

Wheatley River Improvement Group Summer 2008 Final Report

Supervisor: Adam Vessey
Work Crew: Sam Arnold

This summer began with a survey of previous years' work, as well as a bit of scouting on the Horne Creek in Oyster Bed Bridge, and Crooked Creek.

Rackham's Pond:

Sam and I spent nine days throughout the summer on work associated with Rackham's Pond, doing either silt depth testing, clearing trees, or attempting to model the basin.

The silt depth testing was accomplished with a 1/2" piece of steel grounding rod which measured roughly eight feet long. There were two sets of silt depths taken, at different intervals—the first set was spaced roughly every hundred feet, on either side of the stream, while the second set was somewhat more organized, set up with eight cross sections in which the points are ten feet apart, and each cross section two hundred feet apart up the basin, starting from just above the dam. Measurements were recorded using GPS.

One day was spent clearing trees on the road down to Rackham's Pond, while another was spent clearing alders so the altitude gradient of the old bypass/spillway could be measured.

Geographic Information System (GIS) use:

To help with the plotting of points at Rackham's pond, I requisitioned some GIS maps from D.E.E.F.. This was accomplished via Mary-Lynn McCourt (mlmccourt@gov.pe.ca), Geomatics Supervisor with D.E.E.F.

I used an open-source program, Quantum GIS (qGIS) to make use of the acquired data layers—layers, because there is often only one type of information per layer; say, the elevation contours may be on one, below that, you may have some orthographic photos, while on top, you may have a road layer. I requested and received only the contours, orthos, and hydro network.

Due to the License Agreement signed during the requisition, I am unable to give the maps (digitally) to other members of the group, though if needed, pictures and/or prints can be produced, or the maps could be reissued upon completion of the License Agreement by the group.

Electrofishing:

One day was spent with Rosie MacFarlane—the Freshwater Fisheries Biologist with Fish and Wildlife, electrofishing upstream of Rackham's pond.

At the end of the electrofishing, we tallied it up, and figured that some 150 fish were present on the 150 foot (~47 metres) stretch of stream we covered—mostly Brook Trout and fairly small, but there were also managed to find both about half a dozen larger Brook Trout, and a few Stickleback.

Rainy Days:

While there were not many days where we actually were rained out, there were a number of mornings we spent inside because it had rained the previous night, and everything was still rather wet. During these times, we were able to complete two presentation boards—one on the work the group does, and the other with more general information, such as some history of the area, ideal locations for various native trees and shrubs, and more information on the problems encountered in the watershed.

Some time was also taken working on some tree information sheets, which are to be used at some point on the trails made in previous years near Don Matheson's. Currently, they are only in English, but having them translated into French has been discussed.

A web log (blog) was also started for the group, at <http://wrig.blogspot.com/>.

W.R.I.G. Nursery:

The nursery required a bit of heavier work this year, on account of a few beds of trees which had grown too big. A few days were spent clearing beds of Yellow Birch, White Ash, and parts of other beds, which had some rather large Red Oak and White Pine. After removing the trees from the beds, Don tilled the newly vacant beds, as well as a few which had been cleared with last year's tree give-away, for eight beds total.

We replanted the beds with a combination of White Spruce, Eastern Larch, Eastern Cedar, and White Pine, as well as the majority of one bed into which we planted some maple seedlings. We had to seek out the maple seedlings ourselves, because the government nursery had none—they do the hardwoods more so in the fall—and ended up planting approximately three beds of White Spruce, since they had plenty and should be fairly moveable.

We spent a day picking up some mulch (wood chips) and putting it on the nursery beds.

Tree Planting:

We planted 174 trees in two locations: bordering the Crooked Creek just upstream of the Parker Cross Road, and diversification plantings on Leigh Laird's land on the Winsloe Road, handy to the fork in the Horne Creek.

Stream work:

There were two main locations where we performed stream enhancement this year, totalling some 1,300 metres: On the Crooked Creek, on either side of the Parker Cross Road, and on Leigh Laird's land on the Winsloe Road. Brush mats were built on this section of the Horne Creek, with the help of Environment Futures crews.

At the start of the summer though, we also went through Norma Wayne's stream on the Little Bungay Road fairly quickly, more just to check on previous year's work, but we did also remove some debris.

Miscellaneous:

A couple of days were spent well out of the watershed: One for a First Aid course in Summerside, and the other when we took a trip to the Devil's Punch Bowl.

The trip to the Devil's Punch Bowl was undertaken on a Saturday, for a tree identification seminar. Using their nursery as reference, the different native trees were discussed, and clues were given on how to identify them.

There were also a couple of days spent distributing flyers, newsletters, and posters, for the water sampling clinic held in the spring, and the Wheatley River day.

Another afternoon was spent helping to remove some spruce which had fallen into/across the river, just downstream of Rackham's Pond; there are spots north of the dam which could almost use brush mats, along the east side.

Recommendations:

1. A cellular phone should be purchased for the crew supervisor, to facilitate in- *and* out-bound communication, especially for safety's sake.
2. A push should be made to have the First Aid course happen before the work term starts, or at least at the beginning of it, since having the crew working for a month without their training (up-to-date) could prove disastrous.
3. The supervisor needs to (be helped to) develop a time frame for when work is to be done—I found it a little difficult at first, judging how long a given task will take.
4. Be sure to encourage the supervisor to contact Environmental Futures supervisors as soon as possible, especially if there are only two people to the crew.
5. The bi-weekly meetings between the crew and the board should be reinstated, since the focus of the meetings of late has shifted strongly towards the Pond project, and previously, the River Days weekend. This would be a better opportunity for the crew to express concerns or whatever they might, since with the more recent meetings, there is often a more extensive agenda to be covered.
6. There should be at least one outing during the year for the board members, to see what the crew has accomplished, and to help them keep their focus on what the crew can and is doing.
7. The impact of beavers in the area should be reconsidered; there are two separate dams quite close to each other, on both main feeders in to the Wheatley River, and they are both quite large. One is downstream from where the stream crosses the Little Bungay on the south end, or upstream from the bridge on the Millboro Road, while the other, and potentially more dangerous, is located just upstream of Route Two, in Brookfield, near the Darlington Road. Those in Brookfield have repeatedly attempted establishing a dam downstream, just before the culvert under Route Two, which in time could cause a failure in the road surface.

Work to be done:

More work can be done on the Horne Creek, both upstream and downstream of where we worked on Leigh Laird's land, as well as on the Chapel Creek, west and a short ways east of Route 243. Also, it may be time to restart on the Wheatley River itself, or at least to have a good look at the work which was done near the beginning of the project.

Conclusion:

I feel that this summer was a success, considering the number of people on the crew, as well as the diverse tasks asked of Sam and I.

Adam Vessey
Stream Supervisor, 2008