



The Current

AUTOMNE 2009

What's Happening to our Oceans?

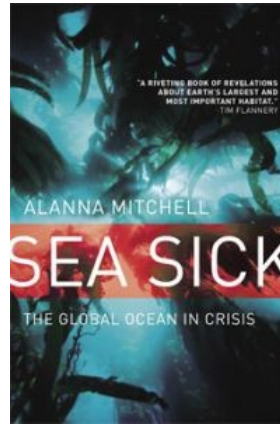
INSIDE THIS ISSUE:

- What's Happening to our Oceans? 1
- Upcoming events 1
- Invasive Species 2
- Petitcodiac River 2
- Irishtown Nature Park 2
- Water Quality Results 3
- Membership Information 4

I listened to a disturbing report recently on the CBC about the condition of the worlds oceans. Alanna Mitchell is an award winning environmental journalist that has spent three years aboard research vessels with marine scientists from around the world studying the ocean. What she discovered is that the worlds ocean is in crisis condition and nobody seems to know it. In her book "Sea Sick", she outlines the following five serious threats to today's oceans.

The first is nutrient enrichment, the addition of nutrients like phosphates and nitrates to the ocean through untreated sewage and agricultural run-off. These are creating dead zones in our ocean where there are no living aquatic organisms because of lack of oxygen. What is most alarming is that these dead zones now measure hundreds of kilometers wide and that there are over 500

of them. The second problem is overfishing. Did you know that over 90% of the big fish in the ocean are now gone? The next



Sea Sick : The Global Ocean in Crisis

problem - acidification. Apparently the earths atmosphere is not the only thing affected by high levels of CO2. High levels of

CO2 in the ocean are raising the oceans pH and making them more acidic. This leads us to the next big problem which is the death of coral reefs. Coral reefs are home to a diverse population of marine organisms, so much so that they are known as the "rainforests of the sea". If the coral reefs die so will most everything else. The final problem that she identifies is garbage accumulation. There is a lot of plastic in the ocean now, plastic that takes thousands of years to break down—enough that it is visibly accumulating in many places. I don't know about you, but I can see a common thread running through all of these problems since they all start on land. It makes me wonder what a difference we could make in the health of the entire world if we all just did a better job of managing what is happening in our watersheds.

Upcoming Events

Nov. 19
 Painting Moncton Green
 Student Center U de M
 6:30 – 8:30
 Contact Raissa Marks
 nben@nben.ca or 855-4144

Own a business and need to know how to assess your impact on the environment?

Nov 24-26
 Environmental Impact Assessment Workshop
 UNB Fredericton, College of Extended Learning 453-3503

Demonstrations and events are once again expected all around Canada for the

Global Day of Action
 December 12th - 2009
 It could be bigger than ever !
 Watch for details on local events.



Melanie Imough

2010 has been declared the « year of the Petitcodiac River » by the Petitcodiac Riverkeeper.

Invasive Species

Alien invasive species are species of plant, animals or insects that are not native to a particular region, but have become introduced and established or have the potential to become established. They can be predators, diseases of native vegetation and animals, competitors and breeders. They can come from another continent, country, or a different ecosystem within the same country. They often cause irreversible damage to native ecosystems and are detrimental to the local economy. The introduction of such species

can occur artificially through human activities or naturally due to migrating birds or the wind. According to the World Union for Nature, invasive alien species represent the second greatest menace to biodiversity, after the disappearance of natural habitats. Mélanie Imough, a University of Moncton student hired by PWA this past summer, created a document containing a list of categorized species that have been introduced, or have the potential to be introduced to the Atlantic Provinces' ecosystems. The document can be

reviewed at the PWA office or on our website. It contains descriptions of all of the listed species that can be found in Atlantic Canada.



Petitcodiac River restoration.

The plan to open the gates of the Petitcodiac River and restore fish passage is going as planned. A tender for 6.3 million dollars was recently awarded to Michels Canada to reposition the main water lines that currently run under the causeway to a deeper location under the Petitcodiac River. The work is to be started this fall and will be completed be-

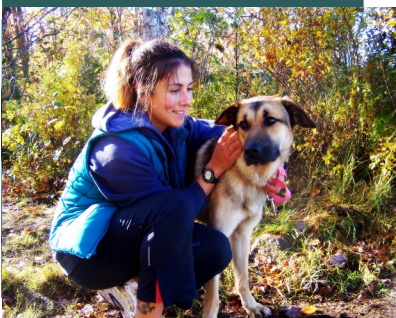
fore the gates open in the spring of 2010.

More than 67,000 young salmon parr have been placed in the Petitcodiac River watershed in the anticipation of restored fish passaged for native species of migrating fish including sturgeon, shad, gaspereau, smelt and others. The Petitcodiac Watershed Alliance will be participating in studies desi-

gned to monitor the changes that will occur as our 3,000 square miles of Petitcodiac River watershed is rehabilitated.

The Petitcodiac Riverkeeper has asked us to join him in declaring 2010 as the Year of the Petitcodiac River.

Irishtown Nature Park Project



Lindsay Laltoo and Liam at the Irishtown nature Park

The Petitcodiac Watershed Alliance now has an educational program being offer at the Irishtown Nature Park for students in school district 1 and 2 .

The project was developed by Lindsay Laltoo, a summer student provided in part through Canada Summer Jobs. The

program includes a water quality monitoring project where the students find and collect water samples from five different sites at the Irishtown Nature Park. They then test for many of the same parameters we use to assess water quality. The program also includes a section on taxonomy, highlighting many of

the plants and animals found in the Irishtown Nature Park. This project was funded in part by EcoAction and the Environmental Trust Fund. For more information about this project visit our web-site at: petitcodiacwatershed.org.

Jonathan Creek

	pH	DO	E-coli	NO3	PO4
May	7.5	10.84	95.9	26.6 mg/L	0.51
June	7.5	7.98	488.4	9.6 mg/L	0.21
July	7.0	8.41	517.2	13.3 mg/L	0.32
August	8.0	9.79	461.1	18 mg/L	0.19
September	7.5	9.93	2419.6	17 mg/L	0.10
October	7.0	13.08	186.0	15 mg/L	0.15

Rabbit Brook

	pH	DO	E-coli	NO3	PO4
May	7.0	11.6	2419.6	26.6 mg/L	0.59
June	7.0	9.20	920.8	91.7 mg/L	0.14
July	7.5	14.46	2419.6	28.6 mg/L	0.68
August	8.0	10.84	2419.6	23 mg/L	0.51
September	7.0	11.10	2419.6	11 mg/L	0.71
October	7.0	9.15	2419.6	17 mg/L	0.42

Riverview Marina

	pH	DO	E-coli	NO3	PO4
May	6.5	10.25	13.2	4.0 mg/L	0.36
June	7.0	8.21	2419.6	0.0 mg/L	0.36
July	7.5	8.55	2419.6	<<	0.15
August	7.0	10.36	2419.6	7.2 mg/L	0.21
September	7.0	9.62	90.9	14 mg/L	0.52
October			1.0		

Petitcodiac River (Salisbury)

	pH	DO	E-coli	NO3	PO4
May	6.7	12.81	19.6	4.0 mg/L	0.12
June	7.0	9.48	224.7	24.8 mg/L	0.32
July	7.5	9.3	178.9	5.8 mg/L	0.08
August	8.0	11.12	18.3	16 mg/L	0.01
September	7.0	11.02	648.8	14 mg/L	0.12
October	6.0	11.88	123.6	11 mg/L	0.19

Turtle Creek

	pH	DO	E-coli	NO3	PO4
May	6.5	13.01	9.6	5.8 mg/L	0.0
June	6.5	9.84	37.9	23.5 mg/L	0.13
July	7.5	9.56	2419.6	21.7 mg/L	0.12
August	7.0	10.56	13.2	8.9 mg/L	0.21
September	7.0	9.45	2419.6	8.8 mg/L	0.14
October	6.5	12.55	18.7	10 mg/L	0.18

Fox Creek

	pH	DO	E-coli	NO3	PO4
May	7.5	11.08	648.8	62.5 mg/L	0.73
June	6.5	10.07	816.4	79.7 mg/L	2.60
July	7.0	8.91	187.2	38.8 mg/L	0.36
August	7.0	7.81	2419.6	20 mg/L	0.33
September	6.5	9.51	2419.6	19 mg/L	0.17
October	6.0	12.38	81.6	19 mg/L	0.13

Irishtown Reservoir

	pH	DO	E-coli	NO3	PO4
May	6.5	9.79	75.4	11.5 mg/L	0.14
June	6.5	8.53	22.3	7.0 mg/L	0.49
July	7.0	8.94	35.0	271 mg/L	0.04
August	7.5	9.28	7.5	13 mg/L	0.06
September	6.5	5.26	4.1	71 mg/L	0.04
October	6.5	9.27	214.3	13 mg/L	0.05

McLaughlin Reservoir

	pH	DO	E-coli	NO3	PO4
May	6.0	9.55	8.1	0.0 mg/L	0.0
June	6.0	9.12	42.2	31.0 mg/L	0.07
July	6.5	7.23	24.3	134.2 mg/L	0.12
August	7.5	7.39	95.9	8.6 mg/L	0.12
September	7.0	6.79	3.0	62 mg/L	0.12
October					

Memramcook River

	pH	DO	E-coli	NO3	PO4
May	7.0	11.55	30.5	66.5 mg/L	0.18
June		9.10	104.6		
July		9.95	204.6		
August	7.0	10.06	770.1	16 mg/L	0.08
September	6.5	10.15	648.8	15 mg/L	0.13
October	5.5	12.73	21.1	12 mg/L	0.11

Breau Creek

	pH	DO	E-coli	NO3	PO4
May	7.0	12.32	23.1	19.9 mg/L	1.55
June	6.5	9.33	79.8	54.0 mg/L	0.21
July		9.23	122.3		
August	7.0	8.51	235.9	10 mg/L	0.12
September	7.0	9.87	344.8	16 mg/L	0.15
October	6.5	13.47	24.3	8.9 mg/L	0.38

Humphreys Brook

	pH	DO	E-coli	NO3	PO4
May	7.0	11.13	28.8	14.6 mg/L	0.14
June		10.37	686.7	<<	<<
July	7.5	8.73	770.0	19.0 mg/L	0.16
August	7.5	9.15	59.8	15 mg/L	0.11
September		8.56	1732.9	10 mg/L	
October	6.5	10.66	275.5	13 mg/L	0.15

pH ideal values between 5 and 8
DO above 5.5 mg/L
E-Coli below 200/100mL
NO3 below de 13 mg/L
PO4 depends on geologic composition



Alliance du bassin versant
Petitcodiac
Watershed Alliance

Name / Nom : _____

Organization / Organisation : _____

Address / Adresse : _____

Tel. / Tél. : _____

E-mail / Courriel : _____

The greatest danger to our future is apathy. – Jane Goodall (1934)

Membership Levels:

- Fish Friend \$20:** includes quarterly newsletter, occasional updates.
- River Rescuer \$50:** includes quarterly newsletter, updates, members only mug.
- Watershed Supporter \$100:** includes quarterly newsletter, updates, annual report (State of the watershed), members only t-shirt.
- Corporate/ Watershed Supporter \$250 +:** all of the above, plus placement on our web-site.

*** Checks should be made out to PWMG-GSBP Inc.**

SEND TO/ ENVOYÉ À
Petitcodiac Watershed Alliance
236 St. George Street, Suite 109
Moncton, NB E1C 1E7