearby hills. In the summer these horses would be brought to the resettled community of Gadd's Harbour to graze on the plentiful pasture there.

Marine biology students were always brought to Gadd's Harbour on field trips, often staying for extended periods. Dr. Hooper recalls the antics of one of these horses, which quickly developed a taste for Scotties potato chips brought over by the students.

This wily creature learned to steal the packets of chips from any unguarded knapsack and gallop to the far end of the beach where he would deftly open the bag by stepping gently on it. He would gobble the chips and come back looking for more unsuspecting students.

In fact, Dr. Hooper admits to bringing along a few bags of chips on purpose now and then so he could watch the horse's antics and the students' reactions.

Former students spoke very fondly of these field trips and of Dr. Hooper's expert guidance and great kindness towards them. Several claim that their experiences in Bonne Bay were formative, and that their decisions to become marine scientists first took root during these summer field trips.

I can compare the old field

# Oral Histories of the BBMS--Elizabeth Russell & Erin McKee

## Deirdre Puddister

I went to Bonne Bay first as an undergrad, I was completing my honours degree, so I went out there in the summer of '99 and started with one of the early season courses, 3709. After I finished my honours degree I came back in the following spring and did 4810, which is a research-based course for students who are farther along in their degree. And you do an independent research project, and then you execute it. You make all your plans before you go out in the spring, right after exams, then you do your actual research and your write-up while you're there.

Doing the courses in Bonne Bay led me down a completely different path; it brought me to my Masters degree and certainly sharpened my skills in terms of research, so that doing the courses completely changed what I was doing with my life.

Well, one thing that we did enjoy, every year Bob organized a trip for students to Labrador. We drove to St. Barbe and went to the southern coast of Labrador and we dove.

I remember myself and Bob did a dive off the wharf in Red Bay, and the students were so flabbergasted at what they saw, there were sea butterflies, and they look like these little angels in the water, they looked like snow angels. The water was so full of them that it looked just like a snowstorm. The reason why we went to Labrador was to get the 'arctic' experience and to see the creatures that are unique to colder waters. We wouldn't have seen that had we been on the island, so it was a pretty unique experience.

So Bob and myself were going to do a dive. Bob knows these areas like

the back of his hand. So, he said 'ok, when we get in,' he said, 'the current will take us out about 7 minutes, and then it will reverse and take us back in so we won't have too big of a swim'. And we went out, they had had a big storm, and so the current was off.

We went out for 7 minutes, kept going, kept going, and kept going. Fifteen minutes later, Bob looked at me and he gave me the signal to go to the surface, and I was shaking my head 'no, we're too far'. 'Go to the surface'. And we were about a kilometre from shore, so we had to swim back in. I wasn't long warming up after my cold dip.

Another incident I remember was the wind gust. William and I had our backs to the water, which was a good distance from the actual waterline, so we weren't worried about anything—and we could see the students and didn't know anything until this wind caught us and it knocked William flat down, like on all fours. It sent Bob kind of skipping across the rocks, but it picked me up, blew me over William, and I just caught the corner of his shirt as I passed over him, like feet, hands, everything, up and over William, and I came down on the other side of him, about 20 feet away from him, and I landed so hard that I broke my hand.

The students saw every bit of it, and they said they just saw me get picked up and go over William and land on the rocks in front of him, and he was sitting on the ground, with his mouth hanging open. But they said it was almost like a wind swirl came in off the water and just picked us up and tossed us. I mean Bob and William are both big men, you know, and it knocked one completely on his face and sent the other one flying across the rocks, and picked me up and tossed me. But anyway, I ended up in a cast for six weeks. *Continued on page 17* 

#### *Fikret Berkes* (*Natural Resources Institute, University of Manitoba*) *writes:*

I was at Bonne Bay briefly in 1969 before there was a Station (and a National Park). Our research vessel, part of a McGill University based marine ecology and oceanography project in the Gulf of St. Lawrence, stopped there for a few days and sampled the Bonne Bay fjord.

The next year (1970) I decided to spend a couple of months at Bonne Bay. I helped Frank Murphy and his assistant to set up a primitive lab at the site of an old fishing building built on stilts above the water. With a few rubber tubes and a small pump, we were able to set up a few tanks with circulating seawater since we were right over the water. For my purposes, the lab offered a unique opportunity.

Nowhere else in the Gulf of St Lawrence could one do that (except maybe at the mouth of the Saguenay River, but I did not try that). I did part of my graduate work in this lab, and wrote a thesis chapter based on Bonne Bay's live Euphausiids. The PhD thesis was completed in 1973 at McGill.

#### SPRING, 2010

# Oral Histories of the BBMS -- Bob Hooper

I first came to Bonne Bay because of Frank Murphy. Frank had been a schoolteacher who fell in love with biology and eventually did a Masters degree in our department. He was the one who came first to work with the International Biology Project. Frank needed help so I grabbed the chance to see a part of Newfoundland I had never seen before. Some work had been done on marine invertebrates and some fish species, but not much marine biology had been done in Bonne Bay up to then, apart from the information that the local fishermen knew.

Ed Maynard used to charter his trap skiff. It had a bit of a wheelhouse on it and a 3-cylinder Lister diesel. We collected plankton and water samples and, in our spare time, I'd go snorkeling. The first time I went under water I saw four species of seaweed that weren't supposed to be in NF, according to the knowledge of the time. That was when I got hooked on Bonne Bay.

The station was a typical 2-storey outport house. The top floor had a very small kitchen, a living room and three very small bedrooms. That's where Frank lived with his wife and four kids when they were here. The main floor had two larger rooms that were converted into labs and a small bathroom that was converted into a special lab where we did the radioactive work and the chemical work. It had a full basement, so we had a lot more storage space, ironically, than we have now.

The second building was an old fish store, one of the oldest buildings on the waterfront. The timbers had been adzed and pit-sawed, sort of squaredoff tree trunks, that had been covered with short boards off old packing cases. By the time the new building was being planned, the old buildings had reached a state of decay such that they had to be taken down. They were rotten. I wish we could have saved the old store.

The IBP project ended in 1973, and I had been coming out periodically with Frank to help him. There were a few people in the Department at the time who had an interest in marine biology, Robin South, Don Steele and Alan Whittick come to mind. The Biology department had started a student Biology Society and we started to come out during the mid-term break to scuba-dive through the ice, to go cross-country skiing and make observations. I discovered that there was a lot of dynamic activity happening in the Bay in the winter just as much as in summer, especially with the colder water species.

There are two totally different biologies here, between the summer and the winter. In winter, you'll see all kinds of seaweeds and species that you don't see in the summer at all. Some of them go dormant in the summer, like our terrestrial plants go dormant in the winter. They can degenerate right down to just a few microscopic structures or spores that will re-grow when you get cold conditions again. There are advantages in the winter for things that can survive the cold temperatures: the nutrients in the seawater are maximal and the water is clearest in the winter.

The head of the Department, John Phipps, was contacted by Miller Ewing, head of the University Houses and Grounds Division to come and see if anything could be salvaged from the station before it was abandoned. Memorial was going to pull out of the place. It was assumed that the Station



was a temporary acquisition for the IBP project and had no further use. I heard a rumor that Memorial was thinking of offering it to the Boy Scouts, as a camp. I went straight to Mr. Ewing and told him that there was considerable interest in maintaining it as a research station. I managed to get a number of people onside and eventually Dr. Phipps wrote a letter saying that the Biology department wanted to keep the Station and would take responsibility for it.

At that time, we had a kind of "Canadian Tire" aquarium, with the kind of pump you would use for your cabin pumping water up to three or four plastic tanks, and a dozen or so plastic laundry tubs. I used them to keep seaweeds alive for my own research, and soon we discovered the snow crab population and started to do research on them. From that time on, we had a sea water system. It was very rudimentary, but it ran for the best part of thirty years without ever failing.

The people who were working here then were highlevel graduate students, professors and biologists...

# Oral Histories of the BBMS --Bob Hooper-continued

During the seventies, we experimented with field courses and field trips that were part of courses, in Conception Bay, but that was never very satisfactory. There were two issues: the Avalon was a pretty boring spot for marine biology compared to the south coast or the west coast—much less biodiversity, fewer habitats, and so forth. The Avalon was neither warm enough nor cold enough and the ice conditions were neither complete nor absent; the south and west coasts had a better tidal range.

The people we had most to do with were Reub and Ada Samms, our next-door neighbours who did everything for us. Ada used to be the housekeeper and laundry-woman, and Reub was a kind of jack-of- alltrades—plumber, electrician, and handyman. We needed to come up with all kinds of adaptations to the equipment, even inventing, and if Reub couldn't solve a problem himself he found someone who could do it. He used to arrange boats for us. He was a sort of former-day Dennis Rumbolt.

We started thinking about a new building when the merchant next door, Max Caines, went out of business. It was a typical outport general store with food, dry goods, medicines, hardware, and fuel, absolutely everything. The population of the town was shrinking at the time, and Max's successor Don Harding could not make a go of it. MUN tried to buy the shop, but could not do so because of federal restrictions. The Samms were getting older, and were moving into other accommodations, so we bought their house and that took care of our student residence issues for a while.

During the late 80s, Aidan Kiernan at MUN took an interest and was

concerned about the conditions under which students were being housed. We didn't exactly meet the building codes for student residences. He had nightmares about the risks of fire and so on. As soon as the University started thinking about student safety, they realized there had to be a new building. In the meantime, Parks Canada had established itself, and took more of an interest in the work of the Station, and in collaborating with the researchers here. DFO was also interested because we had been doing some work with Jerry Ennis on various things, especially snow-crab populations. They were behind us getting expanded facilities.

Courses have been taught regularly here ever since then. This year we will teach seven undergraduate courses and two graduate courses. During the introductory course the students learn a few outdoor skills: how to handle a boat and navigate a bit, how to keep from freezing to death, how to tie knots, how to use and maintain the different samplers and all those sorts of things. The advanced courses guide students through individual projects that they have chosen. They do all of the literature searches, the experiment designs and planning ahead of time, and when they come out here they concentrate on getting the data, analyzing it and writing up what they have been responsible for discovering.

In the 90s, the Discovery Centre concept was hatched and we almost became part of that. Architects, different levels of government and various government agencies such as ACOA and the Gros Morne Cooperating Association (GMCA) got involved. Things were coming together and Colleen Kennedy of the GMCA spearheaded the idea of various groups collaborating on a new building.

The Public Aquarium component of

the station came about as a result of Parks Canada and the GMAC, along with other tourism operators, making a good case for it as a tourism initiative. As an educational institution. MUN would not have been eligible for ACOA funds. We have had our problems with the pumps over the past few years, largely because of the design, but now those problems have been solved and a new pump system has been commissioned. We are grateful to Dr. Barb Neis, Keith Hiscock and the GMAC for their part in making this happen.

For the future, I wish that we could find the means of providing bursaries and/or scholarships for the students who come out here entirely at their own expense. They are mainly from this province, but increasingly from other places in the world, for which the name Newfoundland is synonymous with ocean studies. We could expand our course offerings and do cutting-edge research here. We could attract many more students to study marine biology if we worked at it.

Financially, we contribute a lot to Bonne Bay, through our purchasing and tax contributions as well as the spending of our students, their families and guests. Over the past few years, more than ten thousand visitors have come into the Station.

If the BBMS did not exist, there would be no opportunity for students in this province (and in other provinces who have no such facilities) to do field work in marine biology. It is an essential educational facility.

## Oral Histories of the BBMS --Lindsey House

### Fiona Cuthbert

Fiona Cuthbert was a lab instructor in Biology and frequently collected specimens in Bonne Bay during the 1990s and early 2000s. She worked at the Station with Dr. Hooper in the 1990s as a research assistant studying sea urchins. She became station manager in 2003. The following is excerpted from an interview done in October 2009

Bonne Bay Marine Station is a marine ecology research and teaching facility that is also open to the public during the tourist season. The facility is situated in Norris Point, on a point right between the two arms that make up Bonne Bay. This location is perfect because the Bonne Bay area has highly diverse habitat, including marine plants, fish and invertebrates, and many species of marine flora.

Facilities at the marine station include teaching and research laboratories, library/resource centre, multimedia theatre, aquarium, residence accommodations, and small boats, with the intention of providing both a good learning environment and a good facility for marine ecosystem research. It also includes an Ocean Observatory linked to the Internet, which allows researchers located elsewhere to observe and analyze the ocean ecosystem in action. As well, visitors can observe marine flora and fauna in the station's aquaria and touch tank and learn about the station's latest research.

The Bonne Bay Marine Station is operated by Memorial University of Newfoundland and the Gros Morne Co-operating Association.

"My first trip was as a grad student in 1989. There were two buildings. The first was an old fish loft, the ground floor dark and dingy with

above-ground pipes and a crude aquarium. The top floor was used for equipment and as sleeping quarters for some instructors. Another building, a typical outport two-storey house, accommodated two tiny labs and sleeping quarters for students (sometimes as many as 26). The residence facilities were very cramped and primitive. There was a big dining area and kitchen that doubled as a lecture room after breakfast was cleared away and as a recreation area after supper. In the 80s, it looked pretty much like the photos in Elmer Harp's book.

There are three main components to the Station: 1. Undergraduate teaching: 7 courses with a field component (5 from middle of May to middle of August); winter course students select topics and do the literature reviews, set up protocols, gather equipment and then collect and analyze the data in the two week course. Two Ontario colleges do terrestrial field courses in the fall, and teaching interns do a training course as well.

2. Marine research: Graduate Masters and PhD students as well as MUN faculty conduct their research during the summer. This research need not be marinebased.

3. Public education: The Station staff work with community partners to offer such programs as *Trading Books for Boats*. With the CURRA they are engaged in offering workshops and other such events. In addition, they offer tours of the Station for the public, mini-enrichment programs for high schools, and many activities during Celebrate the Sea Day within the annual Trails, Tales and Tunes Festival. BBMS often hosts small conferences and community meetings.

Students feel great about living here and take part in many community activities. They hike and sightsee in Gros Morne and participate in many social activities within the community and the station. They often volunteer on the Bon Tours boat tours and in the annual beach cleanups.

Community reaction to BBMS is very positive. There is great support from the Town Council and local residents, especially the tourism businesses. BBMS buys local whenever possible and employs mainly local people, such as Dennis Rumbolt (maintenance supervisor) and Joyce Maynard (facility custodian), and Laurie Haycock (gift store) as well as the students who work in the summer.

The CURRA has an office in the Station and its researchers and staff work cooperatively with local fish harvesters and other residents.

Fiona happily at work



### Paul Snelgrove

Snelgrove initially came to Bonne Bay as an undergraduate honors biology student in 1984. After he graduated from MUN, he went away, came back to NL in 1996 and began teaching summer courses and doing field projects of his own and with graduate students.

He has worked with students at both the old and new facilities, and particularly likes the comfort and space of the new station. In the old station, lectures were held in the kitchen with everyone crowded around the kitchen table. He remarked, "The old station was almost like camping, the simplicity of the old station was very appealing, but the new station is a great improvement."

"As a student I found it a great place to work. Students can be safe as it is a protected site rather than working from Logy Bay, for example, and risking getting swept off to Ireland. The Bonne Bay area is the most beautiful part of Newfoundland; biologically it is an interesting spot, with a convergence of subarctic and southern species, a diverse and biologically rich environment

## to work in.

Conducting field courses as a teacher allows for live specimen collection and doing things in the lab that you can't do in a classroom per se. Students develop a greater sense of independence in research and collecting; it is a positive experience for students to go out on water and collect samples rather than just abstractly thinking about it in a classroom. When I first went through the Bonne Bay courses I was in fourth year biology so had already decided to become a biologist, but my experience there reinforced my decision and gave me greater confidence.

I remember the experience of going out in the Boston Whaler; it was dead flat calm, visiting a large area of kelp across the bay, enjoying looking in the water and experiencing the environment,

The Marine station adds to community through the energy of young students who are keen on science, their enthusiasm for the ocean has to be contagious. People People come and want to see the marine animals in the aquarium;

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the station is a benefit to the community in that sense.

It is a real challenge to keep a field station running, but it serves a quite useful function so we should do what we can to support it.

This is a problem around the world for universities and field stations; they are expensive facilities but they provide access to oceans that people wouldn't have otherwise."

Snelgrove taught at Bonne Bay every summer from 1997 to 2008. His course covered experimental ecology of inshore Newfoundland waters, showing students facets of how the ocean works in coastal NL. He also has taught marine sampling methods, and ecology of open waters.

Snelgrove is now in South Africa with a project called Census of Marine Life (80 countries and 2000 scientists are involved). The purpose of this project is to improve understanding of biodiversity in the oceans. He is on the steering committee for this project, which will wind down in 2010.



## **Grant Gardiner**

Dr. Gardiner came to the biology department at MUN in 1979 with background in biology and oceanography. He taught Biology 4810 (field course) for many years with Bob Hooper.

Students would stay in the house, while he and Bob would sleep in the shed above the old aquarium, "lulled to sleep by the sound of running waters all night". It had good access to the water and the main floor of the house was converted to a lab area with living space on the upper floor, so it was a good facility for groups of a dozen or so students in a field environment.

Gardiner goes on to explain: "When they are operating at full capacity the BBMS can have two water intake pipes pumping water up to the station from the bay, and the deeper one brings in cold, clean water consistently which is great for maintaining animals in the long term, and the shallower one is a little warmer, so we sort of have hot and cold running seawater, or cold and colder running seawater! Water can be conditioned for whatever kind of experiment you are trying to do. There have been issues with the seawater pumps from time to time, mainly because of the design, but the BBMS is a tremendous facility that allows us to bring in groups of people and to provide excellent support for researchers who wish to do work in Newfoundland fjords."

Improvements were made along the way, in the water supply and facilities for live animals. Eventually the idea was to convert it to a modern field station, and "the foundation was laid for that by Bob Hooper, who had been going out there for field courses, as well as his own research; going out there in the winter, making important connections with the community and garnering community support." Gardiner particularly remarked on the partnership with the Gros Morne Cooperating Association. This partnership enabled MUN to get funding from ACOA for the new building.

Reuben Samms was the caretaker of the old BBMS for many years and when he passed away he arranged for the university to have the right of first refusal to his property adjacent to the station, which enabled MUN to have the space and land for the new station. "There were a lot of years in the shed above the aquarium before we had the new marine station in place."

The teaching program has been expanded and there are more opportunities for students. Existing courses have been modified so students can now essentially do five summer semester courses out there, each in two weeks. "That's a sacrifice for the students, because summer is usually when they're off earning money to try and keep their student loans down. However, it is really an unparalleled opportunity for students who are interested in marine issues and marine ecology to really get their feet wet, literally, and it's nicer going out there in the summer than in April when the traditional 4810 course was taught. Then the bay might have been iced over, or one day students would be out sunbathing and the next day in full foul-weather gear trying to get samples in a snowstorm. The weather is very changeable, and this kind of experience is important for students because they might not always be working in a controlled lab environment."

"Environmental education helps

students integrate across different subject areas, and those students are often high achievers as a result. Working in BB really strengthened my belief in the benefits and value of those kinds of learning approaches. I have also tried to facilitate those kinds of study and learning opportunities for students. The field course environment is interesting too, in that Bob and I were able to spend a lot of time with the students, developing a rapport that is perhaps unavailable in a classroom. It's an enriching experience for the instructors as well as the students.

When undergraduates who have done courses at the BBMS go away to do graduate work somewhere we get a lot of good feedback like "this person came into my lab and I thought I would have to spend six weeks training them to do something but they already knew how to do it!" and that is true not just of the marine side of things.

Whether they're going on to do graduate work, or whether they're looking for a position with environment or DFO or in any kind of group that may require them to do fieldwork, they've got that sort of hands-on experience of how you handle things when they don't come out the way you thought they were going to. These sorts of things are valueadded to an undergraduate program, and really are helpful to students who are then going on to do more graduate work or to go into a job in their field of choice. So, lots of value-added for them, lots of value-added for the university. We've certainly had students who have come here from elsewhere in Canada because of the marine program in biology, and because of the field station. And the more of that we can get happening, the better."

## Alan Whittick

Alan Whittick came to Memorial University in 1969 as a PhD student. He spent several summers at the Bonne Bay Marine Station.

Whittick first went out there in December 1969 on a field trip with his supervisor. Former teacher Frank Murphy, who worked in the early days as a research assistant/station manager-inresidence, then ran the Station. Bob Hooper arrived the year afterwards and they both were going to Bonne Bay regularly by the mid-1970s. Hooper took the lead in keeping it going and courses were started there in 1979-80.

Whittick taught yearly courses there until the 1990s when he started to work in East Africa. Sometimes he would go out with Bob Hooper on weekends, Friday to Sunday, driving out from St. John's or flying out to Deer Lake. The house was very small for the sixteen people it was expected to accommodate. Frequently, Dr. Hooper and the other teaching staff would sleep across the lane in the attic above the lab.

The first courses had a combination of lectures about the environment, the materials, the species, habitats, and so on. Biology 4810 became the project course, done in the spring. Students would start with project ideas of their own and develop them with assistance from professors in St. John's and in Bonne Bay. They would write their own proposals, figure out what equipment they needed, and come out to Bonne Bay for three weeks' intensive, hands-on, practical marine biology research sessions. Biology 3709 became the showand-tell course, where they went out and learned general things

about the environment, did a bit of general surveying, oceanography, and site-exploration, some underwater. There was a written exam and students had to keep logbooks throughout the course.

Dr. Whittick recalls: "The nice thing about it was that it was more like the system I came from in England where you did courses in blocks. Your attention wasn't divided between a variety of undergraduate courses. As in England we'd have a six-week block and do two things, rather than jumping backwards and forwards, so students could get into it in greater depth. They also were not going home at night, so discussions and problem-solving could happen then.

In St. John's, they had extracurricular activities. In Bonne Bay they tended to work 24 hours a day. They might have bonfires on the beach and whatever but they're all working together. Most people got along incredibly well.

After the first couple of courses out there, we hired a lady from the community to cook and clean. It sounded like a good idea but it didn't work, so then we decided to do it ourselves, assigning duties to students, some of which had never even cooked or washed up before. The first week, we'd give them a cookbook and recipes. They would wash up, cook, and that was part of the course! The second week we had people vying to cook. We had some spectacular meals! That was probably the best part of the course for some of them. We couldn't carry on running the lab the way we did, but a little bit of the fun of the early days has been lost."

Whittick remembers: "There were other people from North America who went there, students and researchers. There was no formal arrangement with the community in terms of a partnership. We did all sorts of things for them and they did things for us. Somebody might come along and say, 'I've lost an anchor in this spot in about sixty feet of water, if someone's going scuba diving could they put a rope on it?', that sort of thing. We did that sort of thing all the time. In return we'd get fishing things given. For the most part, we were quite respected in the community; we'd impress on the students that we were guests here and they should act accordingly."

Whittick saw the changeover from car ferry to road traffic in the area. "I think the biggest mistake though was the loss of the car ferry [from Norris Point to Woody Point]. That killed both sides I think, but certainly the south side. The ferry in the old days was small, it needed some subsidy, but there were politics involved. The ferry came off, the government either took it back or bought it back and it was given to CIDA. Shipped off to Costa Rica or Belize somewhere. I thought, 'that's amazing, you can give this ferry, give it as an aid project... but we can't put the money into keeping it running here in Bonne Bay, Newfoundland.""

Dr. Whittick's entire interview will be available on the CURRA website.

Allison Eaton is the new interim manager of the Bonne Bay Marine

Allison Eaton is the manager of the Bonne Bay Marine Station while Fiona Cuthbert is on leave. She is excited to be here in Bonne Bay and looks forward to a busy and eventful summer. Look for her during Celebrate the Sea Day here at the Station on May 22, part of the wonderful Tales, Trails and Tunes Festival.

Allison has worked in marine environments ranging from search and rescue to tide pool interpretation. Her background includes a Bachelor of Science from Mount Allison University, where she completed her honours research on the Northern Rock Barnacle, and a Bachelor of Education in Primary and Elementary methods from MUN.

## **Climate Change**

The seniors of Glenburnie-Birchy Head-Shoal Brook have been thinking about climate change in Bonne Bay. Patricia Manuel. teacher at the School of Planning at the University of Dalhousie, Halifax, NS and Sarah Herring, planner for the City of Saint John, NB have been spending some time with them, obtaining information about changes in weather patterns, ice movement and duration, quantity and depth of snow, the high and low tides, changes in how they get their firewood home. Raymond Cusson was the climate change coordinator. A focus group session for seniors was held during a mug-up at the Chocolate Moose Café in Birchy Head.

Several weather diaries have been discovered, containing information about wind, temperature and other climatic conditions from the early 1900s. One gentleman has been keeping his own weather observations every day for the past 30 years. All this information will be analyzed and studied together with scientific information gathered over the years by Environment Canada and other government agencies to give the researchers a complete picture of how the climate is changing on the south side of Bonne Bay. Their final report to the community will be presented in June 2010.

Climate change doesn't just mean warmer temperatures. Some of the most significant impacts will be felt through changes in water conditions which result in more extreme weather events, changing ecosystems with increased risk of pests and diseases, and other effects through impacts on agriculture, soils,



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Municipalities of all types will be affected by:

- Impact of extreme weather events on municipal infrastructure, including on roads, bridges, buildings, water and sewer networks, electrical infrastructure and flood control systems. These will include storm damage, damaged roads and pavement, weather stress on buildings and other infrastructure such as wharves and breakwaters.
- Changing temperatures and ecosystems causing floods, heat waves, smog, increased risk of diseases, pests and fires, as well as winter transportation difficulties from thin and quickly melting ice.
- More pressure on health care, social services and community services to cope with the impacts of climate change, such as flooding and road washouts.

#### Deirdre Puddister, continued from page 9

Well, obviously, I did my Masters with Bob, so we got to be pretty good friends, but I was a student there when the new station was just a concept, and I was there when they broke ground, and I was there when they opened the doors for the grand opening. I was there through the whole process and I don't think enough can be said for how much time and energy Bob put in to get making the station a reality.

Colleen Kennedy also put a lot of effort into it, and I remember the long hours that they both put in to making sure that the station became a reality. I just don't think that enough can be said for the hours that those guys put in to making the station a reality. Bob is the heart of the station, and always will be. I'm sure somebody will take his place eventually, but it will always have been Bob's baby, and it was through his persistence that the station became a reality, and that the station is now an option for students.

It is a wonderful opportunity for students. I know three or four people that did Honours and Masters degrees and never would've thought it was possible, that they would've had the ability to do a Masters degree, had they not gone to Bonne Bay. So going to Bonne Bay has helped people not only with their confidence but it has shaped so many people's careers in this area. I could name 10 people whose careers changed completely. 'I'm going to be a nurse, and I'm just getting my biology degree so I can do that' now has a Masters degree and is on a completely different path because they did a couple of courses in Bonne Bay and fell in love with learning and academic life and fieldwork and research and all that fun stuff.

Bonne Bay as being formative in many ways, in terms of marine biology and also life lessons that have stood me in good stead ever since.

#### David Robbins

I studied biology at Memorial from 1982-87 and went back to do a Masters in Environmental Science from 1994-2000. I worked for Bob Hooper at the Marine Station in 1987 from April to September. When Bob was away I was in charge of the Station. It was the early stages of the snow crab research, so we started a tank, built a tank out there, and got the water flowing and actually went out and collected snow crabs, tagged them and were studying various mating behaviours and various things for snow crab.

The Station was very much part of the community. The buildings were buildings that were originally constructed as fishing stages or a local house, and we converted them.

It was a fascinating mix of science and sociology because you're part of the community. We felt as though we were working in the community like the other residents were, but yet we were doing scientific experiments.

It's a huge change now; it's become a mixture of science, publicity and education, public education, whereas before it was really a source of advanced education for honours, masters and PhD students. And I think it's changed for the good because Bonne Bay and Norris Point have changed. The Station has become much more of a tourism attraction, and the aquarium fits in beautifully.

In the late 80s we had a lot of poaching of snow crab in that region, so there was a need for



BBMS before and after: top photo courtesy of David Robbins

public awareness on conservation of marine species. And I think Bonne Bay Marine Station still supports that.

We could dive any time and we were out in the spring all the way to the fall. Lots of integration with the locals, people would come and go, we made a lot of friends there, working, and diving with Parks Canada people, and socializing in the nighttime with many of the locals, so we were part of the community. And I think it's still like that.

It's certainly changed in that some of the older guys, the way of life has changed. Back when I was first there, in the mid 80s, there was no Internet, you'd go out and spend the summer and there'd be very little communication back to St. John's. There'd be very few vehicles down by the wharf, and the old guys would still meet out on the wharf to chat in the mornings. I don't think you see that any more. Now it's tourism that dominates. Back then it was still fishery and the older way of life.

I look upon my experiences in

#### David Robbins--Continued from page 17

It really influenced my career choice because it just always kept me grounded in environmental science, that mix between pure study of a field such as biology and the applied nature of it. Conservation, understanding, and also limited but frequent use of the resources--Bonne Bay exemplified that. We had a lot of local fishery of crab and we were studying about how you can use it in a sustainable manner.

Memorial is a great university. But like any university, there has to be opportunity for you to get out into the field to study your discipline. And Bonne Bay is an ideal setting for that. You take the marine lab in Logy Bay: not everyone can dive and go on a boat there; it's the most hostile part of our coast. Bonne Bay is totally accessible. Any student, with limited field skills or ability to go on a boat, can go out and be a part of marine biology research. You can't do that anywhere else.

You can study snow crab all you want, but when you go out and see them in a dive, and collect them, and then study them in the field, it's extraordinary. And to see biology in action, going to an algal bloom when the ocean heats up in August-September, well you can read about that, but in Bonne Bay you can actually see it occur.

I think that the diving was the critical experience for me. Bob Hooper is an extraordinary diver. And to spend the summer diving in all sorts of circumstances and all sorts of places out there in weather conditions and depths, was an experience that I'd never get elsewhere. And that was extraordinary. It was something that people would really, from an adventure tourism perspective, you'd pay thousands and thousands to get.

The setting is incredible! It is a wonder of the world in my mind. And it's still unspoiled. I was out last year and spent time in Norris Point and from a scientific perspective it hasn't changed; it's still a great entry

point into the marine ecosystem. It grew from just a small basic little research centre to a research-tourism complex. That's wonderful to see. And now my kids are really connected to it--they want to go back.



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#### Post-doctoral Fellowship -Lobster Population Biology and Sustainable Fisheries

A post-doctoral fellowship will be available in 2010 to develop the science basis for evaluating several conservation initiatives currently practiced in this province.

These practices include an officially designated Marine Protected Area, several locally initiated closed areas, v-notching, and release of large lobsters. The project will focus on reproductive value, an established concept in population biology that is rarely applied to fisheries. This is an opportunity to further develop the quantitative basis for evaluation of risks and policy in commercially exploited populations of long-lived marine species. This project has a strong collaborative component, through the community-based CURRA project working with the Fish Food and Allied Workers union (FFAW), and through ongoing collaboration with DFO-Oceans and DFO-Science Branch.

Position requires completed PhD in any area of quantitative biology, with experience in population biology and demographic models. Position is for 1 year, renewable to 2 years. For more information on the project see

www.mun.ca/osc/dschneider/lob ster

To apply, send a cover letter with *Curriculum vitae* to David Schneider Professor, Ocean Sciences Centre Memorial University, St. John's NL, A1C 5S7

David.Schneider@mun.ca

http://www.mun.ca/biology/dsch neider/

# Fisheries Forum in Plum Point

The FFAW hosted a community forum in Plum Point on March 30 to open discussion about the future of the fishery on the Northern Peninsula. CURRA researcher and MUN professor Ratana Chuenpagdee was the facilitator.



The forum was attended by more than 40 fish harvesters, plant workers, buyers, and municipal and community representatives from Bonne Bay to the northern tip of the Peninsula. Four speakers gave thoughtful and animated presentations: Nina Mitchelmore of the Rural Secretariat on the current demographics, Barb Genge of The Tuckamore Lodge on the tourism connection with the fishery, Don Brown of the Eagle River Credit Union on the economics picture and Dave Decker of the FFAW on the challenges facing the fishery and on the current and future plans of the Union to face these challenges.

The discussion was passionate and wide-ranging. Fish harvesters are concerned about resource management and fish prices. Many expressed frustration with both provincial and federal regulations and with current policies allowing processors to own fish quotas.

Some called for processing plants to be multi-species plants, and expressed concern that a local processor cannot obtain a license.

Some argued for an overall marketing strategy for the fishery in Newfoundland and Labrador, with a Marketing Board. developing local niche markets that inshore fish harvesters could avail of.

A retired fisherman addressed the crucial issue of outmigration: "Where is the next generation of fishermen coming from? Who are we going to pass our enterprises on to?"

After the presentations, the gathering broke into four groups and made recommendations. Two of these stood out:

• The region has to act as a whole, rather than as individual communities, and act immediately.

• all sectors of the community, not only those immediately involved in the fishery, must work together to build a sustainable future.

Mandy Ryan, FFAW stewardship advocate, will write a summary of the discussion and the recommendations coming from the symposium for all participants. The report will be combined with reports from similar meetings held in Marystown and Twillingate and will be available eventually on the FFAW web site.

# NEW PUMPS for BBMS

On March 31, the new pump system recently installed to bring seawater from different depths of Bonne Bay into the Marine Station aquariums was officially declared operational.

Keith Hiscock, Assistant Director of Facilities Management at Memorial University was on hand to inspect the work done by G. J. Cahill Company contractors Rod and Matthew Penney, Lloyd Parsons, Eric Brake and Jack Bavis, as well as Tony Costello of QuadraTec, and John Dalley of IEAS.

The pumps will transport 450 litres of water an hour from shallow (6 fathoms) and deep (20 fathoms) locations adjacent to the Marine Station. The seawater will be used to keep marine creatures alive in the touch tank and the various aquariums used for marine biology research.

The photos below were taken during the pump-christening ceremony.



#### Photos by Darroch Whitaker



# Be sure to experience the Trails Tales and Tunes Festival from May 14-23

The fourth annual Trails Tales and Tunes Festival will take place at various locations in Norris Point from May 14-23. Come and join us for a wonderful time with hikes, guided bird-watching, great food and wine, old stories and songs and lots of wonderful music.

Tune in to our community radio station VOBB, 102.5 on your FM dial, to get daily updates, performances and interviews.

See the schedule and list of performers at:

www.trailstalestunes.ca



real Chickade



*The Western Shorefast* Bonne Bay Marine Station P.O. Box 69 Norris Point, NL, A0K 3V0

Contact us:

CURRA Community Coordinator (abest@mun.ca)





Social Sciences and Humanities Research Council of Canada Conseil de recherches en sciences humaines du Canada



The CURRA acknowledges financial support from the Social Sciences and Humanities Research Council of Canada (SSHRC), Memorial University and multiple community partners and groups.