

HOOK, LINE AND THINKER

The Newsletter of the Fishermen and Scientists Research Society

Issue: 2012-3

Summer 2012

YOUR COMMUNICATIONS COMMITTEE IN ACTION

The newly formed FSRS Communications Committee has met twice and is now developing our new Communications Strategy. We're re-designing both our web site and the newsletter; developing joint projects with the Fisheries Museum in Lunenburg; and creating a new outreach program for schools.

You'll notice some changes to the format of the newsletter over the next few issues, including the introduction of new columns and the reappearance of some past favourites.

The redesigned web site will be launched September 24, 2012; and we'll be gradually introducing additional features. The web address stays the same, so you won't need to update your web "Favourites". Check out the new "look" at www.fsrs.ns.ca; we think you'll like it.

The FSRS 20th Annual Conference Sponsorship/Marketing Plan will be launched at the next Communications Committee meeting to be held September 26th.

Hilda Russell has taken on the position of committee chair and we would like to take this opportunity to welcome her and the rest of the committee members:

Shaun Allain

Patty King

Christine MacKenzie

Katherine Stevens

Josh Fricker

Jean Lavallee

Angelica Silva

Jennifer Hackett

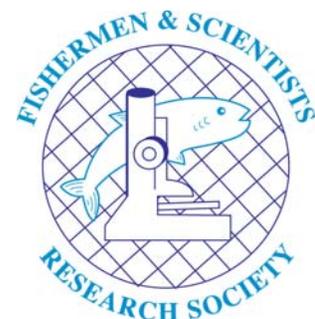
Jack MacAndrew

Laura Simmons

Look for more updates from the Communications Committee in future issues.



Check out our
fresh new look
at
www.fsrs.ns.ca



GREY SEALS AND COD STUDY NEEDS HELP

By Rachel Neuenhoff, PhD Candidate, University of British Columbia

Scientists at the Marine Mammal Research Unit at the University of British Columbia want to find out what impact Grey seals are having on the cod population of the Gulf of St. Lawrence, and they need first hand experience from fishermen to assist them.

The university group is conducting a collaborative study with DFO and the fishing industry on predator-prey relationships between Atlantic cod and Grey seals in the Gulf. Investigators want to hear about your experiences with and observations of Grey seals.

The study will:

- 1) investigate the impact of Grey seal predation on Atlantic cod;
- 2) assess the effect of fishery and Grey seal management plans that might be implemented in the Gulf.

Participation gives your consent to use your responses and personal observations about where Grey seals are found, their numbers, what they are doing, and how you perceive them to impact the fishery. Your participation is completely voluntary. All responses will remain confidential and privacy protected.

To participate in this study or to obtain more information, please contact:

Rachel Neuenhoff
 PhD Candidate
 University of British Columbia
 Marine Mammal Research Unit
 AERL, 2202 Main Mall, Rm 247
 Vancouver, B.C. Canada V6T 1Z4
 email: r.neuenhoff@fisheries.ubc.ca



Picture courtesy of Rachel Neuenhoff, PhD Candidate, University of British Columbia.

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FROM THE RESEARCH DESK

By Shannon Scott-Tibbetts, Research Biologist, Fishermen and Scientists Research Society



As the summer gradually comes to a close, we are wrapping up our busy spring and summer sampling season and gearing up for the fall season. We will attend Lobster Fishing Area (LFA) advisory meetings and participate in a US/Canada Lobster Symposium in Portland, Maine.

Our technicians will be busy on the water with our Lobster Collector (Lobster young of the year) Project in October and November and our ongoing Lobster Moulting and Quality Project in LFA 33 and 34.

We thank our fishermen who continue to collect valuable lobster science data for us with the Lobster Recruitment Project now in its 13th year. Please check out our revised website to see a list of the projects we are currently working on and please contact me if you want more information.

During the summer I was invited to participate in meetings held in Digby, NS and Moncton, NB. The LFA 34-39 Framework Review meeting for DFO took place in Digby, NS on July 10-12th. The purpose of this meeting was to review the data sets available to begin the assessment process for these LFAs. The invitees included fishermen and scientists from stakeholder groups in the Bay of Fundy area. Presentations included topics on the life history and biology of the lobster and the relevant sources of data being collected. One of the data sources used in the assessment process is the Lobster Recruitment Index data collected by fishermen in LFAs 27-35. It shows us the trend for small lobsters and those moulting into market size in the next year or two. This review meeting allowed fishermen to see how the data is being used by Fisheries and Oceans Canada (DFO). The fishermen were asked to give their input on what else needed to be considered for study.

The Atlantic Lobster Sustainability Foundation (ALSF) held its 2nd annual lobster science workshop in Moncton, NB on July 24-25th. I was invited to speak on the FSRS and our various projects. The workshop began with remarks from the Minister of Fisheries and Oceans Canada and the three Provincial Ministers. It then continued with a keynote address from Andrew Jeffs from the University of Auckland in New Zealand. He spoke about marine enhancement projects undertaken by his university and gave tips on what worked and what didn't for their systems. David Smith, from Sobeys, spoke about sustainability and what it means in a retail world. The sustainability theme was continued throughout the day by presenters from Université de Moncton and the New England Aquarium. I was included in a broad group from universities and research institutes discussing how we contribute to increased lobster science and how we are working towards keeping stocks at the level of a sustainable resource.

The second day began with a summary from Liette Vasseur of Brock University on the previous day's presentations, after which we heard from industry groups about their sustainability issues. It was a very informative workshop with much discussion on ways to keep the lobster industry growing and healthy.

The FSRS recently attended the Atlantic Geoscience Society's 19th annual education workshop (EdGEO) on August 22nd, held at the Bedford Institute of Oceanography as part of their 50th anniversary celebrations. The workshop attracted 30 Nova Scotian educators of varying backgrounds to take part in a number of sessions and talks.

FSRS Fisheries Technician Shaun Allain attended the event as a presenter, giving a brief presentation about our research projects. He also demonstrated a few hands-on activities teachers could duplicate in the classroom such as basic lobster biology and fish anatomy.

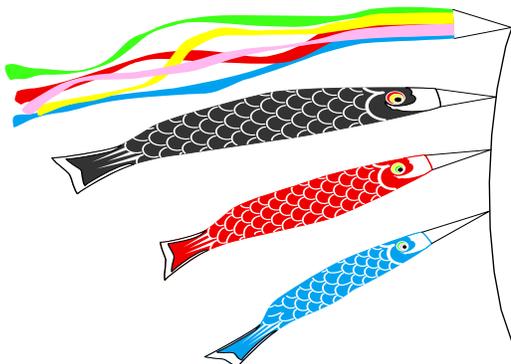
Autumn is now upon us, and the 17th annual 4VsW Sentinel Monitoring Program has begun. Starting September 1st, two longline fishing vessels contracted by the Fishermen and Scientists Research Society are participating in a groundfish survey executed fully by the fishermen. The two captains who have agreed to participate this year are: Randy Boutilier from Mushaboom and Jerry Creamer from Philip's Harbour.

Due to budgetary constraints, the fishermen will survey 18 predetermined stratified random stations instead of the 53 stations in previous years. The FSRS maintains this monitoring program to ensure the collection of scientific groundfish data from the inshore because the DFO research vessel is unable to survey these locations. The 18 stations are included in strata 468 and 469. Please look for results from this project in the next issue of the newsletter.



THE FSRS WELCOMES NEW MEMBERS

We welcome ten new members to The Fishermen and Scientists Research Society, whose applications were approved at the August 9, 2012 Executive Committee meeting. The more members we have, the greater is our ability to achieve our mandate and promote the sustainability of our marine fisheries resources. We have every expectation that our newbie FSRS members will make useful contributions to the society.



Esther Aboderin
Allain Barnett
E. Roy Drake
Emma Nickerson

Chioma Anikpo
Tom Calvanese
Marty King

Shlomir Auciello
Ashley David
Aseer Manilal

FISHERS REEL IN ON GARBAGE

By Ashley David, Ship to Shore Program Coordinator, Clean Nova Scotia

It is August 15, 2012. I enter a crowded restaurant on the Yarmouth waterfront. The room is filled with excitement. Yarmouth's annual fishing derby begins today- vessels are ready, crews recruited, and boat captains have come to the restaurant to register and hear instructions from derby organizers.

They will also hear from me.

I'm not here to talk about fishing.

I'm here to talk about garbage. Yes, garbage.

Eyes fixate on the plastic coated bait box my colleague picked up on the Pubnico shore. Statistics record that nearly 600,000 of these bait packages are discarded overboard every year in the Atlantic Region by lobster fishermen.

I also have in hand a length of rope I picked up on a beach in Ingonish. It too is made of a plastic. Most things these days are made of plastic, I say, and this is all the more reason to bring it back to shore.

My audience seems to agree so I continue.

I show pictures of shorelines all around Nova Scotia. Scattered on the beaches are rope, bait box straps, plastic containers, lobster traps and plenty of other debris.

I refer to studies that look at fish, lobsters and turtles. It seems marine creatures are apt to confuse garbage for food; or they can die a slow death by becoming entangled in it. Ocean trash is lethal.

I tell them about some of the fishers I have met who have made commitments to take all their waste back to shore, including plastic, cardboard and bottles.

I tell them about Lunenburg Harbour and others which now have recycling facilities at the wharf. Things are getting better, I promise.

I conclude by showing a two-minute film clip made by my friend, Martin Hellmich. You can watch it, too: <http://vimeo.com/30830050>.

Not long after my presentation, I hear from a contact I met during the summer. She has good news to share. A vessel captain present at my Yarmouth presentation has committed to bringing his waste ashore.

If not for that call, I might never have known whether my presentation had any effect on the crowd that night. To all those who have made the commitment to bring your waste to shore, I offer my sincere thanks.

Ashley David is the Ship to Shore coordinator at Clean Nova Scotia. With funding from RRFB, Fisheries & Oceans Canada and Nova Scotia Fisheries & Aquaculture, Ship to Shore engages commercial fishers in Nova Scotia on the importance of managing waste at sea and on land. To watch the Ship to Shore's full length film visit: <http://vimeo.com/45643984>.

Contact Ashley David, (902) 420-7940, adavid@clean.ns.ca

To learn more about the Ship to Shore program visit: <http://clean.ns.ca/programs/waste/ship-to-shore/>

IS GLOBAL WARMING AFFECTING NORTHERN GANNETS?

Fishermen across the Atlantic region have been reporting warmer than usual ocean waters, and the subsequent effects on marine species. Now it seems the phenomenon may well be having its effect on marine bird species as well. This summer has been challenging for breeding Northern Gannets - one of our most magnificent seabirds in Atlantic Canada.

In some breeding colonies, something very unusual has taken place - adult gannets have abandoned their young and flown away. Scientists think there is a possible cause - the scarcity of small fish species, which gannets depend upon to feed to their chicks; caused by warmer ocean water around breeding colonies.

Scientists at Environment Canada and Memorial University hope to learn more. Your observations can help build our understanding.

Please watch for and report 1) numbers and 2) locations of feeding adult Northern Gannets to seabird biologist Carina Gjerdrum, at carina.gjerdrum@ec.gc.ca, or 902-426-9641 OR enter your observations on eBird.ca (an easy-to-use site for sharing bird observations).

What does a feeding adult Northern Gannet look like?

An adult gannet is larger than a gull and has a white body with yellowish head and black wing tips (young gannets have brown on their bodies).

Feeding gannets plunge from heights of forty feet and more into the ocean like aerial torpedoes, often in large flocks.

Please share this notice with fellow fishermen, boaters, ferry passengers and any others who spend time along the coastline and at sea.

We appreciate your interest and observations.



Photo courtesy of Carina Gjerdrum, Seabird Issues Biologist, Canadian Wildlife Service, Environmental Stewardship Branch, Environment Canada

UPPER BAY OF FUNDY LOBSTER FISHERY MONITORING PROJECT 2012 UPDATE

By Monica Finley, Project Biologist, Fishermen and Scientists Research Society

The Environmental Impact Assessment (EIA) for the Modifications to the Petitcodiac River Causeway Project predicted no significant impact on commercial fisheries, however, as a precautionary measure, one of the conditions of EIA approval was that a Commercial Fisheries Follow-up Program be implemented. The Fishermen and Scientists Research Society (FSRS), in collaboration with Fisheries and Oceans Canada (DFO), the AMEC Study Team (consultants retained by the NB Department of Supply and Services (DSS) for the Project), and the fishing industry, developed the Upper Bay of Fundy Lobster Fishery Monitoring Program to address the need for monitoring the lobster resource and fishery as part of the Commercial Fisheries Follow-up Program. In September, 2008, the FSRS was awarded a contract from AMEC Earth and Environmental to implement a monitoring program comprising:

- 1) an at-sea sampling program in exposure and control zones before and after opening the gates in the causeway; and
- 2) a juvenile trapping program in exposure and control zones before and after opening the gates in the causeway.

Sampling for Stage 1 of the Commercial Fisheries Lobster Monitoring Program was completed in December 2009. This stage involved gathering data to determine a baseline before the opening of the causeway gates. Lobster catch rates in commercial and FSRS juvenile recruitment traps were monitored during the open fishing seasons between October 14 - December 31, 2008, April 1 - July 31, 2009 and October 15 - December 31, 2009, and during an out-of-season trapping survey between August 10 and September 20, 2009.

The Petitcodiac River causeway gates were opened by DSS on April 14, 2010, restoring tidal exchange. Data collection for the second stage of the Commercial Fisheries Lobster Monitoring Program commenced April 26, 2010. Lobster catch rates in commercial and FSRS juvenile traps were monitored during the open fishing season between April 26 and July 31, 2010, October 17 and December 16, 2010, April 29 and July 31, 2011, October 21 and December 17, 2011, May 1 and July 31, 2012, and during an out-of-season trapping survey between August 10 - September 20, 2010 and August 8 -September 19, 2011. The 2012 out-of-season survey commenced August 8th and is in progress during the month of September. Lobster catch rates in commercial and FSRS juvenile traps will continue to be monitored during the fall 2012 fishing season.

In-Season Sampling

During the open fishing season within the designated exposure and control areas (Figure 1), aboard commercial fishing vessels, the FSRS technicians record the lobster carapace length, sex, and the number of berried individuals in each trap they sample. In addition to the data collected from commercial traps by the technicians, fishermen also collect data during the season from FSRS juvenile traps. Eight fishermen during the fall 2011 and ten fishermen during the spring 2012 each deploy five FSRS juvenile recruitment traps. The traps are set in close proximity to the commercial traps in a location determined by the fishermen to have a reasonable expectation of catching juvenile lobsters. The fishermen measure the lobsters from the juvenile traps and record the sex and whether the lobsters are berried.

Sediment (when present in the traps) is collected each sampling day. Surface water samples are no longer collected as of fall 2011. This change was announced at the 2012 Petitcodiac River Causeway Project Commercial Fisheries and Physical Characteristics Follow-Up Program to the Commercial Fisheries Stakeholders meeting held April 19, 2012.

Out-of-Season Sampling

The out-of-season trapping survey commenced in August 2012. The 2012 out-of-season trapping survey target areas (Figure 2) are the same as the trap locations that were fished during the 2009-11 out-of-season surveys. These locations were selected following direct consultation with DFO, the FSRS, and LFA35 fishermen in 2009. Three vessels with the FSRS technicians aboard are participating in the out-of-season sampling in 2012. Out-of-season trapping surveys are planned at a similar time and location for the upcoming years.

A complete data report on the Upper Bay of Fundy Lobster Fishery Monitoring Program component of the Commercial Fisheries Monitoring Program: Stage 2 Year 2 was submitted to AMEC in June 2012. Monica Finley has been rehired this year as the biologist for the project and is analyzing the data and preparing a data report on the Upper Bay of Fundy Lobster Fishery Monitoring Program 2012.

Tables and Figures

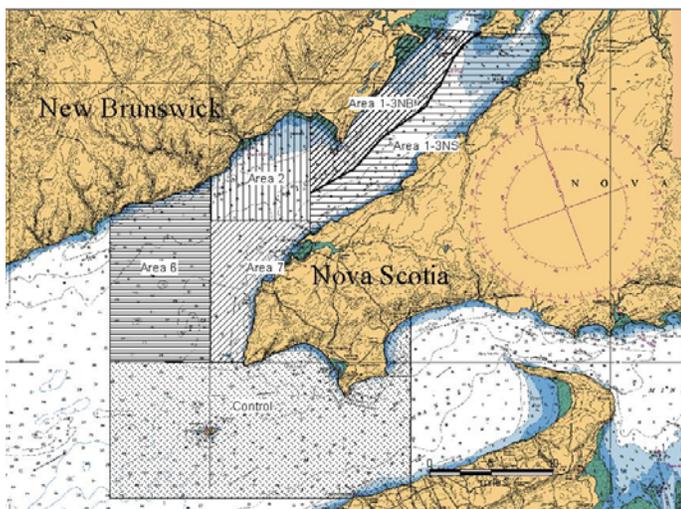


Figure 1. The commercial lobster fishery exposure and control areas established during the Stage 1 Follow-up Program for the Petitcodiac River Causeway Project.

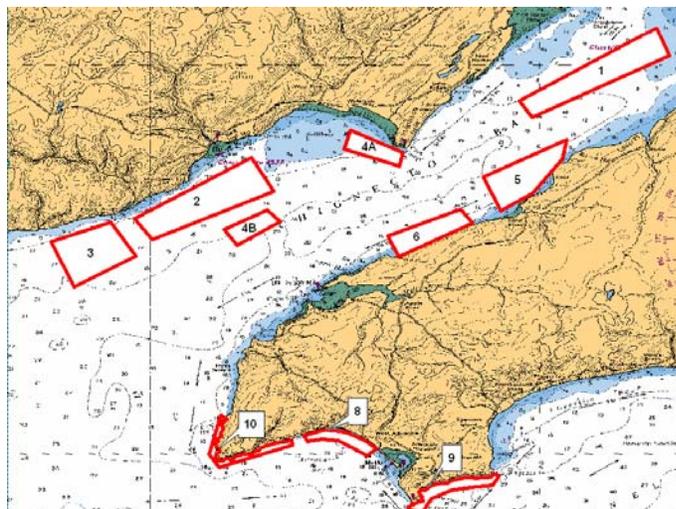


Figure 2. The boxes represent the out-of-season lobster trapping survey areas, 2012. Areas 1, 2, 3, 4A, 4B, 5, and 6 are located in the exposure zone and areas 8, 9, and 10 are located in the control zone.

Year	Season	Trap type	# of TH	# of legal lobsters	# of sublegal lobsters	# of berried lobsters
2008	Fall	Commercial	3058	8329	6926	358
2009	Fall	Commercial	2591	7253	5304	180
2010	Fall	Commercial	4032	15061	7945	324
2011	Fall	Commercial	4260	15818	11062	591
2008	Fall	FSRS Juvenile	676	1342	4072	30
2009	Fall	FSRS Juvenile	774	1151	3656	23
2010	Fall	FSRS Juvenile	655	1217	3342	51
2011	Fall	FSRS Juvenile	597	1201	3324	57
2009	Spring	Commercial	7165	10686	13191	878
2010	Spring	Commercial	10049	22885	22559	716
2011	Spring	Commercial	9052	22781	26715	1306
2009	Spring	FSRS Juvenile	805	414	4194	29
2010	Spring	FSRS Juvenile	777	685	2900	15
2011	Spring	FSRS Juvenile	850	788	3386	60
2009	OOS	Commercial	1777	10025	5783	114
2010	OOS	Commercial	1758	11529	6210	84
2011	OOS	Commercial	1837	11836	4621	178
2009	OOS	FSRS Juvenile	881	2869	4836	30
2010	OOS	FSRS Juvenile	856	3065	4305	33
2011	OOS	FSRS Juvenile	897	3161	4097	66

Table 1. A summary of the data collected as part of the Upper Bay of Fundy Lobster Fishery Monitoring Program. All data was collected within the exposure and control areas (Figure 1) or within out-of-season sampling areas (Figure 2) identified for this project.

OOS = out-of-season

**TWENTY YEARS WORKING TOGETHER - WHAT A MILESTONE!
COME CELEBRATE WITH US AT THE
FSRS 20TH ANNUAL CONFERENCE
FEBRUARY 20 - 21, 2013**

Best Western Glengarry Hotel in Truro, NS

The Fishermen and Scientists Research Society (FSRS) is currently preparing for our 20th Annual Conference. The call for posters and displays has gone out and we encourage you to join us in celebrating 20 years of “working together for the sustainable future of our marine fisheries resources.”

*Check out our website at www.fsrs.ns.ca for more details as they become available.
We hope you can attend. See you there!*

POSTER/DISPLAY RESERVATION FORM

To reserve booth or poster space, please send your completed Poster/Display Reservation Form to Christine MacKenzie by January 31, 2013 Fax: 902-876-1320; E-mail: chrismd@bellaliant.net. Poster/Display Reservation Forms are also available on-line at www.fsrs.ns.ca.

Organization	
Address	
Contact Name	
Phone	Fax
E-mail	
Posters	
Title	
Authors	
Brief Abstract	
Dimensions ___ feet wide x ___ feet high	
Displays	
Brief Description of Display	
Dimensions ___ feet wide x ___ feet high x ___ feet deep	
Setup Requirements	
Table ___ 3' x 6' skirted table (check if required)	
Power Outlets ___ Power outlets required (standard 120v, indicate number of outlets required)	
Other Requirements (Please specify)	

WWW.LOBSTERMOUTL.CA



While we've continued our sampling program this summer, we've also been busy setting up www.lobstermoutl.ca, our new and improved online home base for the Atlantic Lobster Moutl & Quality Project. Make it your online home as well. Come on in, and find the latest information about the project, including up-to-date sample data. We have now sampled 123,000 lobsters during the life of the project, and we have re-designed the website to provide a better platform to include all the information you have become accustomed to finding there. The administrator of the website is Natasha MacDonald. You can contact her at tashamacd@gmail.com with any ideas and/or suggestions of what additional items you would like to have added to the site.

PATTY'S PICKS WEB SITES OF INTEREST

www.cfrn-rcrp.ca/Public-Home-EN

Canadian Fisheries Research Network - A collaboration of academic researchers, the fishing industry, government researchers and managers from across Canada.

www.lobstermoutl.ca

Atlantic Lobster Moutl and Quality Project - Informing participants and interested parties about the project, including up-to-date sample data.

gap2.eu/

GAP Project - Connecting Science, Stakeholders and Policy; a European initiative to develop collaborations between scientists and fishery stakeholders.



Don't forget to check out the redesigned FSRS web site at www.fsrs.ns.ca!

COLLECTION AND SYNTHESIS OF CRUCIAL OCEAN DATA SUPPORTED BY NOAA FUNDING

Emergency managers issuing storm warnings to fishermen determining if conditions are safe, must rely on good data to make good decisions.

A collaborative partnership of leading marine institutions in the northeast, including the Gulf of Maine Research Institute (GMRI), has secured more than \$2 million in funding from the National Oceanic and Atmospheric Administration (NOAA) to help provide actionable information to those who use the water.

“We’re taking complicated data and making it accessible and useful to the stakeholders who depend on it,” said Riley Young Morse, GMRI Ocean Data Product Development Manager. “Without the portal at NERACOOS.org, the information would be scattered throughout the various organizations and universities collecting the data.”

Combining real-time data streams from buoys and weather stations with model forecasts and satellite data, the Northeastern Regional Association of Coastal Ocean Observing Systems (NERACOOS) spans coastal waters from the Provinces of Nova Scotia and New Brunswick to Long Island Sound.

GMRI’s team synthesizes the incoming data and provides the user interface that makes that data accessible and useful to coastal, maritime, and marine science communities in the northeast.

“For more than 10 years, the observation system in the northeast, particularly the buoys, has been a tremendously important resource for mariners, fishermen, scientists and many others in the region,” Young Morse said. “We are continually working to enhance this resource by developing new products and services to make these data as useful as possible to the many folks who rely on the information.”

The majority of the funding, which will be applied toward the data collection and forecasting efforts of the program, will be distributed among the NERACOOS operational and research partners, including GMRI, University of Maine, University of New Hampshire, University of Massachusetts Dartmouth, University of Rhode Island, University of Connecticut, and Bedford Institute of Oceanography, Nova Scotia.

“This funding, with its allocations to these important ocean observing projects, will enable us to collect vital data that will be used to benefit those whose livelihoods depend on the ocean, as well as all those who care about the future of the health of the environment,” said J. Ru Morrison, PhD., executive director of NERACOOS.

About the Gulf of Maine Research Institute

The Gulf of Maine Research Institute (GMRI) catalyzes solutions to the complex challenges of ocean stewardship and economic growth in the Gulf of Maine bioregion. Its dynamic fusion of science, education, and community provides range to effect change from multiple directions, while its objectivity and commitment to collaboration make it the go-to organization for marine communities grappling with contentious issues, management transitions, and new business systems. GMRI is making a long-term investment in science literacy as the cornerstone of a 21st century ocean economy by providing programs to ignite the curiosity, ambition, innovation, and problem-solving potential of Maine’s next generation. For more information, visit www.gmri.org.

For more information contact: Steven Profaizer, Communications Manager, sprofaizer@gmri.org, (207) 228-1635

BEACHCOMBING - What's New in The News

CANADA'S STATE OF THE OCEANS REPORT, 2012

Fisheries and Oceans Canada recently released *Canada's State of the Oceans Report, 2012*. Written in plain language, this report summarizes the detailed scientific reports on Canada's five Large Ocean Management Areas: The Pacific North Coast; the Beaufort Sea; the Gulf of St. Lawrence, the Scotian Shelf; and the Placentia Bay Grand Banks area that were produced as part of the Health of the Oceans initiative.

Canada's State of the Oceans Report, 2012 is available at: http://dfo-mpo.gc.ca/science/coe-cde/soto/documents/dfo_soto/english/index-eng.htm.

The detailed reports on the five Large Ocean Management Areas are available at: <http://dfo-mpo.gc.ca/science/coe-cde/soto/background-eng.asp>.

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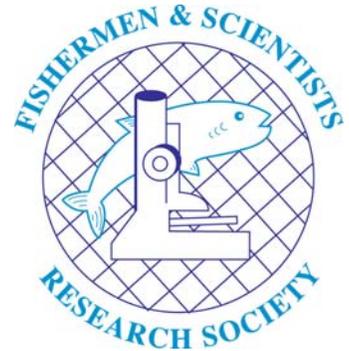
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UPCOMING EVENTS

Eastern Canadian Fisheries Exposition

February 8-9, 2013
Mariners Centre
Yarmouth, NS

www.EasternCanadianFisheriesExpo.ca

Celebrate with us at the Fishermen and Scientists Research Society's

20th Annual Conference

February 20-21, 2013
Best Western Glengarry Hotel
Truro, NS

