

Shell Conservation Internship Program

2005

FINAL REPORT

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During my Shell Conservation Internship this summer, I accomplished a lot of great things and learned some valuable skills for employment in the conservation field. Summarizing these past sixteen weeks will not be an easy task as my experiences were so widely varied, but that is certainly not something to regret. I have been given both office and field related tasks.

In the office, I'm helping to structure NCC's project data, both paper and electronic information, according to Ontario's new sub-regional Land Information system. The significance of this work cannot be understated. Having complete files that are user-friendly, both paper and electronic, is essential to daily operations. The organized paper files are now easily accessible and finding important information can be done quickly as is often needed. Our database also allows users in our various sub-regional offices access to property information when the file is located elsewhere. Additionally, important documents can and are being scanned and linked to the database which facilitates access across the Ontario region.

This task was especially interesting to me for many reasons. The simplest is that I gained a greater understanding of the processes involved in land securement whether it is a purchase, donation, easement, other type of acquisition. I also learned a lot of history about the NCC properties which was interesting and especially helpful when I visited many of the sites. This work also allowed me to see the evolution in NCC's business; from being a largely facilitating organization through funding assists to owning and managing properties and then to taking conservation easements once the legislation was enacted for this in Ontario. It became evident that important habitats could be conserved through many different ways and that there are many landowners who are very passionate about conserving the significant features of their unique properties.

In addition to my work in the office, I had many ventures into the field. My field excursions were always a great experience, even when the Poison Ivy was crawling up the trees or the risk of chiggers (biting larval mites) was at maximum threat.

My first field day was spent in the Happy Valley Forest, part of the Oak Ridges Moraine near Toronto. On our first day we learned about identifying vegetation communities, invasive species and other management threats, and conducting biological inventories of plants and animals. We learned soil sampling techniques, including the identification of soil types, which I had no previous experience with and so found very helpful.

The properties in Happy Valley Forest were stunning, from the sea of beautiful trilliums to seeing all the amphibians (my wildlife interest is amphibians and reptiles!). Also on this trip we completed Global Positioning System (GPS) trail mapping – another new skill for me. We also spent time learning about invasive species management and this means hours of pulling Garlic Mustard! This wouldn't be the last we focused on removing invasive weeds; I also assisted at one of our Volunteer for Nature (VfN) days where we removed Garlic Mustard at a different site.



Trillium Sea in the Happy Valley – May 18, 2005



Pulling Garlic Mustard at Turkey Point – June 4, 2005

Two of my other field days involved the less arduous task of planting. One daytrip involved planting native maple at a site near Mono Mills. Trees had been planted two years previous as well and were all growing well in the area, a positive sign for the management initiatives on the property.

My other planting foray was to a site near Turkey Point on the north shore of Lake Erie. At this site, two previous prescribed burns had been carried out to help promote Black Oak savanna succession, the historic community in the area. The fires helped clear the forest understorey so that dormant savanna species in the seed bank could germinate and repopulate the area. We saw a growing population of Bird's Foot Violet, a rare species dependant on savanna conditions, another positive sign for the restoration efforts. In order to further restore the savanna and to increase native butterfly populations, we planted and seeded native wildflowers such as Milkweed and Lupines. It was at this site that I had the opportunity on two separate visits to see the recently hatched Turkey Vulture. This was an exciting experience and my pictures from the two visits showed how much the Turkey Vulture had grown in just three weeks.



Planting Wildflowers at Turkey Point – June 24, 2005



Baby Turkey Vulture at Turkey Point - June 4, 2005 (left) and June 24, 2005 (right)

I also traveled to an NCC site on the Bruce Peninsula where we attempted to locate another rare flower, the Ram's-head Lady-slipper. We were not able to survey the entire property and didn't find the plant, but one plant was found on an adjacent property. The day was still a success though, we saw a Ribbon Snake which was also an important find.



Ribbon Snake at Corisande Bay (Bruce Peninsula) – June 14, 2005

I was very fortunate to participate in a tour of Bickford Oak Woods, a property located in southwestern Ontario. The tour was for Gord Miller, the Environmental Commissioner of Ontario. Allen Woodliffe, a renowned biologist in Ontario, led the tour and brought us to the most unique feature of this site, the Swamp Cottonwood stand. This stand of trees in Bickford Oak Woods is the only known stand of Swamp Cottonwood in all of Canada so it was a privilege to take part in this tour and glimpse such a rare species.



Allen Woodliffe and Gord Miller - June 23, 2005



Me & the Swamp Cottonwood – June 23, 2005

With the other two Ontario Region Shell Interns, Sarah Piett and Andrew Ryckman, I had a four-day field outing to NCC's Oxley Poison Sumac Swamp located in Ontario's deep south. On this trip, we camped out for three nights, and helped with management activities. The work here involved testing different methods to see what would best stimulate the underlying savanna seed bank. This work was similar to field labs in university and I enjoyed applying my knowledge to a real-world application.

Also on this trip we were very fortunate to visit Pelee Island where NCC has secured land through purchases, donations and easements. We explored the alvar communities on one of our properties, seeing savanna alvar and treed alvar and we also explored other protected habitats on the island. We spotted a melanistic Garter Snake that kindly entertained a photo opportunity for me.



Andrew, Sarah & I: Pelee Island Savanna – July 28, 2005



Melanistic Garter Snake: Pelee Island – July 28, 2005

Other land protection knowledge that I acquired this summer included the importance of complete management plans, thorough baseline documentation reports, vigilant monitoring of all properties, whether owned or easements, and maintenance of positive relationships and regular contact with landowners. This job has been extremely rewarding; NCC is such a positive organization to be involved with.

I have gained such a wide breadth of knowledge during my summer and am truly appreciative of this opportunity. My knowledge has been practical, technical, theoretical and personal. I really enjoyed getting to work with volunteers in the field as well as other people who are all genuinely and passionately concerned about our environment and who are working to make things better. It's truly a very constructive field to be working in. Additionally, my co-interns were amazing. Everyone was friendly, supportive and willing to teach. I really feel that this summer experience gave me a more optimistic outlook on the future for our environment. It's been very motivational.

The Shell Intern trip to Calgary this year was a wonderful cap to my summer experiences. It was great to meet all of the other interns and find out what different things we had all done and learned this summer. Hearing about Shell's environmental efforts was a positive lesson as well. I am distinctly aware that we are a society dependent on fossil fuels, but am glad that Shell is working to reduce their impact on the Earth in many ways. I had a lot of fun on the trip and learned even more about NCC as well as Shell.



Some of the Shell Interns at Elbow Falls, Alberta – August 23, 2005

It will be odd to be finished my summer role at NCC as I have really enjoyed my time and will miss all of the great people I've been fortunate to work with over the last four months. I am very happy that this internship has opened future doors for me by giving me such fantastic work experience in my field, and I will continue to work hard to put in my part of the change that I so wish to see in the world, wherever that may be.