

Review from yesterday...

<http://mvhs.nbed.nb.ca/teacher/note/env-sci-120-day-41-miramichi-river-atlantic-salmon-and-their-life-cycle>

Env. Sci. 120 Day 41 - Miramichi River, Atlantic Salmon and their life cycle...

Posted April 20, 2015

- discussed my passion for the Miramichi River and its ecology.
- discussed life cycle of the salmon


*** NOTE: Wednesday is Earthday...be great to have some promotional videos for the school. Check out their website for ideas - ECOPOINTS!**

 [env_sci_120_-_april_20.pdf](#)

Check out pictures from Fly Fishing Workshops...

<http://mvhs.nbed.nb.ca/teacher/gallery/mvhs-fly-fishing-workshopsapril-10th>

MVHS Fly Fishing Workshops...April 10th

 Image Gallery

Posted April 20, 2015



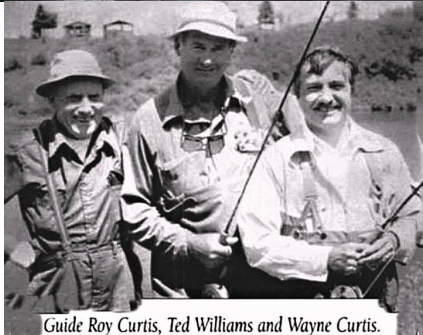
Check out the pictures from the workshops/presentations/demonstrations done at MVHS for 10 participating schools...

Reminder...Earth Day is TOMORROW!!!
Check out Greg's Promotional Video...



Miramichi River...Rich in History!!!

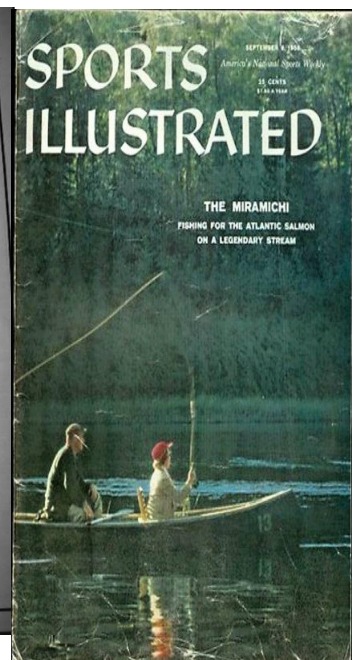
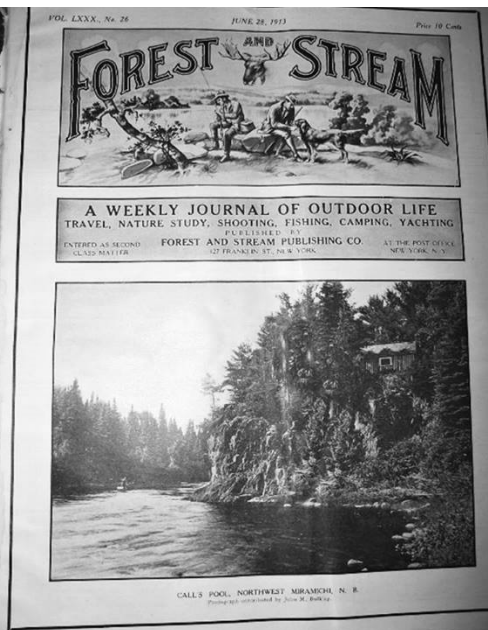
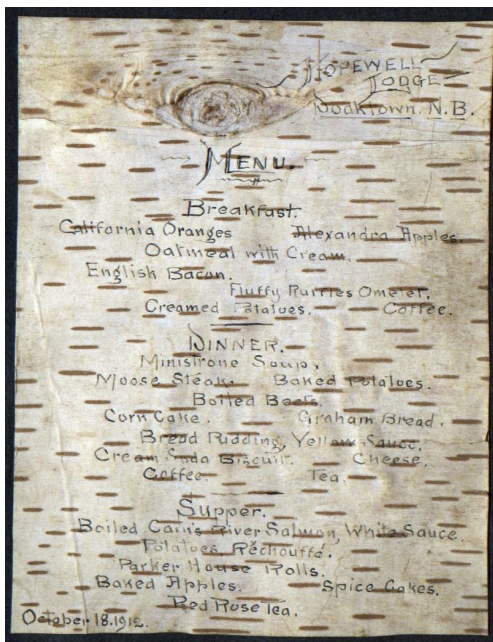
MANY THANKS TO OUR JANITOR CHARLIE ASOYUF



Guide Roy Curtis, Ted Williams and Wayne Curtis.

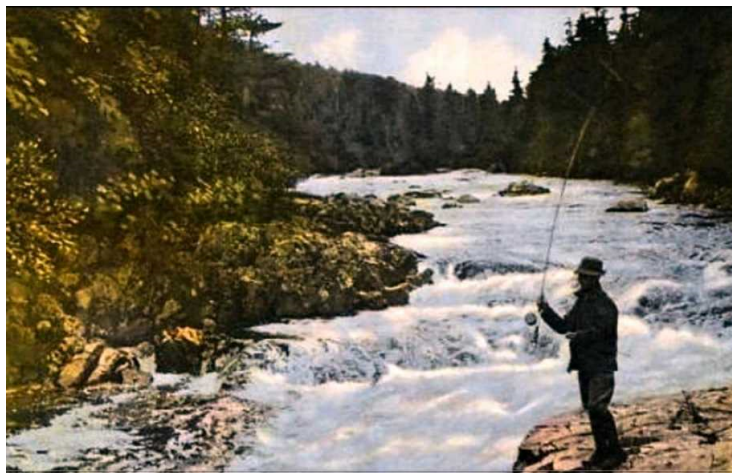


The guides of Charlie Wade—Posing on the grass in front of Wade's Camp are, back row from left to right: Francis Vickers (cook), Earnest Hollier, Stanley Furlong, Lawrence Burke, Melvin Brophy and Patrick Brophy, wearing the light jacket; front row: young Joe Brophy, Peter Colford, George Hennessy (father of Moncton police superintendent George Hennessy), Christopher Brophy, Murdock Burgan, Jack Vickers, Jim Vickers and (uncle) Joe Brophy. Missing from the photo: John Brophy (foreman), Clyde Brophy, Wilson Arbeau, Eldon Curtis, Weldon Peterson and Joseph Brennan.



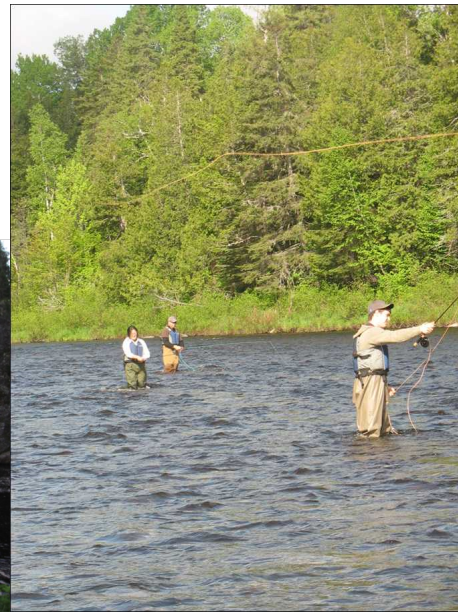


Miramichi Heritage Video

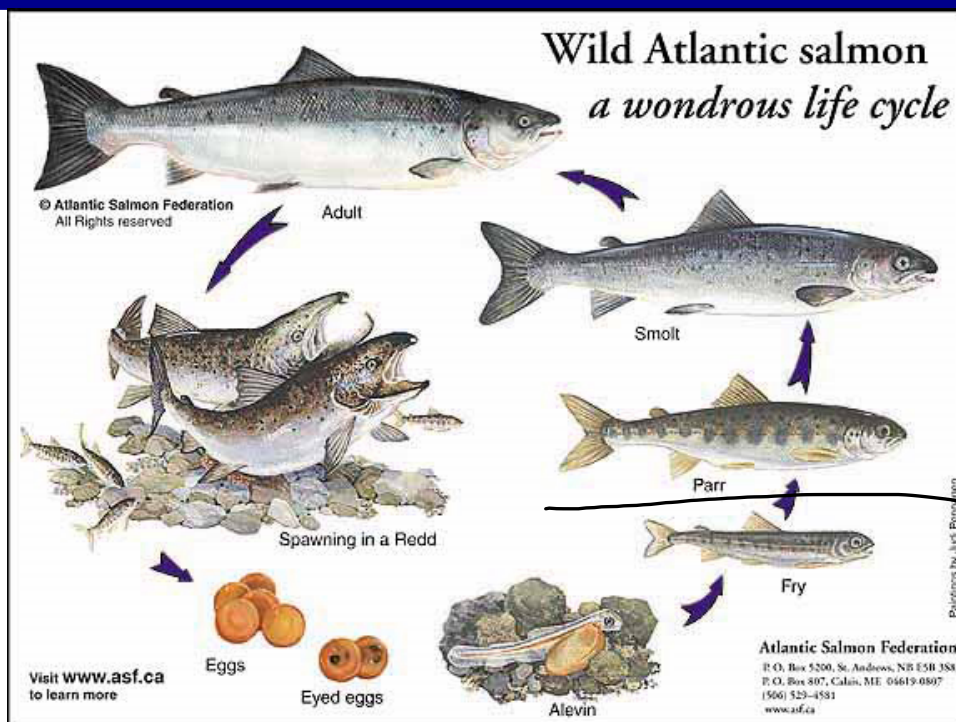


Any Day on the Miramichi River is a Day Well Spent!

- William Bacso

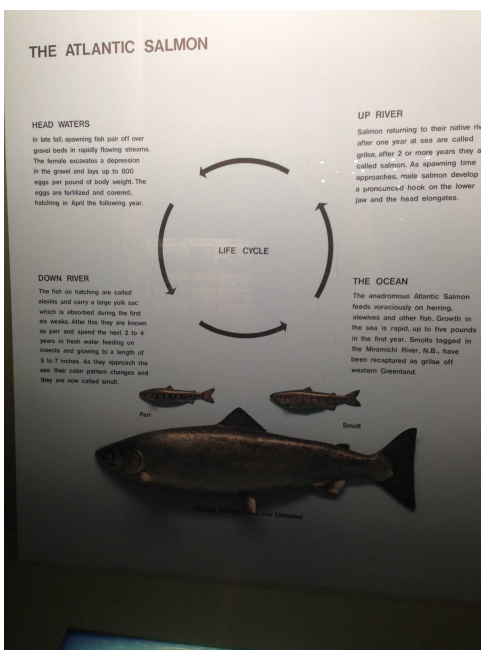


The "Life Cycle of an Atlantic Salmon"




Museum of Natural History
Halifax, NS

Zach Legere & Zach Adams
2014 Miramichi Fly Fishing Show



Life Cycle of the Atlantic Salmon.wmv

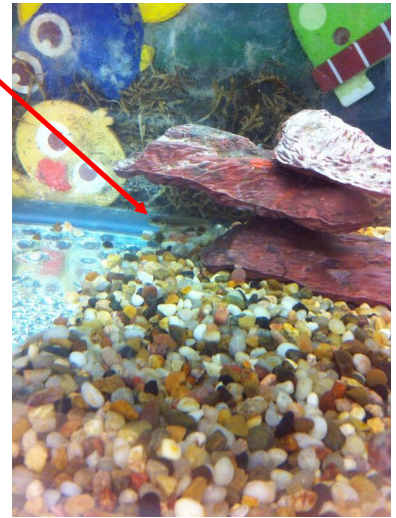
WEBCAM...


Miramichi Valley High School
Environmental Science 120 Live View | Help



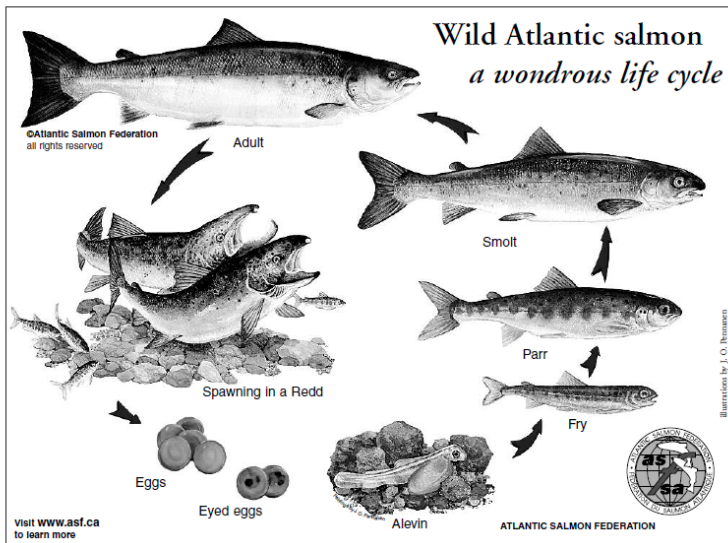
ALEVIN...

BUBBLES (FRY)...
EYED EGGS...



 Fish Cam

A Lifetime Journey – the pocket version



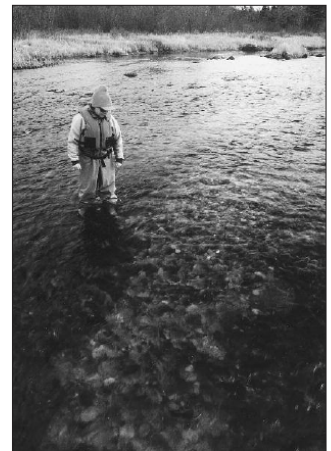
Redd →

A Special Streambed

Loose gravel of mixed sizes, up to 9cm/3in covers this section of riverbed. Here wild Atlantic salmon have excavated the loose rock (grey area) in order to lay their eggs. After digging out 20cm. / 8in. of the gravel, the eggs have been fertilized, and then been covered again by the female.

This redd, as it is called, is indicated by the lighter gravel. White gravel around it has algae growing on the surface, the newly churned streambed does not. Thus the lighter tone.

Late the following spring the eggs will hatch, and the alevin will live off their yolk sac beneath the gravel. As this food supply is used up, the small Atlantic salmon will emerge, and swim above the gravel areas of nearby riffle areas.



Tom Moffat

Wild Atlantic salmon vary in appearance during their lifetime. Until the early 19th century the life cycle was not understood and documented, and Parr and Smolt were assumed to be different species of fish.

- EGGS - Pea-sized orange eggs are deposited in riverbed gravel in autumn, and hatch the following early spring. As the eggs develop, the eyes of the developing wild salmon can be seen through the semi-transparent membrane.
- ALEVIN The partly transparent alevin hatch and remain hidden in the riverbed gravels, feeding from the attached yolk sac. They are about 2 cm or less than 1 inch in length.
- FRY - Wriggling up from the gravel, fry begin feeding on microscopic life in the stream. They eventually reach a length of 5 to 8 cm./2 to 3in. before transforming into parr.
- PARR - The vertical markings, called 'parr marks' appear, with a single red dot between. Parr remain in the river for 2 to 6 years, depending on water temperatures and food availability.
- SMOLT - At a length of 12 to 24 cm/4.7 to 9.5 in. a springtime transformation of the parr into smolt takes place. A silvery sheen replaces the parr marks, and internally they undergo a complex transformation to survive in saltwater. On the downstream journey the odors of the smolt's native river are imprinted on its memory, to be recalled when it returns to spawn.
- ADULT - Silvery hunters, adult wild salmon live one or more years at sea. Wild salmon that return after one year at sea are called GRILSE.
Adult salmon return to home rivers, entering freshwater between April and November. Once in freshwater they stop feeding, living off accumulated fat reserves.

SPAWNING IN A REDD -

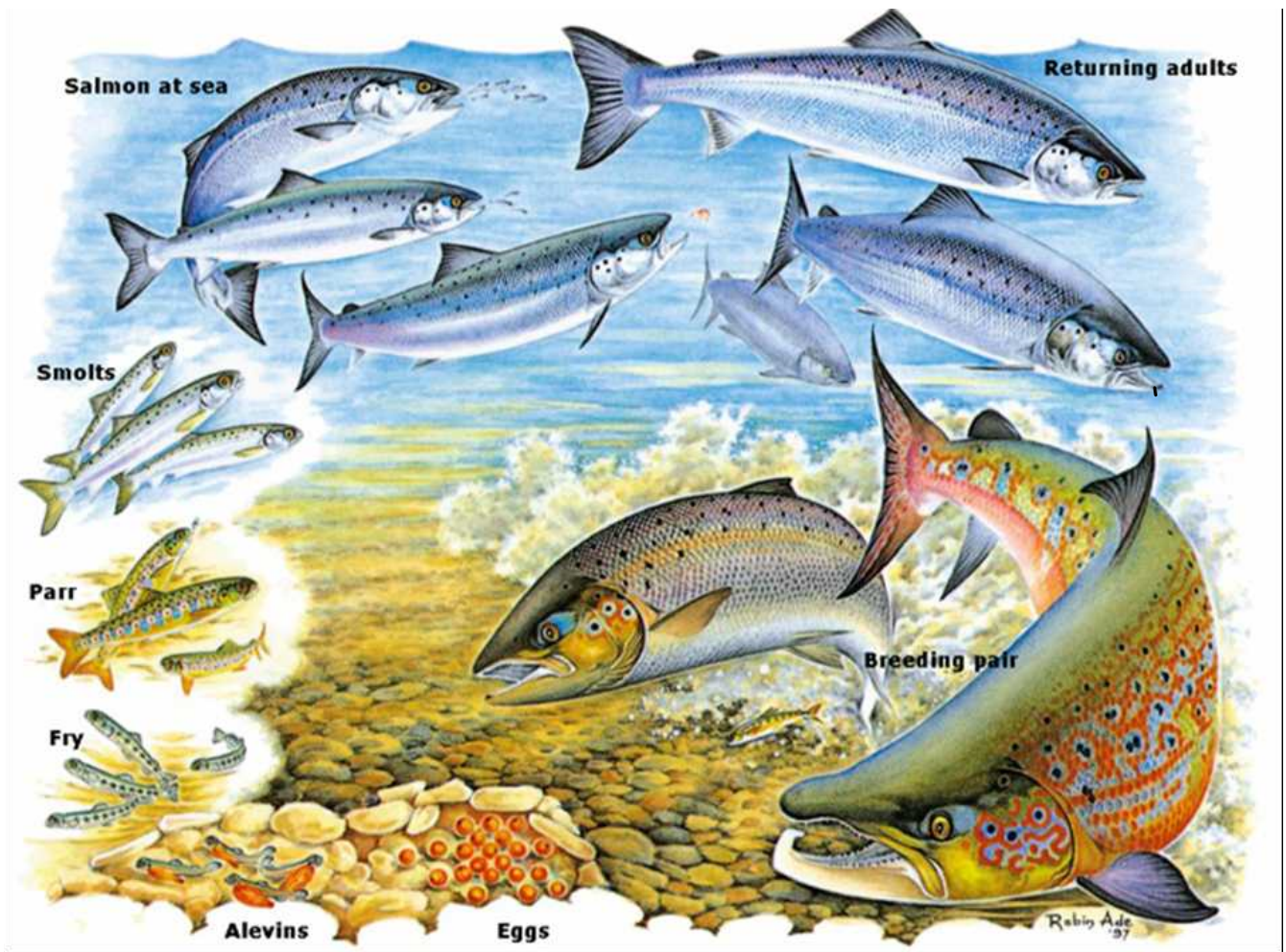
In late fall the wild Atlantic salmon spawn. The female digs a 10-30cm/4-12 in. deep nest called a REDD in the gravel bottom of the stream. Her eggs and the milt from an adult male are released into the redd, the gravel replaced with additional tail thrusts. In some cases sexually mature male parr manage to fertilize a percentage of the eggs. In the painting parr are seen swimming nearby, looking for an opportunity. The female may lay 1,500 eggs or more for each kg./2.2 lb of body weight. - Thus a 12 pound female salmon will lay about 8,000 eggs, completing the life cycle.

The Heart of a Salmon

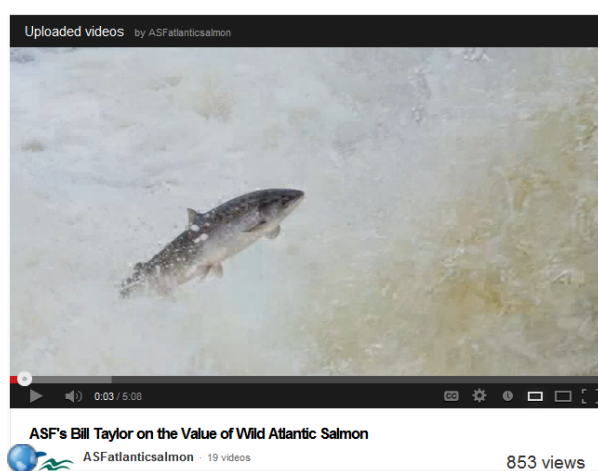
An adult Atlantic salmon's heart rate will vary with the temperature of the water – and with the exertion.

In water at 16 C, a salmon's heart rate was measured at 67 beats when resting in still water – and reaching 91 beats when exercising for more than an hour.

Interestingly, soon after exercise begins, the salmon's heart rate actually drops, as it reduces blood flow to the outer parts of the body, in order to increase efficiency of the muscles.



Atlantic Salmon...importance to NB, Miramichi and YOU!!!



Attachments

Life Cycle of the Atlantic Salmon.wmv