

BASELINE REPORT for:
Laurie Lawson Outdoor Education Centre

LOCATION Northumberland County
Hamilton Township
Lot 24, Concession 2 (S. part)
Size - 100 acres or 42 hectares
North side of Telephone Road, 1 . 1 km. west of Burnham St

HISTORY - A Mr. Donaldson was owner of the property in 1878. Subsequently it passed through the hands of several owners until purchased by the late Dr. Laurie Lawson. In 1968 he offered the site to the local Cobourg School Board for use as an Outdoor Education Centre. Initially four Cobourg schools made use of it working out of a large loaned C.O.D. tent erected by army personnel. It should be noted at that time major parts of the property had already been planted with red and white pine. With the advent of nine regional school boards, a re-organization effort by the Ministry of Education in 1969, its usage was suddenly desired by 29 local central Area schools of the new United Counties Board. Thus a building was built in partnership with technical students of CDCIE. By 2005, 35 years later approximately 125,000 student visits from elementary, secondary and special needs classes have utilized the centre accompanied by their school staff and numerous parent volunteers. Dr. Mary Bedford-Jones and her husband, the late Mr. Bill Goodwin took over the property following Dr. Lawson's death in 1983. Dr. Bedford-Jones the current owner has two main objectives in her desire to continue the preservation of this area.

1. Wildlife enhancement and environmental protection through:
 - (a) habitat protection
 - (b) support the reintroduction of native species
 - (c) continue no hunting and limited fishing policy
 - (d) continue selective thinning of red pine plantation

Note: The property is presently under the MFTIP - Managed Forest Tax Incentive Program.

2. To continue to make the property available for educational purposes. Note: This program was a pioneer in the field from the late 1960's onwards and has a high profile in the community.

IMPORTANCE OF PROPERTY TO SURROUNDING LANDSCAPE:

Being the only wooded area for some distance, it provides shelter and habitat for many species of flora and fauna. During spring and fall migration it is alive with migrant birds enroute to nesting grounds or overwintering sites. With so much woodlot fragmentation these days it is great to have a relatively large block of wooded area within close proximity to Lake Ontario for this purpose. In springtime it is a favourite area for botanists and photographers seeking spring flowers such as hepaticas, trilliums, Jack-in-the-pulpit, dog-toothed violets, bunchberry to Indian pipes. in fall it

is a destination for local fall colour with the climax species such as maple, oak and ash mixed with the greens of cedar, pine, spruce as well as the yellows of birch, poplar and tamarack. Bird feeders are watched daily by students as well as Christmas census and Atlas groups. Until recently it was an area where town youngsters could always count on seeing beaver and muskrat or their signs. As the poplar and birch age and size this becomes less feasible. Its proximity to two major towns (Cobourg and Port Hope) make it a desirable retreat which can be reached on foot, bike or car by youth to seniors alike.

Pioneering the Outdoor Education Program in 1968 I was closely associated with the property for the following 20 - 25 years. The last naturalist that I hired was Mark Rupke who is still closely connected to the property. I am indebted to Mark for current maps and updated information, especially pertaining to the last 15 years. Note: For ease of understanding the property components, I am going to refer to the 6 major sections indicated on the Managed Forest Compartment Map.

SECTION 1 - NORTH WEST CORNER (4.5 ha.)

The overall property is relatively narrow but quite deep, extending approximately from Telephone Road to the Danforth Road (S.E. corner) which is about half the distance to Dale Road. Thus this N.W. section of the property is located too far from the Outdoor Education Centre to be utilized. The only clearing is on the top of the N.W. hill with the land sloping to the stream on the E. side. This section was the only part planted mechanically to red pine circa '68 with some white spruce along the stream. The open area in the N.W. corner has a good old field section which was used for seed collection in the establishment of the new Goodwin Field in 2004. A significant area of natural cedar bush exists here also. Deer are attracted to the old apple trees for fruit. Section 1 is to be thinned at the rate of one acre per year.

SECTION 11 - NORTH EAST CORNER (3.4 ha.)

This section lying E. of Cobourg Creek was not planted except for some white spruce along the creek edges and has had very limited development. Again it is too far from the building for daily use and has become a natural shelter for deer, fox etc.

SECTION III - HYDRO CORRIDOR (2.0 ha.)

Two hydro transmission lines run from the W. to E. boundary of the property. This open area by necessity is maintained by Ontario Hydro. It is the old field habitat on the property and relatively unused due to distance from the centre. Seed collection (milkweed, black-eyed Susan etc,) took place for the initial planting of the new Goodwin Field as well as blue-eyed grass as transplants. Being an open area it is not uncommon to observe red-tailed hawk, great horned owls and kestrels hunting over this section. Leopard frogs have been noted in the old oxbow area, adjacent to the creek.

SECTION 1V - EASTERN PLANTATION (4.5 ha.)

The chief feature in this area is Cobourg Creek with two seasonal streams. It is a relatively flat area with steep slopes to the stream. A number of riparian clearings are developing along the stream which are maintained when the creek overflows and scours the area with huge chunks of ice. These areas in turn enhance wildlife opportunities e.g. animals using them and it is a rich area for goldenrod, dock, Joe-pye weed, willow etc.

SECTION V - NATURAL RECOVERY (12.3 ha.)

The N.W. part of this section was known as the duck marsh in the early O.Ed. days. A canoe paddle frequently revealed nesting black duck, wood duck, mallard as well as mink, the occasional otter, beaver lodges and muskrat pushups. Frog songs and woodcock peenting were deafening on a spring evening. In the winter, we spent many afternoons skating here as the area was quite windswept and required little shovelling. A bonfire at the north end amongst the blue beech and hemlock always provided warmth and of course roasted marshmallows plus hot chocolate! In 1967 Loveshins the neighbours to the west began to tile drain their field to the south. This cut off water flow to our existing marshy area impacting the area over time substantially. Emergence plants tend to survive when it is not so wet. Ordinarily they survive at the edges where water is shallow. As the duck marsh became drier these plants survived. Approaching the duck marsh, field clearing areas of large birch and poplar are gradually changing to maple species. Therefore a succession climax area is forming. As a climax forest develops ponds become more distinctive adding more and more diversity to the property. There are 3 to 4 old creek courses of Cobourg Creek which have developed into an ephemeral pond complex. About 40 ephemeral ponds now exist. Ephemeral wetlands or vernal pools are unique, specialized habitats, frequently overlooked because of their small size and appearance. They are actually landform depressions that temporarily fill with water following heavy spring rains, snow melt or the result of a high water table. Most are temporary and dry out entirely by summertime. Many amphibians and some invertebrates have adapted and thrive because of these wet-dry cycles in a vernal pool. Outdoor students are thrilled during "pond studies" to see Fairy shrimp, caddisfly, daphnia, sprintails, water boatmen, blood worms, dragonfly and damselfly larvae, whirligig beetles etc. not to mention salamanders, toads and 4 or 5 species of frogs!

Over the years the original stream N. of the current trail system shifted to the west boundary at the duck marsh, then S. through the centre of the property to the front ravine. Over time and erosion it worked its way N. to the ravine N. of the cabin and E. to the present location. Three temporary streams meander to the S. and two temporary streams meander to the N. Old maps and aerial photos indicate these early stream beds are developing into an ephemeral pond complex. There are ephemeral vernal pools in a variety of situations:

- (1) 30 year old successional forest with birch, poplar, ash mix.
- (2) climax forest, with primarily sugar maple, blending into red maple close to the pond edge.
- (3) sedge marsh
- (4) cedar swamp etc.

These ponds serve as habitat for a wide variety of frog species: chorus frog, wood frog, grey tree frog, spring peeper occasional green and leopard frog as well

as toads. There are also populations of jumping mice present. In the ponds a rich diversity of aquatic life exists: Fairy shrimp, daphnia, cyclops, pillclams, aquatic sowbugs, rat-tailed maggots, various water beetles and many mosquito and midge species.

Early creek banks were high and severe erosion patterns are noticeable. Some 30 oxbows of varying ages exist therefore providing a rich place over time for a tremendous diversity of habitat. Some of which is similar to old lake shoreline habitat e.g. the new duck marsh trail to the N. has bunchberry and maple-leaf hiberniam in the old patch.

Reintroduction of salamander species e.g. Jefferson salamander will be feasible hopefully in approximately 10 years. Their required habitat contains large fallen birch which provide suitable soil conditions. At this point egg masses from elsewhere can be moved to this location. This will be a similar habitat to Jobe's Woods at Presqu'ile: redbacked, yellow-spotted and Jefferson salamander complex. This section contains a wide variety of trees: white cedar, soft and red maple, birch, poplar, basswood, white ash, hemlock, black cherry, blue beech and the start of a population of beech as well.

Interestingly along the western boundary we found the remnants of an old farmstead foundation with the typical lilac plantings still apparent.

This section is the focus of recent O.Ed. studies. Plant life is rich also including several ferns, May apple, Jack-in-the-pulpit, trillium, violet, colt's foot, hazlenut and alternate dogwood to mention a few.

SECTION V1 - MAIN PLANTATION; (13,4 ha.)

Between Telephone Road and the front ravine this section is heavily planted to pine circa '68. At present this provides a good buffer for the property from vandalism, trespassing snowmobiles etc. N. of the ravine much of the red pine has declined and is being replaced by birch, maple and willow. Ravines cutting across this section serve as wildlife corridors and a source of seed which takes as red pine is thinned or dies out naturally.

Originally when Laurie Lawson first permitted us use of this property it was called Frog Hollow locally. A large pond just S. of the cabin was alive with many frog and aquatic species already noted in Section V. Excellent bird feeders attract a rich variety of birds as well as red, black and flying squirrel, chipmunk, ermine, raccoon and jumping mice. It also contains considerable riparian zones of ostrich fern, black willow, basswood, Manitoba, red and silver maple, some beech, planted red oak and tulip tree as well as cedar etc.

With the cutting of the large red pine plantation to form Goodwin field there have been a number of new species introduced: switch grass, big blue stem, little blue stem, Solomon's seal, black-eyed Susan, prairie buttercup, pussytoes, blue-eyed grass, bergamont, plantain, lupine etc. It is anticipated that in having this area close to the new oxbow it may serve to increase habitat and populations of toads and leopard frogs. Currently a pest control company is to introduce woodchucks to the area in an effort to increase the quality and quantity of snake hibernacula. In the past it was not uncommon for classes to see smooth green, red-bellied and garter snake in this section.

Increasingly the red pine is being thinned as part of the school program, natural

shading out, harvesting by local individuals for fire-wood and other means. The area is being planted with oak, ash and walnut with varying degrees of success. It may be that sugar maple and beech which is moving in naturally will be the most likely to succeed here.

IN CONCLUSION: I would like to point out the use of especially section 111, V and V1 by local amateur naturalist for scientific studies:

- (1) Annual Christmas Bird Census with crossbill, Hudsonian chickadee and the odd white-throated sparrow being recorded.
- (2) Provincial atlas area for breeding birds.
- (3) Royal Ontario Museum Nesting Records Scheme with great-horned owl, sharp-shinned hawk, rose-breasted grosbeak indigo buntings and woodcock being species already recorded.

The O.Ed.program, so well respected provincially could not have existed for 35 years without the diversity of habitat so easily accessed by schools. For the little person the interdisciplinary nature of the program provided a wealth in language development and the arts. Junior and senior students delved into math, geography via hands-on mapping, ecology by predator-prey simulation games and aquatic studies as a few examples. Secondary participants do advanced mapping skills, forest management and also co-op placements for students hoping to pursue environmental careers.