

Spring 2004  
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## HARBOUR PORPOISES: Weir Release News



*Dr. Heather Koopman keeping a harbour porpoise cool while out of the water.*

**Harbour Porpoises in Weirs in 2003.** A total of 30 porpoises were recorded in Grand Manan weirs in 2003, a relatively low year. Nine swam out, 17 were released alive, one died during seining, and the fates of three porpoises were unknown. Our seining success rate for 2003 was therefore 17/18, or just over 94%, very similar to 2002, during which we released 31/34 porpoises, resulting in a success rate just above 91%. Our overall average for the past 12 years is about 94%, so we are consistent from year to year.

We seined for porpoises a total of 11 times. As in previous years, most of the entrapments occurred in August (14), with eight in July, seven in September and one in May. Our first porpoise seine of the year (July 26th) was a bit later than normal (usually we seine a few times before the end of

### Incorporated in 1981

July). The last seine (September 14th) was also the busiest: we were able to safely release all six porpoises.

*The Harbour Porpoise Release Program, HPRP, has been in operation since 1991 and works co-operatively with local weir operators. Herring weirs are ingenious fish traps, usually fixed to the bottom and constructed of stakes and netting, positioned to corral herring as they move along shorelines.*

**Expansion of Program.** With the success of the HPRP on Grand Manan, we are expanding the program to include weirs around Campobello and Deer Islands, the Passamaquoddy region, and the Wolves. In 2002 we laid the groundwork for expansion of the HPRP through a community outreach program in which we distributed manuals describing the release process to all licensed weir fishers in the Bay of Fundy. We also gave talks to local community groups about the Release Program. In 2003 we continued our efforts by having the mainland mammal seine fixed and placed on a floating rack in Head Harbour, Campobello. We were also a guest speaker at the Fundy Weir Fishermen's Association Annual Meeting in March 2004. We also have keychains and fridge magnets to distribute, complete with contact information, to act as a reminder of this program. Over the next few years, we would like to build the same kind of successful partnership with fishermen from these other regions that we have with weir fishers on Grand Manan .

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**Data Collected From Porpoises in 2003.**

We collected biological data from all 17 of the porpoises released. There were seven males and 10 females. Porpoises ranged in size from 96.5 cm to 152 cm, and in weight from 18 to 57 kg (40 to 125 lbs). There were four calves (born in the spring), six juveniles and seven adults. The smallest was a calf released on September 14th and the largest porpoise a mother released on August 12th. Each year brings its own combination of young and old animals: last year we released more adults (18) than juveniles (7).

Blood samples from porpoises were collected as part of a long-term study monitoring the health of this population. This project was initiated in 1993 and now represents the only long-term health assessment of wild porpoises in the world. Not only do we screen our porpoises for infection, disease, basic chemistry, enzyme function (indicators of organ function and stress) and reproductive hormones (indicators of pregnancy and reproductive status), we also bank frozen blood samples for future analyses.

Disease transmission in marine mammals is becoming more common, with new viruses and bacteria appearing in different groups of seals and whales each year. Once a new disease has been identified in marine mammals in the Atlantic Ocean, we can screen blood samples from our animals for its presence, and thus can use the banked samples to determine when the Bay of Fundy porpoise population might have been exposed to it. This helps epidemiologists trace the path a particular disease might have taken,

Year	No. Porpoises in Weirs
1993	153
1994	77
1995	82
1996	8
1997	35
1998	34
1999	93
2000	20
2001	312
2002	53
2003	30
<b>Total</b>	<b>897</b>

and can also help identify which species are vulnerable to infection, and why. For example, last year we were able to document that the Bay of Fundy porpoise population has been recently exposed to the Brucellosis bacterium. This virulent pathogen has been

documented to cause serious reproductive failures in domestic animals, but its impact on harbour porpoises and other marine mammals remains unclear. Brucellosis has been detected in seals and porpoises from the eastern North Atlantic, but the degree of exposure in Western Atlantic waters is not well understood. Blood samples and bacterial swabs from seven porpoises in 2003 were sent to a laboratory in Ottawa for analysis for this bacterium.

**Porpoise entrapments over the last 10 years.** There is a huge range in the number of porpoises in weirs from year to year, and each summer we have no way of predicting how busy we will all be.

It is clear that the most important factor influencing porpoise entrapments is herring. Over the course of a summer, porpoise entrapments typically peak when herring catches are at their highest (usually in August). Porpoises follow schools of

herring, and so when the fish stay offshore, the porpoises do as well. Annual fluctuations in entrapment rates therefore reflect changes in porpoise distribution that are influenced by herring density, herring movements, and possibly the size class of the fish. Summer 2003 was very similar to 2000, when we released only 12 porpoises. The years 2001 and 1996 represent the two extremes of HPRP activity, and there does not seem to be any obvious pattern, or predictable cycle, in terms of the number of porpoises we can expect to see from one year to the next. A better understanding of factors affecting herring movements, and the annual variation in age classes of herring in the Bay, would improve our ability to predict porpoise behaviour each year.

**Media.** In 2003 a National Geographic International film crew worked with us on a project for European television about our release program.



*If you wish to support the Harbour Porpoise Release program, please mark the appropriate box on the enclosed form.*

**Thanks to Supporters in 2003.** The Harbour Porpoise Release Program operates using funds obtained from many sources, including grants from conservation organizations, the weir industry, and donations from private individuals. Without this financial backing, we would be unable to pay for boat gas, boat and seining equipment, releases, and travel and room and board for the Release Team. We are thankful to our supporters, many of whom have stood solidly behind the program for many years. In 2003 we gratefully acknowledge the support of Connors Brothers Ltd., the International Fund for Animal Welfare, Whale and Dolphin Conservation Society U. K., the Gulf of Maine Council on the Marine Environment and Friends of GMWSRS. We also thank the weir fishery, and all local weir fishermen, for

continuing to support and participate in the HPRP.

**Other Weir Visitors.** In 2003 there were at least three minke whales that we are aware of, and all of them were released unharmed.

*Minke Whale surfacing amongst greater shearwaters.*



## RIGHT WHALES

**Right Whale Notes:** Right whale research effort in the Bay of Fundy was reduced with several major projects completed. Coordination of research activities and monitoring the effort on individual whales continued and an annual meeting was again sponsored by DFO St. Andrews in March 2003. (Another meeting was held the end of March 2004 for the upcoming season).

### Research in 2003:

- The New England Aquarium (photoidentification of right whales, monitoring calves and other projects)
- U.S. National Marine Fisheries Service (photogrammetry - length and size of right whales from aerial photos)
- St. Andrews Biological Station (Department of Fisheries and Oceans - aerosat observations of right whales and whale watching vessels)
- East Coast Ecosystems (distribution and data collection from whale watch vessels).

Thick fog for much of July and the first two weeks of August prevented many surveys for right whales. However, right whale numbers were low in the Bay of Fundy in July as in 2002, a pattern more similar to that of the 1980s.

The 2002-2003 calving season ended with 21 calves identified. During the summer at least 10 pairs of mothers and calves came into the Bay of Fundy. Most right whales had departed by late October.

July 1 marked the official opening of the redesigned shipping lanes into and out of the port of Saint John. Ships certainly seemed to be further away from right whales on most days. Dr. Moira Brown was awarded a Gulf of Maine Visionary Award and a Canadian Geographic Canadian Environmental Award for

heading the initiative to move the shipping lanes.

The new position of the lanes was a best compromise. It is recognized that whales must still cross the lanes when they come into the Bay along the Nova Scotia coast. In August the vessel Sedna IV sailed into the Bay with a number of right whale researchers on board. They were filming a CBC documentary and had spent several weeks earlier in the summer off Iceland on the Cape Farewell Grounds, successfully finding blue whales and one right whale. This right whale was new to the right whale catalogue.

In October a dead female right whale was found dead near the Nova Scotia coast, her death attributed to trauma from a ship strike. Given the estimated time of death, current and wind patterns during that time it was concluded that the impact occurred outside the Bay of Fundy shipping lanes. A graduate student at Woods Hole Oceanographic Institution is currently using some of this whale's bones to study the force required to break right whale bones. This work will help us better understand ship strike trauma.



The 2003-2004 calving season saw at least 17 calves born with one death, a calf estimated at 3-5 days old. It stranded in Florida and died while being transported to Marineland for care. An eighteenth calf died (as a near-term foetus) when its mother was killed during a collision with a ship off the mouth of Chesapeake Bay. This mother, #1004, also known as Stumpy, was well-known to the Bay of Fundy, recognized in part by a missing right fluke tip and an oval white mark on the underside of the left fluke. Stumpy was one of the larger right whales, measuring 16m (52'6") and she had a number of calves, some of whom have also become mothers. Dr. Michael Moore, who coordinated the dissection of Stumpy, commented that "this is the poster child of the right whale that should not have been killed."

**Entanglements in 2003:** Five right whales seen entangled in 2002 were found again in 2003. Two had shed their gear but the others were still entangled. Another four were observed entangled in 2003, with one disentangled off Campobello Island on July 9. Although the whale appeared in poor

condition, almost all of the gear was removed by the Campobello disentanglement team. An entangled yearling whale was found off Florida in March 2004 which was tracked using a satellite buoy until the buoy was accidentally removed. The location and fate of this whale are currently unknown. Along with entangled right whales, it was a busy year for entangled humpbacks with at least four in the Bay of Fundy. Our researchers helped disentangle two humpback whales that become entangled in gill net gear set to catch ground fish.

**Whale Watching:** Laurie continued to collect opportunistic data for marine mammal, seabird, basking shark and other sightings. Maps from these data have a variety of uses such as environmental assessments, and oil spill preparedness planning. Basking shark data for 2003 were again made available to Dr. Steve Turnbull, University of New Brunswick, Saint John. We also provided marine mammal information to Dr. Rob Stephenson, DFO St. Andrews, who is tracking whale watching effort on right whales.

**Right Whale Stewardship:** This project funded from the Government of Canada Habitat Stewardship Program for Species at Risk was completed in early March 2003 as reported earlier. The outdoor panels with information about right whales, whale watching, etc., were well-received during the summer. Further funding from the New Brunswick Environmental Trust and a generous donation from Northern Plastics helped with these and three additional outdoor whale information panels for other wharves on Grand Manan. Many packages of information were given to recreational boaters and a pamphlet on marine mammals was distributed on the ferry and several locations on Grand Manan. We also developed a right whale poster suitable for schools, a right whale stewardship computer slide show, and developed a resource guide for teaching material about right whales, available on CD. We were also able to renovate our museum and website through this funding. Previous newsletters and many other interesting items can be found on our restructured our website (<http://www.gmwsrs.org>).

**Right Whales Seen Entangled in 2003/4** as reported by the Atlantic Large Whale Disentanglement Network, managed by the Center for Coastal Studies, Provincetown, MA. Whale No. refers to North Atlantic right whale catalogue number.

Whale No.	Where & When Seen	Fate
1424	February 12, 2002, Florida to April 14, 2003 Cape Cod Bay	Entangled
3120	April 2, 2002 Cape Fear, NC to June 24, 2003 Gulf of Maine	Entangled
1427	July 12, 2002 Atlantic City to October 23, 2003 Jeffreys Ledge	Gear Shed
2320 Piper	August 4, 2002 Bay of Fundy to April 28, 2003 Cape Cod Bay	Entangled
3210	August 30, 2002 Bay of Fundy to May 31, 2003 Great South Channel	Possibly Shed Gear
2240	January 14, 2003 Jacksonville Beach, FL to February 12, 2004 Cape Cod Bay	Gear Shed
1430	May 20, 2003 Race Point (Gulf of Maine) to June 7, 2003 Georges Bank	Entangled
??	July 9, 2003 Campobello, NB	Disentangled
??	August 25 Race Point (Gulf of Maine)	Entangled
Kingfisher	March 17, 2004 St. Augustine, FL to Cape May, NJ	Entangled, satellite buoy cut off, whale lost

**Right Whale Sponsorship:** Deborah Tobin, East Coast Ecosystems has discontinued her right whale sponsorship (adoption) program and is moving on to other things. We will be starting our own program shortly and will keep you informed.

*If you wish to support our Whale Conservation work, please mark the appropriate box on the enclosed form.*

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## SHEEP ISLAND TERN RESTORATION PROJECT



*Tern decoy and tern nest*

It is the long-term goal of the Fundy Bird Observatory (FBO), a project of the GMWSRS, to re-establish a vibrant colony of terns on Sheep Island. One of only two tern nesting colonies in the Grand Manan Archipelago, this project may in turn promote nesting of other seabird species such as puffins.

In 2003, Brian Dalzell spent much of the spring and part of the summer on Sheep Island, discouraging gulls from nesting primarily

by making loud noises when the gulls were beginning to nest; common terns nest almost a month later than the gulls. A solar powered sound system was also installed which played tern calls continuously. Similar systems have been successfully used to attract terns to nest on other islands. The results were encouraging with at least 40 nests found, compared to 17 in 2002 and eight in 2001. To improve the living quarters on the island, a 16-foot travel trailer was purchased and installed. The FBO banding shed reverted back to a storage shed and work area.

This project could not have been possible without the support of the owners

of Sheep Island, the logistical support provided by Russell Ingalls, the loan of twenty-five tern decoys by the Canadian Wildlife Service and financial assistance from the New Brunswick Wildlife Trust (NBWTF for two years), the New Brunswick Environmental Trust Fund and donations from our Friends.

Unfortunately, while the NBWTF are again supporting the project, additional funding was denied and **we must raise the funds ourselves** to support our volunteer, Carlotta, and pay for necessary equipment to run the project. The program is working; already there are more nesting terns than last year (60 nests and 100 eggs).



*Location of Sheep Island*

For more information contact Brian (dalzell@nbnet.nb.ca).

*Please check the appropriate box on the donation form if you wish to support this project.*

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Aelita Neimanis from Hamilton, ON, was our fourth Gaskin Fellow. She had recently graduated from high school and was heading to Dalhousie University in Halifax in September. Money donated to the Dr. David Gaskin Memorial Fund paid for this fellowship.

### Gaskin Fellow

*Please mark the appropriate box on the enclosed donation form if you wish to help us with this program.*



**Aelita Neimanis  
Gaskin Fellow**

A number of unexpected events occurred in 2003. We responded to a greater shearwater that was in obvious distress and had stranded on land. Shearwaters are designed to take off from water and it is almost impossible for them to lift off from land, except along cliff faces. Despite our efforts, a veterinarian determined that the bird was gravely injured and it was euthanized. This bird has been taxidermied courtesy of the New Brunswick Museum and will be added to our museum displays.

A beluga was found in the Grand Manan Basin near right whales in mid-August. Later, another beluga was discovered near a salmon aquaculture site near Pocologan, NB, when he approached a diver working at the site. This young beluga moved from site to site, ending up in Passamaquoddy Bay. Whenever divers entered the water, the beluga quickly appeared. Cathy Kinsman from the Whale Stewardship Project was contacted. She teaches those who might come in contact with lone belugas about their behaviours and what might be expected. She made several trips to the area to see the whale and talk with salmon workers. During the winter the beluga, affectionately known as "Poco", began moving along the Maine coast and eventually swam into Boston harbour! He did turn around and has been seen in harbours along the coast of Maine almost to Bar Harbor which is only days from returning to the Bay, if that is his destination.

## 2003 SURPRISES

In October 2003, a dead finback whale was seen along the ferry route. The whale eventually drifted

toward Grand Manan and was towed into Woodward's Cove. We assisted Dr. Don McAlpine (New Brunswick Museum), and his crew with salvaging the skeleton. From bruising patterns and rope burn, it appeared that the finback whale died from entanglement in fishing gear, although no gear was found on the carcass. A fenced



compound in the Anchorage Provincial Park was built to house the skeleton while it decomposes above ground covered in straw (this will take several years). Interpretive signage will be unveiled at the whale compound in early August, 2004.

A dead leatherback turtle was salvaged from Wood Island in October with the help of Elliot Sheppard, Sarah McDonald, and Saber Culbertson. This turtle died when entangled in fishing gear south of Grand Manan. Dr. McAlpine added the shell to the New Brunswick Museum collection. Also in October, a pilot whale calf was found on Stanley Beach. It is believed that the calf live-stranded after being separated from its mother. The skeleton will be prepared for our museum.

As in most winters, finback whales have been seen around Grand Manan (January/February 2004). A few finback whales stay in the Bay of Fundy each winter with as many as nine reported from Seeleys Cove, NB, in the winter of 2003.

## MUSEUM & GIFT SHOP

**VISITORS:** We were open most days from mid-June to Thanksgiving in October, 2003. The number of visitors in 2003 was down dramatically to 7681, numbers not seen since 1997 (see table). This reflected the foggy, wet weather in July and beginning of August, stronger Canadian dollar and fewer American travellers. However, purchases per person continue to climb keeping sales within 10% of the highest year. The proceeds are extremely important and allow us to continued functioning of the GMWSRS. The success of our museum/gift shop could not have been realized without the assistance of our two museum attendants, Chelsey and Miranda. In September and October, Cathy Spicer, Ken Ingersoll, and Gordon and Wiley Kempton filled in when Laurie was unavailable. A grant from the Human Resources Development Canada provided the salary for one student for eight weeks.

Year	No. Visitors
1996	7067
1997	7652
1998	9857
1999	10246
2000	8861
2001	10300
2002	9265
2003	7681
<b>Total</b>	<b>70969</b>
<b>Average</b>	<b>8866</b>

**GASKIN MUSEUM OF MARINE LIFE:** A streamlined museum layout was ready for opening in June. Many new displays will be added to compliment this design. This work was funded in conjunction with grants from the Government of Canada Habitat Stewardship Program for Species at Risk, the New Brunswick Environmental Trust Fund and Northern Plastics. Our museum is well used by visitors to the island and groups such as Whale Camp, Elderhostel, the Huntsman Marine Science Centre.

## PERSONNEL IN 2003

**Congratulations!** We want to congratulate former GMWSRS researcher Dave Johnston on receiving the **Frederic Fairfield Memorial Award for Innovative Research** at the Biennial Marine Mammal Society meetings in Greensboro, NC, Dec. 2003 for his work studying the Long Eddy Rip at the northern end of Grand Manan. Dave also successfully defended his Ph.D. thesis this spring and is now working in California. His thesis is online at: <http://www.mbari.org/staff/davej/LongEddy/index.html>

We also congratulate Dr. Heather Koopman who began work at the University of North Carolina, Wilmington, NC, in January 2004 as an assistant professor of animal physiology.

We also congratulate Laurie Murison on being recently recognized by the Canadian Whale Institute for her dedication to the recovery of the North Atlantic Right Whale. You can see the pewter and cherry wood plaque on display in our museum.

We were saddened by the death of long time Friend Patricia Moule after a lengthy illness, and by the unexpected death of our dedicated volunteer Wiley Kempton, always ready and willing to help, often on short notice for the museum. Our sincere sympathies are also extended to Chelsey Beman on the recent death of her mother, Penny.

### DIRECTORS:

- Ivan Green
- Heather Koopman
- Laurie Murison

### EXECUTIVE COMMITTEE:

- Heather Koopman, M.Sc., Ph.D. University of North Carolina, Wilmington
- Laurie Murison, M.Sc.
- Aleksija Neimanis, M.Sc., DVM
- Andrew Westgate, M.Sc., Ph.D. student Duke University, Beaufort, NC.

### RESEARCH BIOLOGISTS:

- Krystal Tolley, Ph.D.

### FIELD ASSISTANTS:

- Leigh Bird, Dalhousie University, Halifax, NS
- Megan Hamilton, University of Guelph, Guelph, ON
- Ken Ingersoll, Grand Manan

### GASKIN FELLOW:

- Aelita Neimanis, Hamilton, ON

### MUSEUM ASSISTANTS:

- Chelsey Beman, Grand Manan
- Miranda Kinghorne, Grand Manan
- Cathy Spicer, Grand Manan

### VOLUNTEERS, MUSEUM:

- Gordon & Wiley Kempton, Grand Manan
- Karen McDonald, Grand Manan
- Marion Murison, Grand Manan
- Curtis Wilcox, Grand Manan

### VOLUNTEERS, RESEARCH:

- Pat Miller, Grand Manan
- Matthew Lambert, Grand Manan
- Lesley Thorne, University of New Brunswick, Fredericton, NB
- Sarah McDonald, Grand Manan
- Elliot Sheppard, Grand Manan
- Saber Culbertson, Grand Manan

### JUNIOR VOLUNTEERS:

- Josh McEown, Pickering, ON

### SHEEP IS. TERN PROJECT:

- Brian Dalzell, Grand Manan

### VISITORS:

**FILM CREW:** **National Geographic International,** Kevan Pegley, Florian Graner, Willem van Heerden

### FRIENDS & FAMILY:

- Dr. Ieva & John Neimanis, Hamilton, ON

- Lisa Cavé & Allan Scott
- Sue Budge, Mari Cooper, Damian Lidgaard, Halifax, NS
- Carl Dalton, Fredericton, NB
- Wayne Clifford & Mary Joan Edwards, Kingston, ON



**From Left to Right: Pat Miller, Megan Hamilton, Krystal Tolley, Heather Koopman, Andrew Westgate, Aelita Neimanis, Leigh Bird**

- Anne & Arnold Koopman, Campbellville, ON

## GRANTS IN 2003

### Summer Students

- ◆ Human Resources Development Canada



### Harbour Porpoise Release Program Support

- ◆ International Fund for Animal Welfare
- ◆ Whale & Dolphin Conservation Society
- ◆ Gulf of Maine Council on the Marine Environment



### Sheep Island Tern Restoration

- ◆ New Brunswick Wildlife Trust
- ◆ Environmental Trust Fund Your Environmental Trust Fund at Work



## CORPORATE DONATIONS

- ◆ **Atlantic Mariculture** (WCF = Whale Conservation Fund)
- ◆ **Connors Brothers** (Harbour Porpoise Release Program, HPRP)
- ◆ **Eastern Wind Power** (Sheep Island terns)
- ◆ **Grand Manan SeaLand Adventures** (WCF)
- ◆ **Huntsman Marine Science Centre** (HPRP)
- ◆ **Maine Coast Sea Vegetables**
- ◆ **Marathon Inn** (Sheep Island terns)
- ◆ **Northern Plastics** (WCF & Sheep Island terns)
- ◆ **Sea Watch Tours** (WCF)

## FRIENDS FOR 2003

- Isaac Bao, Hillsdale, NY  
James & Marilyn Beattie, Rye, NY  
J. Denys Bourque, Saint Jacques, NB  
Paula & Thomas Bartlett, Tiffin, OH  
Newton Bowles, New York, NY  
Gene & Karen Brewer, New York, NY  
Mary Lou Campbell, Grand Manan, NB  
Teresa Carr, Lexington, KY  
Theodore Carroll, Squamish, BC  
Ann Chudleigh, Wakefield, QUE  
Alain Clavette, Taylor Village, NB  
Eldon & Lena Clelland, Kincardine, ON  
Ray & Mary Cousins, Aurora, ON  
Pat Cove, Perth-Andover, NB  
Donna Crone-McMillan, Port Dover, ON  
Jim Cruikshank, Needham, MA  
Allison Daggett, Grand Manan, NB  
Brenda Dale, Sherwood Park, AB  
Eva Dale, Calgary, AB  
Dr. Pierre-Yves Daoust, Charlottetown, PE  
Pattilynn & Terri Davidson, Markham, ON  
Ron & Nina Davies, Amherstburg, ON  
Keith & Jennifer Davis, Nepean, ON  
Lee & Jean Day, Brights Grove, ON  
Tracey Dean, Bayside, NB  
Ernest Donaldson, Belwood, ON  
B. Brian & A. Fischhoff, Pittsburgh, PA  
J.& Eleanor Gardiner, Scarborough, ON  
Kathleen Gorman, Verdun, QC  
Rolande Gough-Ellis, Belleville, ON  
Jane Gray, Toronto, ON  
Joan Green, Fredericton, NB  
Bill & Pam Gudgeon, Burlington, ON  
Sarah Haney, Bolton, ON  
Frances Hodge, Westmount, QC  
Linda M. Hutchings, Calgary, AB  
Doug Jackson, Fredericton, NB  
Charles Jefferson, Ottawa, ON  
Anne K. Jeffrey, Columbus, OH  
Paul Jones, Ottawa, ON  
Sue Kaplan, Exeter, NH  
Arnold & Anne Koopman, Campbellville, ON  
Barbara Kubiak, Franklinville, NY  
Sharon Lamazor, Brooklyn, NY  
Linda L'Aventure, Grand Manan, NB  
Andrea Lebowitz, N. Vancouver, BC  
Stephanie Lehman, Bracebridge, ON  
Eleanor Linberg, Schenectady, NY  
Jean Loggie, Moncton, NB  
Elizabeth Lourie, Exeter, NH  
Janet MacMillan, Moncton, NB  
Kathleen MacNamara, Oakville, ON  
Dr. Mary Majka, Albert, NB  
Sandra McFarlane, Halifax, NS  
Dylan Eadie & Josh McGeown, Pickering, ON  
Ken McIntosh, Saint John, NB  
Judith Miller, Portsmouth, NH  
Pat Moule, Tillsonberg, ON  
Kristi Muller, New Bedford, MA  
MT Neal, Richmond Hill, ON  
Mary Neal, Richmond Hill, ON  
Dr. Ieva Neimanis, Hamilton, ON  
Sally Plaskett, Scarborough, ON  
Dr. Y. Prenoveau, Pierrefonds, QC  
Jan Purvis, Oakville, ON  
Robert Righter, Denver, CO  
Lorna Ritchie, Grand Manan, NB  
Gwenda Robinson, London, ON  
Bill & Sandy Rogers, Gaithersburg, MD  
Margery Schuler, Auburn, ME  
Dave Sergeant, Hudson Heights, QC  
Kathy Sessamen, Saint John, NB  
Tom Sheppard, Sudbury, ON  
H. Silliker, Colpitts Settlement, NB  
Jane & Andrew Smart, Toronto, ON  
Marcia J. Stephen, Orillia, ON  
Lloyd Strickland, Ottawa, ON  
Daniel Taillon & Marie Cousineau, Vaudreuil Dorion, QC  
Annie Tartaglia, Hamilton, ON  
Mel & Sandy Turner, St. Andrews, NB  
Susan & Micheal Turner, Scarborough, ON  
Rohan van Twest, Guelph, ON  
Harry Walker, Miramichi, NB  
Doreen Wallace, Fredericton, NB  
Roy & Kathy Wheeler, Nepean, ON  
Alma and Don White, Moncton, NB  
Brian Wiese, Shanty Bay, ON  
Dennis Wood, Toronto, ON  
Rosemarie Zucker, Toronto, ON

## IN MEMORIAM

Marilyn Jones  
Patricia Moule  
Wiley Louise Kempton

## IN KIND SUPPORT

- ◆ **Canadian Wildlife Service** (loan of tern decoys)
- ◆ **Eastern Charlotte Waterways** (GIS base maps and data entry)
- ◆ **Russell Ingalls** (boat support for the Sheep Island Tern restoration project)
- ◆ **Paul Jones** (donated binoculars)
- ◆ **Terry Davidson** (donated photographs for museum gift shop)



YES! I am a FRIEND of the GRAND MANAN WHALE AND SEABIRD RESEARCH STATION FOR 200\_\_\_\_\_ and wish to donate (tax-deductible):

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## PUBLICATIONS

### Scientific Papers/Book Chapters

- ✧ Koopman, N. H., Iverson, S. J., and A.J. Read. 2003. High concentrations of isovaleric acid in the fats of odontocetes: Stability in the melon vs. variation and patterns of accumulation in blubber. *Journal of Comparative Physiology B* 173:247-261
- ✧ Meagher, E.M., W.A. McLellan, A.J. Westgate, R.S. Wells, D. Frierson, and D.A. Pabst. 2003. Respiration, heart rate and heat flux across the dorsal fin in bottlenose dolphins, *Tursiops truncatus*. *Journal of Experimental Biology*.
- ✧ Neimanis, A.S., H.N. Koopman, A.W. Westgate, L.D. Murison, A. J. Read. In press. Entrapment of harbour porpoises (*Phocoena phocoena*) in herring weirs in the Bay of Fundy, Canada. *Journal of Cetacean Research and Management*.
- ✧ Ronconi, R.A. and S.N.P. Wong. 2003. Abundance Estimates and Changes in Seabird Numbers of the Grand Manan Archipelago, NB, Canada. *Waterbirds* 26(4):462-472.

### Theses

- ✧ Cox, Tara. 2003. Evaluation of strategies to reduce bycatch of harbor porpoises (*Phocoena phocoena*). Duke University Ph.D.
- ✧ Johnston, Dave. 2004. Fine scale oceanographic features and foraging marine predators: The ecology and conservation of an island wake in the Bay of Fundy, Canada. Duke University Ph.D. <http://www.mbari.org/staff/davej/LongEddy/index.html>

### GMWSRS Bulletin Series/General

- ✧ Murison, L.D. 2003. North Atlantic Right Whale. Teachers Resource Guide. GMWSRS Bulletin No. 5.

- ✧ Dalzell, B.E. 2004. A Checklist of Grand Manan Birds. 12 p.

### Learned Societies Presentations

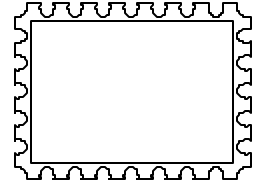
- ✧ Koopman, H.N., S.M. Budge, D.R. Ketten, and S.J. Iverson - Sound Reception by Beaked Whales and Porpoises: Implications of Variation in Lipid Composition of Jaw Fats. 17th Conference of the European Cetacean Society, Las Palmas de Gran Canaria, 9-13 March 2003
- ✧ Koopman, H.N., S.M. Budge, D.R. Ketten, and S.J. Iverson. Focusing sound to the odontocete ear: Does the complex topographical arrangement of specific lipids form a wave guide through the mandibular fats? Fifteenth Biennial Conference on the Biology of Marine Mammals, Greensboro, North Carolina. 14-19 December 2003.
- ✧ Koopman, H. N., Budge, S. M., Ketten, D. R., and Iverson, S. J. The influence of phylogeny, ontogeny and topography on the lipid composition of the mandibular fats of toothed whales: Implications for hearing. Environmental Consequences of Underwater Sound, San Antonio, Texas. 12-16 May 2003
- ✧ Westgate, A.J., D.A. Pabst, W.A. McLellan, and E.M. Meagher. Measuring Heat Flux and Skin Temperature from Spotted Dolphins in the Eastern Tropical Pacific. 17th Conference of the European Cetacean Society, Las Palmas de Gran Canaria, 9-13 March 2003.
- ✧ Westgate, A.J., P. Rosel, E. Rogan, A.J. Read. Population structure of common dolphins in the North Atlantic as revealed by mitochondrial DNA control region sequences. 15th Biennial Conference on the Biology of Marine Mammals, Greensboro, North Carolina. 14-19 Dec. 2003.



## Grand Manan Whale Seabird Research Station

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*Research and Education  
to Promote Conservation.*



## PLANS FOR 2004

- ✧ The Harbour Porpoise Release Program (entering 14th year). We also hope to continue our efforts to expand the HPRP to Campobello and Deer Islands, the Passamaquoddy region, and the Wolves and ideally have a mammal seine within easy reach of all weir fishermen in the area. We are hoping to raise enough money to meet this goal.
- ✧ Continued porpoise health assessment and investigation of Brucellosis exposure; studies to reduce stress in porpoises during handling.
- ✧ Collection of marine mammal tissues for other researchers.
- ✧ Collection of sighting data from whale watches.
- ✧ Continuation of the FBO Sheep Island Tern restoration project.
- ✧ Disentanglement of large whales and response to reports of dead marine mammals on or around Grand Manan.
- ✧ Continued involvement in conservation issues including Right Whale Recovery, and oil spill preparedness.
- ✧ Welcoming visiting scientists to Grand Manan.
- ✧ Initiation of a Right Whale Sponsorship (adoption) program.
- ✧ Open as usual of our renovated marine natural history museum and gift shop - June through early October.



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