# Madawaska Club Limited Managed Forest Tax Incentive Program Forest Management Plan

Prepared by:

Philip Davies Mark Van Rhee This managed Forest Plan is for the 20 year period from:

January 1, 2001 to December 31, 2020;
with a detailed management program for the first five-year period from:

January 1, 2001 to December 31, 2025

The 5 yr. Landowner Report and Approved Managed Forest Plan will be completed and submitted by: July 31, 2005.

# **Section 1: Plan Preparation Details**

#### 1.1 Registered Property Owner

Name: Madawaska Club Ltd. Address: 104 Whitehall Rd

Toronto, Ontario

Postal Code: M4W 2C7

Tel: Residence: (416) 964-0984

Business: (416) 586-5720 Fax: (416) 586-8093

#### 1.2 Plan Author Information

Names: Philip Davies, B.Sc, M.F.C.

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Address: Faculty of Forestry

University of Toronto

Toronto, Ontario

Postal Code: M5S 3B3

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# **Section 2: Location and Identification of Property**

Municipality: Township of Georgian Bay/Geographic Township of Gibson

County/Region: District Municipality of Muskoka

**Zoning under municipal official plan:** Most of the plan area is designated open space -1 with a smaller but significant area zoned Environmental Protection. Lesser parts of the plan area are zoned Shoreline Residential -3 and Shoreline Residential -3-1.

**Table 2.1: Location and Identification of Property** 

Landowner	Prope Locat		Assessment Roll Number	Assessment Roll Area (acres)	Managed Forest Area (acres)
Madawaska Club	County or Reg. Mu	n.: Muskoka	4465020019029000000	239	185.22
Ltd.	Township: Georgia				
	Lot: 44 PT lot 45				
Madawaska Club	County or Reg. Mu	n.: Muskoka	4465020019006000000	320.51	290.91
Ltd.	Township: Georgia				
		Conc: 10			
Madawaska Club	County or Reg. Mu	n.: Muskoka	4465020019047000000	85.6	73.86
Ltd.	Township: Georgia	n Bay			
	Lot: PT Lots 43 & 44	Conc: 11			
Madawaska Club	County or Reg. Mu	n.: Muskoka	4465020019044000000	44.98	44.98
Ltd.	Township: Georgia	n Bay			
	Lot: 44 Plan M163	Conc: 11			
Madawaska Club	County or Reg. Mun.: Muskoka Township: Georgian Bay		4465020019065000000	144.7	135.89
Ltd.					
	Lot: PT Lots 43 & 44	Conc: 12			
Madawaska Club	County or Reg. Mu	n.: Muskoka	4465020019067000000	13	13
Ltd.	Township: Georgia	n Bay			
		Conc: 13			
Madawaska Club	County or Reg. Mu	n.: Muskoka	4465020019080000000	18.5	18.5
Ltd.	Township: Georgia	n Bay			
	Lot: PT Lot 46 PCL 3785	Conc: 14			
Madawaska Club	County or Reg. Mu	n.: Muskoka	4456020004087000000	118.3	70.4
Ltd.	Township: Georgia	n Bay			
	Island 509 PT OR				
Madawaska Club	County or Reg. Mu		4456020004073000000	556	460.9
Ltd.	Township: Georgia				
	Island 506 REMAINDER				
Madawaska Club	County or Reg. Mu		4465020004009000000	27.36	12.8
Ltd.	Township: Georgia				
	Madawaska Club Is	slands			
Total Acres				1567.95	1306.46

# **Section 3: Property Management History**

#### 3.1 General Description of Property History

The property is located in the Township of Georgian Bay/Geographic Township of Gibson in the District Municipality of Muskoka. It is situated on the eastern shoreline of Georgian Bay approximately 16 kilometres NNW of Honey Harbour. Between April and December the property is only accessible from the water. There are no roads leading to the property, although access to the area is possible during the winter months along marked snowmobile trails. Members of the Club maintain boats that are used to access their cottages in the summer, and these are stored at various marinas north and south of the Go Home Bay area.

The Madawaska Club was founded by a group of University of Toronto professors and affiliates. The Charter for the Madawaska Club Ltd. was issued in 1898 and the Club established in the Go Home Bay area during that same year. Between the years 1904 and 1913 land grants were obtained from the Provincial Government and islands were purchased from the Federal government. The land grants were conveyed at a discounted price to the Club in the early part of the century was to provide the University of Toronto group with an area to conduct field research in the natural sciences, hunting and fishing, and as an area for family oriented summer recreation. The original members built a small observatory and biological research station, but these have since been adapted to private use. Members of the Go Home Bay community have carried out scientific research in the area in the past, but the current primary focus of the Club is on cottaging, with the common lands used for recreation and conservation. Over the years the Club has sold lots located on the shoreline of the property for private cottages. The present Club property includes four lots that have yet to be sold and developed (i.e. turned into cottage lots), but the majority of the Go Home Bay area consists of commonly held lands that are maintained by the Madawaska Club. The approved building lots are inventoried, but not covered under this management plan.

In terms of natural resource use, the Go Home Bay area was the site of commercial fishing and the harvesting of large white pine prior to the twentieth century. At the end of the nineteenth century, the combined effects of large-scale timber harvesting, and both human and naturally caused forest fires, had reduced the overall quality of the forest. This left the landscape severely degraded and characterized by barren rock outcrops. Looking at pictures taken in the early 20<sup>th</sup> century, it can be seen that much of the forest had been logged and only small trees remained. The fishing yields also diminished substantially, which closed down the commercial fishing industry in that area.

Activities such as berry-picking, recreational hunting and fishing, tree cutting for firewood and dock stringers, and trapping are permitted on the Club property (The Club allows a local trapper to trap on Club property during the winter). Apart from these activities, the Club encourages low impact recreation and management of a natural environment where there is little interference with natural processes. Historically, septic bed/filter bed sands have brought in exotic plant species, and these accidentally introduced Eurasian species may displace the native species. Combined with this, is the introduction of exotic species in individual cottage owner's gardens. This situation has arisen in the last 30 years, with the provincial government's new laws requiring

cottagers to install more substantial waste disposal systems. Since the soils in the area are very thin, it was necessary for cottagers to bring in soil from inland sources, which undoubtedly contributed to the introduction of many new species to these forests.

#### 3.2 Logging History

The forests in this area were harvested by the turn of the century, with the trees being used for squared timbers and cut lumber. Harvesting of Gibson Township began shortly after 1856, with the majority of the logging carried out by the *Georgian Bay Lumber Company*, who operated the *Muskoka Mills* south of the Go Home Bay area, at the mouth of the Musquash River. The forests were harvested for the extensive stands of large white pine, and the wood was used for building construction. A large amount of the wood was shipped to New York and Michigan for building, as the pine forests in Pennsylvania had been depleted, and those left in Michigan were shrinking. The method of harvesting employed was large-scale clear-cutting, which resulted in the accumulation of large quantities of slash. As a result of the slash left behind, extensive fires, ignited either by humans or as a result of lightning strikes, very often followed the cutting operations. These fires tended to be very intense, burning off both the stumps left after harvesting, and the soil cover in many areas. For this reason there is very little evidence remaining in the area of those harvesting years, and the soil cover is very thin and fragile. It is possible that many of the currently exposed rock areas would have been covered with soil and been able to support forest before logging began.

The oldest trees that were sampled in the preparation of this plan were slightly older than 100 years, with the oldest white pine recorded at 154 years of age. The oldest trees are those that were too small to be harvested by the lumbermen, yet were large enough to survive the subsequent fires, or grew in an area where fire did not occur.

The regeneration of this area and its subsequent return to forest cover occurred naturally, resulting in the white pine and red oak forest that stands today. There have been small forest fires since the turn of the century, but for the most part there has been a continual progression, and the forest is, on average, approximately 100 to 110 years old. Humans have had very little direct impact on this regeneration. The most notable fire event occurred in 1919 and burned for six weeks in the southern end of the property. It was started by a lightning strike in July, and was not put out until August, when rainfall finally extinguished it.

This property is already registered under the Managed Forest Tax Incentive Program, but the plan was written for the previous program (The Managed Forest Tax Rebate Program). As a result of the new regulations the plan needed to be updated in order to requalify for the tax incentive. This new plan contains a more detailed description of the local vegetaion and a more accurate inventory of the forest as detailed surveys were performed throughout the property by the authors of this plan.

#### 3.3 Importance of the Property to the Surrounding Landscape

#### Geology

The property owned by the Club is located in an area that is physiographically representative of the southern portion of the Georgian Bay archipelago, also known as the Thirty Thousand Islands. The archipelago is formed by the westward dip of the Grenvillian peneplane into Georgian Bay. Due to the geologic evolution of the area there are large amounts of exposed bedrock, sparse soil cover, and a limited diversity of species. There are two important processes that resulted in the present ecosystem. The first was that an ice lobe, centered on Georgian Bay in the latter stages of Wisconsin glaciation, removed sediment lying in the lake basin and deposited it in the moraines located adjacent to the Great Lakes. The second process that distinguishes this ecosystem from those farther inland is that as the glacier retreated, post-glacial Lake Nipissing occupied the basin from approximately 9,000 BP to 4,500 BP at 7.5 m above current water levels.

#### **Vegetation Types**

The forests of the Club property are typical of the type associated with the Georgian Bay region. Species including white pine, red oak, red maple and white oak are common to the entire area while poplar, sugar maple and spruce are also present, but not as common.

It is comprised of a multitude of small exposed islands (several that support breeding seabird colonies), a significant forest wetland which supports Atlantic Coastal Plain species, long exposed rock ridges, and forested areas representative of the Great Lakes-St. Lawrence forest of Central Ontario. Crown land forest located inland to the north, east and south is similar to that found in the Go Home Bay area.

Moreaus Bay, located in the northeastern part of the Madawaska Club property, is of significance to the area and the surrounding landscape. This area consists of one large island (Big Island), and numerous bays, channels and lakes in the lee of the island. The topography of the bay is one of uneven, impermeable bedrock knolls and ridges alternating with low wetland areas, which are characterized by poor drainage.

The dominant vegetation types found in Moreaus Bay are dry oak barrens consisting of grasses, lichen covered rocks and common juniper; mixed pine-oak forest on dry-mesic soils with a semi-open canopy; and successional deciduous forests dominated by aspen, white birch and red maple. Further south along the Pittsburgh Channel there is a significant hardwood stand on the mainland. Trembling aspen, red oak, white oak, red maple, and a large concentration of sugar maple regeneration in the understory dominate this compartment. The sugar maple may have invaded from a sugar bush located east of Go Home Bay, on an old farm on the Go Home River.

Located on the leeward side of Big Island, Sand Run Channel, Moreaus Bay, Pittsburgh Channel and Iron City Bay (see compartment map in section 6) make up an extensive area of sheltered shoreline. The waters in this area are generally less than two metres deep, but vary according to season. There is a shallow gradient from shore that has predominantly sandy or gravely soils with peat accumulations scattered throughout. Due to these conditions, the area is an ideal place

for Atlantic Coastal Plain Flora (ACPF), such as Yellow-eyed grass (*Zires diformis*), Virginia chain fern (*Woodwardia virginica*), and horned bladderwort (*Utricularia cornuta*) (see Appendix 6). These vegetation species are more common along the Atlantic Coast, and established here during the last glaciation. They now represent a remnant floral community, and are a significant feature of this area of the Georgian Bay coastline. There are distinct bands of shoreline vegetation communities that run parallel to the shoreline, and correlate well with the moisture gradient.

The Pittsburgh Channel has also been identified by the *Muskoka Heritage Areas Program* as having a high scenic value as an attractive narrow waterway that is readily accessible by boaters, and is frequently used as an anchorage for boaters traveling through the area.

#### Fish and Wildlife

Moreaus Bay provides habitat for numerous rare species of birds and plants. Based on the shallow water that is surrounded by marsh, the diverse fish community, and the excellent pike, muskellunge and bass spawning habitat, the bay was classified by the Ontario Ministry of Natural Resources (OMNR) as a *Sensitive Area* and has since been identified as a conservation reserve in Ontario's Living Legacy. At the northeast end of the bay, is another significant wetland area named Tate Lake. A beaver dam at its southern end maintains the lake and a small channel drains through it into Iron City Bay. The northern section of the lake contains an extensive marsh area, however since this area is outside the commonly held property, it is not included in this plan.

This area is highly sensitive due to the significant fish breeding habitat, the inland lakes and peat lands that provide habitat for rare plant species, and the excellent waterfowl habitat it provides. Suitable policies related to the protection of shorelines for ACPF and fish habitat protection should be followed and the classification of the inland wetlands should follow provincial policy guidelines.

Important herpetofaunal species are also found in the area, and their presence is undoubtedly a result of the unique landscape found along the Georgian Bay coastline. The threatened eastern Massassauga rattlesnake, the vulnerable eastern hognose snake, and Ontario's only lizard, the five-lined skink, have been recorded throughout the Madawaska Club's property. Also of importance is the spotted turtle, which is listed as vulnerable and has been observed on the Club's property. The most important factor in the conservation of these species is the protection and maintenance of their habitat. Each requires a certain environment that should be protected, as the loss of suitable habitat has been identified as the main limiting factor for all of these herpetofaunal species. It is especially important to locate and protect their hibernacula, as they will use the same area for overwintering year after year. Destruction of this important habitat feature has been shown to lead to the demise of the populations that use them.

A group of Go Home Bay cottagers formed the *Georgian Bay Osprey Society*, erecting osprey nesting platforms in the Go Home Bay area, and this initiative has spread throughout the greater Georgian Bay shoreline area. This initiative has been quite successful with nesting locations being erected up and down the shoreline of Georgian Bay. In the Go Home Bay area there are four osprey-nesting platforms, in the Madawaska Club property, and these are shown on the

property map. In addition, Club members interested in bird watching compile bird checklists annually.

#### **Socioeconomic History and Land Use Patterns**

The Go Home Bay community is closely knit, largely descended from the original settling families of the late 19<sup>th</sup> century, with a common library, community store, marina, many social functions, and common ownership of the land through shareholding in the Madawaska Club Ltd. As stated earlier, the Club property is representative of the southern part of the Georgian Bay archipelago.

In May 1998, the former Georgian Bay Crown Management Unit amalgamated with the Bracebridge and Parry Sound Crown Management Units to form the French/Severn Forest. The Ontario Ministry of Natural Resources granted a *Sustainable Forestry License* for this forest to *Westwind Forest Stewardship Inc.* Westwind is a non-profit organization whose purpose is to manage the publicly owned French/Severn Forest in a way that is both ecologically and socially sustainable. It is directed by a local board, which includes community and forest industry representatives.

The Madawaska Club common property is typically used for nature hikes/walks, picnics, hunting, fishing, camping, snowmobiling, berry picking and scientific research. In terms of the cultural significance of the area, several members of the Group of Seven frequently summered in the Go Home Bay area and captured the local features and community in paintings. For the most part, Club members are summer residents, whose permanent residences are located elsewhere in Ontario. The Club's common property is an important part of the community and provides members with a place to separate themselves from the congested areas in neighbouring cottage communities. Furthermore, the community wishes to maintain the type of low impact recreation that has traditionally taken place, and wants to stress that conservation is one of their main goals and should be considered when performing any type of recreational activity on the property.

To further add to the importance of this area to the greater Georgian Bay Area, this management plan is being produced in co-ordination with the *Greater Bay Area Foundation* (GBA), which is currently in the process of implementing the *Georgian Bay Littoral Biosphere Reserve*. The information gathered in this plan will be used by the GBA Foundation and it is hoped that this area can act as a buffer zone so that ecological corridors can be maintained between core areas (i.e. national and provincial parks).

Another important and recent development has been the announcement of the Provincial Government's *Living Legacy* plans, which will create a continuous system of parks and protected areas along the shoreline of Georgian Bay north of Parry Sound. This area will act as a wilderness core for the Biosphere Reserve. This increases the importance of ecologically sound management in the lands located between the core areas (i.e. buffer zones), such as the Go Home Bay area, as they will represent the wilderness corridors of the reserve, and require strict development guidelines to remain viable. Through the development of forest management plans and the sound management of private forests, these corridors can be maintained successfully. It may also be possible that some areas may be declared as provincially significant forest or wetland habitats, or Areas of Natural and Scientific Importance (ANSI).

# **Section 4: Property Location Maps**

#### **Section 4.1: Property Location Map**

Owner(s): Madawaska Club Ltd. District: Muskoka

Township: Georgian Bay

#### Role #:

- 1) 4465020019006000000
- 2) 4465020019029000000
- 3) 4465020019047000000
- 4) 4465020019044009801
- 5) 4465020019065000000
- 6) 4465020019067000000
- 7) 4465020001908000000
- 8) 4465020004087009801
- 9) 4465020004073000000
- 10) 4465020004009009802

#### Legend

# **Section 4: Property Location Maps**

## **Section 4.2: Detailed Administrative Map**

Owner(s): Madawaska Club Ltd. District: Muskoka

Township: Georgian Bay

#### Role #:

- 1) 4465020019006000000
- 2) 4465020019029000000
- 3) 4465020019047000000
- 4) 4465020019044009801
- 5) 4465020019065000000
- 6) 4465020019067000000
- 7) 4465020001908000000
- 8) 4465020004087009801
- 9) 4465020004073000000
- 10) 4465020004009009802

#### Legend

# Section 5: Landowner Objectives, Strategies & Activities

#### **5.1: Priority of Objectives**

The Club has identified the following priorities through their Board of Directors:

			Priority	
Rank	Objectives	Low	Medium	High
1	Recreation (trail development)			✓
2	Natural Environment			✓
3	Optimizing Cash Flow			
	(Reducing Tax Load)			✓
4	Community Involvement		✓	
5	Education		✓	
6	Forest Fire Protection		✓	
7	Hunting	✓		
8	Fishing	✓		
9	Harvesting Wild Edibles	✓		
10	Wood Products	✓		
11	Scientific Research	<b>√</b>		

#### **5.2:** Detailed Property Level Objectives & Strategies

#### Recreation

Objective: To promote the forest as a recreational resource for the Go Home Bay community.

There is a long history of communal and individual recreational use of the Go Home Bay area by the Madawaska Club members. This use consists of a number of activities such as; picnics, summer aquatic sports such as swimming and boating, hiking, nature and leisure walking, camping, fishing and hunting, and trail biking. An annual aquatic sports regatta is held in August, with the following events and party held on the shoreline of the common property. Winter activities in the area include snowmobiling, cross-country skiing and snowshoeing. These events generally occur in this area on a small scale, and have not had any significant impact on the forest. If these winter activities were to become more popular, however, it would be necessary for the Club to address their impacts and make necessary management decisions to control their effects.

1. Develop and maintain a network of trails throughout the property.

Members of the community are currently developing a network of trails throughout the common property, connecting individual cottages and the common lands with each other and surrounding Crown lands. These trails are being developed in an ecologically sound manner on both Big Island and the mainland, based on advice and information gathered at Georgian Bay Islands National Park. They are being designed to allow access for a number of different users, including hikers, mountain bikes, and the elderly. Local

volunteers and paid students are performing the surveying, clearing, and trail blazing of the network.

Many of these trails will follow Nastawgans, ancient aboriginal trails that have been identified from historical Madawaska Club records and air photos, as well as accounts from members of the community. Overgrown logging routes are also being redeveloped as hiking trails. Historically, mapmakers, trappers, loggers, fishermen and early members of the Go Home Bay Community used these trails. The development of this system is an important effort to open the wooded areas of the property to Club members, and allow them to explore both the natural assets and cultural heritage of the area. These trails generally follow the rocky ridges that transect these forests, and have a low impact on the environment. Users are educated about the importance of staying to a single path, and packing out any garbage they may create or find along the trail.

Overland snowmobile routes will be inspected every second year and clearing will be conducted as necessary. The clearing of these trails is necessary, as this is the only way to access the property in the winter.

3. Encourage the community to take advantage of their forest resource for family and community gatherings.

Long, Cecil and Sunset Islands are popular picnic destinations for Madawaska Club members, and are also used for campfires and other larger events such as bonfires. As stated above, the Club holds an annual Regatta in August, and the event organization and party following are also held on the shoreline of the property.

4. The Recreation Committee will be will be asked to consider a camping and picnicking policy for all of the property, but mainly concerning Long, Cecil, and Sunset Islands.

The committee will provide a set of guidelines for the use of the property and shall provide to the Board of Directors recommendations for the construction, scheduling and operation of such facilities as permanent fireplaces, outhouses, docks, firewood bins, garbage bins and picnic benches. The committee will consider issues of safety and fairness and the level of community interest in establishing any permanent facilities versus the interest in controlling expenditures. The status of these facilities will be reviewed on a five-year cycle.

#### **Natural Environment**

Objective: To promote and maintain the natural environment, and allow for the natural evolution of the forest without direct human interference.

The appreciation and enjoyment of the natural community has been one of the main focuses of the Madawaska Club, and it has sought to allow the surrounding forest environment to evolve naturally. Throughout its history, the Madawaska Club has strived to manage the forest in a manner that does not interfere with the natural environment. As indicated in the above table of

management priorities, the focus of the management of the property is on recreational use and timber extraction is low down on the list.

1. The Madawaska Club will work toward having sensitive natural areas in the Club property, such as swamps, beaver sloughs, and significant shorelines designated as Provincially Significant Wetlands, Conservation Areas, or ANSIs where appropriate. This will be carried out by hiring professionals to survey and assess the significance of various areas of the property (i.e. conservation assessments), and making application to have them reclassified by the OMNR.

This region has been described by the *Muskoka Heritage Areas Program* (Reid & Bergsma, 1994) as the *Coastal Barrens Subdistrict*. This area contains environmental conditions that are ideal for Atlantic Coastal Plain Flora, and this specialized habitat harbours the greatest diversity of reptiles and amphibians in the province (Reid & Bergsma, 1994). The Muskoka Heritage Areas Program recommended that the Moreaus Bay area be defined as a Heritage Area, based on their Natural Heritage Evaluation criteria.

2. The Club will continue to promote wildlife habitat improvement in the area, through such projects as the establishment of wood duck boxes, and the maintenance of the osprey platforms. The Club will work to have the hibernaculum locations of the threatened and vulnerable herpetofaunal species, such as rattlesnakes and spotted turtles, identified. This will be done through local youth involvement, possibly an undergraduate natural science student from university. Information collected from a variety of sources, such as the *Natural Heritage Inventory of Canada* and from individual Club members who have made observations, could then be used to identify these critical habitats. This information could be used to ensure that trails avoid disturbing these habitats. In addition, the Club will work to educate its members about these species, and reduce fears amongst them concerning the danger of rattlesnakes.

The Greater Bay Area Foundationand Madawaska Club Ltd. have been active in promoting the wilderness benefits of the area, and have taken measures, such as the establishment of nesting platforms for osprey, to encourage the use of the area by various species. Interested volunteers in the community have also produced lists of flora and fauna. The publication produced by the Madawaska Club for its 75th Anniversary, *Madawaska Club: 1898-1973 Go Home Bay*, contains an extensive list of the bird species present during the year in Go Home Bay. Bird and other species lists have been compiled in the area since the inception of the Madawaska Club.

3. The inventories of flora, fauna and wildlife habitat developed in the preparation of this plan will be updated and enhanced to produce an ongoing survey of the area's surrounding ecosystem at the local scale.

This information will be used to:

a) provide guidelines to the community regarding the natural environment. These will help to identify and protect the habitat of endangered and threatened species, and help to protect habitat during critical times such as nesting and breeding,

- b) identify potential education and demonstration sites,
- c) provide an ongoing database of information that may be employed in future management plans, and plans developed by individual private property owners.

This information will be collected by Club members and experts employed by the Club. The involvement of volunteer teenagers and university students will also be encouraged, and will contribute to the Education and Community Involvement objectives of this plan.

4. The Club will continue to collect environmental data on their surrounding wilderness. Initiatives such as having wetlands reclassified as significant, or identifying hibernacula, will require habitat information. This could be collected by professionals hired by the Club, or through projects established with University students. This information could also be shared with other groups, such as the Georgian Bay Littoral Biosphere Reserve, or published in articles prepared by students who have collected.

Madawaska Club members have an intimate knowledge of the area, and are an excellent source of information about species habitat. Families on Long Island, for example, have noted the presence of the endangered spotted turtle in forest behind their properties. This informal data collection is an invaluable asset for groups such as the Natural Heritage Inventory of Canada (NHIC), who collect information about the status of wildlife species.

Furthermore, many physical and ecological changes have occurred in the Madawaska Club property through its long history. Older members share anecdotes of abundant fish populations, fluctuations in bird populations, and the regeneration of past clearings and blowdowns, and the current younger generation will no doubt collect similar stories. Many of these observations are recorded in the Annals of the Club, which has been published every 25 years since the Club's establishment in 1898.

Natural processes are to be allowed to occur in the forest without the direct intervention of the Club (i.e. through harvesting), so that the community members may continue to enjoy the natural environment, and observe the natural dynamics of the forest, as well as the impact of external influences.

5. The Madawaska Club will work together with other agencies to promote the environmental significance of the area to the greater Eastern Georgian Bay area.

The Greater Bay Area (GBA) Foundation is working towards having the larger Georgian Bay shoreline area, through to Highway 69, established as a *United Nations Educational, Scientific and Cultural Organization* (UNESCO) *Biosphere Reserve*, under the *Man and the Biosphere (MAB) Program*. Furthermore, the Ontario Government has recently expanded its Parks and Protected Areas network to encompass a large area of Georgian Bay coastline northward from this region to Killarney Provincial Park. The Madawaska Club Ltd. will work to promote these objectives, and manage its forests in a manner that is consistent with the management of those programs.

#### Optimization of Cash Flow, Reduction of Tax Load

Objective: To reduce the additional costs associated with maintaining the common property owned and managed by the Madawaska Club Ltd. and its members.

The costs of maintaining this community are greater than most cottage areas. At this juncture, the community considers most of the costs to be reasonable, with the main exception being the taxes on the unoccupied lands. Optimization of Cash Flow as far as the community is concerned is a matter of reducing the Tax Load. The cancellation of the last *Forest Management Agreement* was virtually contemporaneous with a rapid escalation of the mill rates and assessments on undeveloped land. Shorelines of inland lakes, sloughs and lagoon areas were assessed as prime waterfront. Small islands and shoals on Georgian Bay were treated in the same manner. Since these portions of the property were not acceptable for development from the perspective of municipal planners or anyone in the community, a lobby was applied to reduce these assessments to more reasonable levels. The lobby has been partially successful. In the meantime the Madawaska Club Ltd. was able to defray some of these non-productive holding costs by selling two approved lots over the last few years. However the community has expressed a strong majority view that further subdivision of the property be avoided. This can be financially justified by reducing the net tax burden.

This objective will be addressed through the following measures:

- 1. Achieve MFTIP approval for all applicable areas of the forest.
- 2. Encourage individual property owners in the Madawaska Club to prepare management plans for their own properties, and apply for MFTIP approval.

The preparation of individual plans will add valuable information to that collected both through the preparation of this plan, as well as by other research groups/community members who could compile plant inventories, and record wildlife observations. This may be done in co-operation with the proposed *Georgian Bay Littoral Biosphere Reserve* where monitoring programs are required in all areas (i.e. core, buffer and transition) of the Reserve. The GBA Foundationis heading up the proposal for the Biosphere Reserve, and would be the agency to which any information would be reported. Also, through the network of parks along the coastline, it is conceivable that almost all of the Georgian Bay coastline could be monitored with local programs in line with the existing ones in any of the national or provincial parks. The Club may also want to initiate a project, in conjunction with other groups such as the NHIC, OMNR, and GBA Foundation, to compile a comprehensive list of the flora found along the length of the environmentally unique Georgian Bay coastline.

- 3. Apply for status under the Conservation Land Tax program for those open areas not eligible under the MFTIP program.
- 4. Work to have appropriate wetland areas designated as Provincially Significant Wetlands, or ANSIs. Although resources at the OMNR to carry out such work have been reduced, the Club

could hire university students or a private contractor to assess the wetland properties, and make application to the OMNR for reassessment.

5. Continual lobbying efforts will be made to assure that the tax assessments are realistic and affordable by the community.

#### **Community Involvement**

Objective: To encourage the community to become involved in the active management of their forest, and redevelop a once strong community spirit.

Anecdotal evidence suggests that the sense of community is one area where life in the Go Home Bay area has changed significantly, and efforts are being made by the Club to reintroduce some of the cohesiveness that once characterized the community.

1. Encourage the development of community spirit and a sense of ownership of the forest through community initiatives and activities.

For most of the century, community life at Go Home Bay revolved around the arrival of the supply boat from Midland, carrying mail, groceries, and provisions, on a daily basis. This event allowed members of the community to share news of recent events with each other at the community dock, and virtually all members of the community knew one another. With improvements in the highway system, faster and more reliable cars and boats, telephones, email, and modern appliances such as refrigerators, the need for the supply boat service has been lost. Therefore the community should continue to work to develop other means of maintaining the community spirit.

The Club contains many members who have knowledge, either professionally or as hobbyists, in many areas of the natural sciences. These individuals are assets that may be used though such activities as interpretive nature walks, an endeavour that is organized by the Club, and has generated a great deal of interest in the past among Club members. These events raise awareness amongst the Club members of their surrounding environment. By educating them about the forest, they are less likely to damage habitats or harm wildlife, and can help to preserve the fragile environment.

2. Development of the trail network using volunteers.

By involving members of the community in the management of the common property, through such activities as the development of a forest management strategy and the trail system described above, a sense of pride and ownership should develop and strengthen the community.

- 3. The marathon regatta races, regular regatta, sailing races, craft classes and nature walks will be scheduled and supervised by the Regatta and Recreation Committees.
- 4. Establishment of the Madawaska Club properties in the Biosphere Reserve.

The efforts of the Club members toward the Biosphere Reserve project will allow them to gain a strong sense of pride in the fact that they are making a significant contribution to the preservation of the global environment, and promotion of environmental awareness.

#### Education

Objective: To promote the use of the wilderness as a source of knowledge and education for the community, and especially younger generation, of Go Home Bay.

Education has always been a strong component of the community at Go Home Bay. This has taken the form of anecdotes shared by elders in the community, or through organized educational activities arranged by the Club. The community even had its own school board, which was established in 1951, and eventually taken over by the local school board during the 1970s. The community also maintains a library which is open two afternoons a week during the summer season, and contains more than 5000 books, and is run by a dedicated librarian and volunteer staff.

1. The Club will continue to use the forest to teach its younger generation, helping foster an appreciation, understanding, and respect for the wilderness through interpretive programs organized by the Club.

The Madawaska Club feels that this property is an invaluable asset, and their goal is to maintain their common forest property, both for organized interpretive nature tours, and as a place where its members can learn about their natural surroundings.

2. Development of interpretive nature trails and nature walks.

Those members with professional knowledge of the natural environment often share their knowledge with others in the Club in guided tours, such as rock walks which detail the geological history of the area. Families also use the area as a natural classroom, teaching their children about the wildlife and vegetation that live in the forest, ponds, lakes, and on the shorelines of the common property. The development of the trail system, outlined above, will help to facilitate these endeavours by improving accessibility to the forest. Sections of the trail system will be established as demonstration areas, and the appropriate literature concerning these areas will be distributed within the community when available, and copies will be placed in the library. These steps will facilitate more involvement and interest in the nature and rock walks.

#### **Forest Fire Protection**

Objective: To reduce the threat of forest or property fire in the Go Home Bay community.

Due to the remoteness of the cottages in this community and the fact that they are distant from any municipal fire services, both forest and private property fires are of major concern. Severe thunderstorms frequent the area, especially in the late summer months, and represent a significant risk to the forests and buildings in the community. Furthermore, the thin soils and desiccated nature of the rocky shoreline and islands are

often tinder dry by midsummer and as such are highly prone to fires started by lightning, campers, and other accidental sources of fire.

To address this, the Madawaska Club has installed emergency fire pumps and hoses at six cottages located throughout the Go Home Bay area. These are prominently sign posted and located in convenient places, in the event that they should be required for an emergency. The community actively works together and has developed an emergency contact system to alert neighbours to fire and other emergencies. This helps to provide the early warning and response system, and is an important preventative measure in the event of fire. Volunteers in the community are also trained in basis fire-fighting skills.

- 1. The Madawaska Club Ltd. will continue to work as a community to maintain and improve its network for alerting the volunteer fire crews to respond to fire, and other emergencies.
- 2. The Club will train the volunteer fire crews on an ongoing basis, and ensure that the fire pumps and equipment are maintained in a proper operating condition.
- 3. A caretaker will continue to be employed on a part time basis year round, to provide security and fire prevention at individual cottages and the property in general.

#### **Forest Resource Extraction**

Objective: To use the forest resources in a sustainable and ecological manner.

1. Hunting, fishing, and harvesting of wild edibles will be monitored by the Board for success and any conflicts with other objectives, by poling certain active members of the community annually. This procedure will enable the Board to respond to any resource management problems that may arise, and ensure that those activities will be able to endure. Furthermore, hunting and fishing regulations will be followed by Club members, and enforced by the Ministry of Natural Resources and local Conservation Authorities.

Several members of the community enjoy hunting of marsh and slough ducks and partridge in early autumn. A smaller number of people hunt bay ducks and deer later in the season. Good fishing is still available on Georgian Bay, so fishing in the inland lakes of the forest is limited and infrequent. Blueberries are harvested by members of the Club, and are abundant throughout all compartments of the forest.

2. The Board will issue guidelines restricting the cutting of firewood to those areas further than 90m (300 feet) from the shoreline, and marginal to (within 90m of) established cottage lots so that a degree of thinning for fire protection is accomplished, but the interior forest areas are not modified.

Wood products such as firewood and dock stringers are obtained in the forest, although the latter occurs on a much smaller scale and is less prevalent than in the past. Firewood collection is of importance to those who stay at their cottages into the fall and winter, and most of these people collect some of this wood from their property. The majority of this cutting occurs on private lands, and not in the common property.

The Club will consider educating its members on ecologically sound harvesting, to ensure that only lower quality trees are removed, and that habitats, such as cavity or nesting trees are not removed. The trained professional forester who is currently contracted by the Club could carry out this education.

#### Scientific Research

Objectives: To promote the collection of scientific data on the Go Home property.

1. Encourage students and organizations to continue to collect natural science data on the property and in the area surrounding the cottages and common property of the Madawaska Club. There is already an extensive amount of information on work done in the area since 1898. A bibliography of this work is in the progress of being put together.

Scientific research has been conducted in the Go Home Bay area in the past, and consists of work done by the Muskoka Heritage Areas Program (Reid & Bergsma, 1994), theses conducted by youths in the community, as well as others. Also, students from the Faculty of Forestry, University of Toronto, developed this MFTIP Management Plan in an agreement between the Faculty, the Madawaska Club Ltd. and the Georgian Bay Association.

Due to the long history of the community and the interest of its members in the area, there is always a great deal of interest generated in the community when research is being conducted. Members who have spent their lives in the community are always willing to share their knowledge, and provide assistance and advice to the researchers.

#### **5.3: Strategy for Plan Implementation**

The communal forests of the Madawaska Club are to be managed in a manner consistent with the types of uses that have been outlined as important in the preceding section. To this end, management will consist primarily of the development of the forest as a resource for recreation and education, both in a manner that does not interfere with the continuing natural evolution of the forest. The Club does not wish to perform any timber harvesting on the property in the foreseeable future.

Many of the community members have expressed concern over the low quality of trees in the area and are wondering what can be done to improve this situation. Most are concerned about the regeneration of white pine, and the state of the current forest (i.e. tree health is deteriorating). One solution would be to have controlled burns through the understory, which would allow white pine to regenerate. However, since many of the cottages are built of wood, and are quite old and significant parts of the communities' heritage, controlled burns do not seem like a viable solution due to the inherent risk of losing control. Prescribed burns are also very difficult to perform, and require perfect timing and adequate resources (i.e. fire crew), which makes coordinating a burn difficult

The Madawaska Club Ltd. requested that more information than the minimum MFTIP requirements be collected. Information on the ground vegetation, wildlife and critical habitat in the area was collected, and a bibliography of the natural science information produced by other authors in the area was developed. This body of information should be enhanced over the next 20 years, through the active involvement of the community in their forest. Members of the Club interested in subjects such as bird watching have worked to develop lists of species found in the area in the past, and these lists may be used to develop a record of the changes in the forest over time. Members in the community will be provided with checklists of the birds, mammals, reptiles and amphibians that are found in the area. This will enable them to record the species as they see them. These records are maintained by the individuals, and have been published in the Annals of the Club, published every 25 years since 1898.

The development, maintenance and use of the trail system will give members increased access to their forest, allowing them to make personal observations of various forest ecosystem processes. The Club should encourage members to record information, such as bird, reptile, and amphibian sightings and the presence of interesting wildflowers, so that they may continue to develop and enhance the information that has already been collected.

At present, there are no other programs in place to ensure conservation of the Club land. There is a previous forest management plan, but it does not allow areas to be set aside as legally declared conservation areas. It is hoped that several areas (other than Moreaus Bay) can be set aside as ANSI's, Provincially significant wetlands or conservation areas since they will not meet the requirements of MFTIP but are still very significant environments that provide critical habitat for numerous flora and fauna.

## **Section 6.1: Managed Forest Compartments – Woodland Compartments**

Owner(s): Madawaska Club Ltd. District: Muskoka

Township: Georgian Bay

N

#### Role #:

- 1) 4465020019006000000
- 2) 4465020019029000000
- 3) 4465020019047000000
- 4) 4465020019044009801
- 5) 4465020019065000000
- 6) 4465020019067000000
- 7) 4465020001908000000
- 8) 4465020004087009801
- 9) 4465020004073000000
- 10) 4465020004009009802

#### Legend

#### **Section 6.1: Managed Forest Compartments – Woodland Compartments**

Owner(s): Madawaska Club Ltd. District: Muskoka

Township: Georgian Bay

N

#### Role #:

- 1) 4465020019006000000
- 2) 4465020019029000000
- 3) 4465020019047000000
- 4) 4465020019044009801
- 5) 4465020019065000000
- 6) 4465020019067000000
- 7) 4465020001908000000
- 8) 4465020004087009801
- 9) 4465020004073000000
- 10) 4465020004009009802

#### Legend

#### **Section 6.1: Managed Forest Compartments – Island Compartments**

Owner(s): Madawaska Club Ltd. District: Muskoka

Township: Georgian Bay

N

#### Role #:

- 1) 4465020019006000000
- 2) 4465020019029000000
- 3) 4465020019047000000
- 4) 4465020019044009801
- 5) 4465020019065000000
- 6) 4465020019067000000
- 7) 4465020001908000000
- 8) 4465020004087009801
- 9) 4465020004073000000
- 10) 4465020004009009802

#### Legend

#### **Section 6.1: Managed Forest Compartments – Rock Compartments**

Owner(s): Madawaska Club Ltd. District: Muskoka

Township: Georgian Bay

#### Role #:

- 1) 4465020019006000000
- 2) 4465020019029000000
- 3) 4465020019047000000
- 4) 4465020019044009801
- 5) 4465020019065000000
- 6) 4465020019067000000
- 7) 4465020001908000000
- 8) 4465020004087009801
- 9) 4465020004073000000
- 10) 4465020004009009802

#### Legend

#### **Section 6.1: Managed Forest Compartments – Wetland Compartments**

Owner(s): Madawaska Club Ltd. District: Muskoka

Township: Georgian Bay

N

#### Role #:

- 1) 4465020019006000000
- 2) 4465020019029000000
- 3) 4465020019047000000
- 4) 4465020019044009801
- 5) 4465020019065000000
- 6) 4465020019067000000
- 7) 4465020001908000000
- 8) 4465020004087009801
- 9) 4465020004073000000
- 10) 4465020004009009802

#### Legend

# **Section 6.2: Summary of Managed Forest Compartments**

**Table 6.2: Summary of Managed Forest Compartments Map** 

Compartmen	nt Number and Name	Is the Compartment eligible? (Yes/No)	Are there residences in the compartment (Yes/No)	Are there open areas greater than 1 ha in the compartment? (Yes/no)	Eligible compartment area? (Acres)
Number	Name				
W1		Yes	No	No	20.5
W2		Yes	No	No	96.06
W3		Yes	No	No	96.2
W4A		Yes	No	No	6.5
W4B		Yes	No	No	19.2
W5		Yes	No	No	28.7
W6		Yes	No	No	148.52
W7		Yes	No	No	55.75
W8		Yes	No	No	30.9
W9		Yes	No	No	39.2
W10		Yes	No	No	19.7
W11A		Yes	No	No	109.3
W11B		Yes	No	No	82.2
W11C		Yes	No	No	92.4
W12		Yes	No	No	37.1
W13		Yes	No	No	9.9
W14A		Yes	No	No	6.1
W14B		Yes	No	No	60.6
I1		No	No	No	7.16
I2		No	No	No	4
I3		No	No	No	3.5
I4		Yes	No	No	7.4
I5	Pig Island	Yes	No	No	5.3
Wt1A		No	No	Yes	9.5
Wt1B		Yes	No	No	15.1
Wt1C		Yes	No	No	12.4
Wt1D		No	No	Yes	2.5
Wt1E		No	No	Yes	3.9
Wt1F		Yes	No	No	6.2
Wt1G		No	No	Yes	31.5
Wt1H		No	No	Yes	11.7
Wt1I		No	No	Yes	5.06
Wt2A		No	No	Yes	2.5
Wt2B		Yes	No	Yes	41.95
Wt2C		Yes	No	No	4.9
Wt2D		No	No	Yes	13
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		110	1 110	100	13

Wt2E		Yes	No	Yes	3.4
Wt2F		Yes	No	No	3.1
Wt2G		Yes	No	No	2.5
Wt2H		Yes	No	No	0.6
Wt3A		Yes	No	No	3.7
Wt3B		No	No	Yes	0.8
R1		Yes/No	No	Yes	5.2
R2A		Yes/No	No	Yes	21.6
R2B		Yes/No	No	Yes	25.9
R2C		Yes/No	No	Yes	64.8
R2D		No	No	Yes	3.4
R2E		No	No	Yes	8.6
R2F		Yes/No	No	Yes	16.7
R2G		Yes/No	No	Yes	10.5
R3A		No	No	Yes	21.2
R3B		No	No	Yes	3.3
R4		No	No	Yes	3.1
R5A		Yes/No	No	Yes	10.5
R5B		Yes/No	No	Yes	2.5
R5C		Yes/No	No	Yes	7.4
R5D		Yes/No	No	Yes	7.4
R5E		Yes/No	No	Yes	6.2
R5F		Yes/No	No	Yes	9.3
R5G		Yes/No	No	Yes	16.7
R5H		Yes/No	No	No	3.1
R6		No	No	Yes	46.8
L1A	Burwash Lake	No	No	Yes	42.6
L1B	Loudon Lake	No	No	Yes	21.6
L1C	Galbraith Lake	No	No	Yes	29.7
L2	Lake St. Patrick	No	No	Yes	23
TOTAL					1567.95

# **Section 7: Managed Forest Compartment Descriptions**

Compartment No.: W1 Area: 20.5 acres (8.2 ha)

#### 7.1 General Description

This compartment is considered protection forest and iscomprised of mainly white pine and red oak. This portion of the Club land is located at the southern most boundary of the commonly held land and is fairly uniform in composition, although it is divided into two sections by a marsh. The compartment is scattered with low wet areas and rocky ridges. West of the compartment is a mountain bike trail that was developed for private recreational use by one of the Club members.

The most common tree species is white pine, which comprises approximately 50% of the stand. Regeneration is dense to sparse, as is the ground vegetation, and consists of white pine, red oak, white oak, and red pine. The canopy ranges from full closure to mostly open, and there is a dense understory of regeneration under open canopy areas. There are only a few snags located throughout the compartment, which is atypical when compared to the other compartments. There is also evidence of fire in the form of fire scars on stumps.

#### 7.2 Compartment Site Characteristics

Soil Type: Sandy, rocky, shallow soil, approximately 1 m thick.

Drainage: Well drained into marsh area to the East.

Topography: Rocky outcrops and low lying wet areas scattered throughout

compartment. Low hills to 10 m local relief.

Water Features: Large marsh located in the middle of the compartment. Several

beaver flooded sloughs.

Physical Features:

Access: Year round, by foot, boat, or snowmobile Other Features: Paths located throughout the compartment

#### 7.3 Compartment History

A fire burned for approximately six weeks in the months of July and August 1919, covering an area spanning from near Rabbit Lake (at the southeast end of compartment Wt1H), to behind the Trusler cottage on the shoreline west of this compartment. This fire was eventually extinguished by rainfall, although fire crews were employed to fight it. Evidence of this event may be found in the compartment, in the form of burned tree stumps, and the average age of the stand.

#### 7.4 Compartment Inventory

Tree Species	% Comp	Age (Years)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
		78	17.2	By age class for		By age class for	
White Pine (Pw)	50			Comp.		Comp.	
Red Oak (Or)	20			10-25	596	15.5	

White Oak (Ow)	10		26-40	265	22.5	
Red Maple (Ms)	10		41-50	19	3	
Red Pine (Pr)	10		50+	3	1	
Total	100			883	42	

**Summary of Tree Inventory**: Species Composition: Pw5Or2Ow1Ms1Pr1 Height: 17.2 m Age: 78 years Basal Area: 42 m<sup>2</sup>/ha

# **Other Vegetation Assessment Table**

Common Name	Scientific Name	Common Name	Scientific Name
American mountain ash	Sorbus americana	Multicoloured blue flag	Iris versicolor
Black cherry	Prunus serotina	Northern bugleweed	Lycopus uniflorus
Black huckleberry	Gaylussucia baccata	Pale corydalis	Corydalis sempervirens
Black spruce	Picea mariana	Pin cushion moss	Leucobryum glaucum
Blue bead lily	Clintonia borealis	Pink lady slipper	Cypripedium acaule
Bracken fern	Pteridium aquilinum	Poison Ivy	Toxicodendron radicans
Bristly sarsparilla	Aralia hispida	Red maple	Acer rubrum
Bunchberry	Cornus canadensis	Red oak	Quercus rubra
Bush honeysuckle	Diervilla lonicera	Red Osier Dogwwod	Cornus stolonifera
Canada mayflower	Maianthemum canadense	Red pine	Pinus resinosa
Carex sp.	Carex sp.	Reindeer lichen	Cladina rangiferina
Club moss sp	Lycopodium sp.	Rock tripe	Umbilicaria mammulata
Common Blackberry	Rubus allegheniensis	Sensitive fern	Onoclea sensibilis
Common elderberry	Sambucus Canadensis	Sheep sorel	Rumex acetosella
Common Hair Grass	Deschampsia flexuosa	Smooth serviceberry	Amalanchier laevis
Common juniper	Juniperus communis	Sphagnum moss	Sphagnum sp.
Common Polypody	Polypodium viginianum	Starflower	Trientalis borealis
Cow wheat	Melampyrum lineare	Tamarack	Larix laricina
Dwarf raspberry	Rubus pubescens	Violet sp.	Viola sp.
Eastern white pine	Pinus stobus	White birch	Betula papyrifera
Fragrant bedstraw	Galium triflorum	White cedar	Thuja occidentalis
Goldenrod sp.	Solidago sp.	White oak	Quercus alba
Ground pine	Lycopodium dendroideum	Wild lettuce	Latuca spp.
Hairy Solomon's seal	Polygonatum pubescens	Wild red raspberry	Rubus idaeus melanolasius
Honeysuckle sp.	Lonicera sp.	Wild sarsparilla	Aralia nudicaulis
Indian Pipe	Monotropa uniflora	Winterberry holly	Ilex verticillata
Large leaved aster	Aster macrophyllus	Wintergreen	Gaultheria procumbens
Low sweet blueberry	Vaccinium angustifolium	Woodland strawberry	Fragaria vesca
Marginal wood fern	Dryopteris marginalis		

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White pine, red oak
Cavity Trees			

<ul><li>nesting/roosting</li><li>feeding</li><li>escape</li></ul>	<i>y y</i>		-Red maple, white pine
Stick Nests		✓	
Fallen Dead Trees	✓		
(woody debris)			
Mast Trees	✓		
Supercanopy Trees	✓		White pine
Conifer Thickets	✓		
Other Food Sources	✓		Blueberry, huckleberry
Surface Water			Marsh to East
- year round creek/pond	✓		
- seasonal runoff	✓		
- seasonal pond		✓	
Dens or Dug Holes	<b>√</b>		
Others	✓		Evidence of fire

#### **Wildlife Species Noted**

Species	Season	Habitat	Comments
Five Lined Skink	Summer	Marsh area	
Black bear	Summer	Forest	Observed scat

#### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

#### **Short Term (5 Years)**

To continue to encourage the use of the forest area by individual Club members, through such endeavours as the development of hiking and mountain biking trails. Guidance and standards for safety should be provided to ensure sound design and environmental considerations when the trails are being developed. The Club should examine the potential for connecting this area to the trail system being developed further north, near the gas docks and library.

#### 7.7 Other Compartment Features

No other compartment features are noted.

# **Section 7: Managed Forest Compartment Descriptions**

Compartment No.: W2 Area: 96.06 acres (38.42 ha)

#### 7.1 General Description

This compartment is a large protection forest area located inland from the rocky shoreline, and is characterized by thin to no soil over bedrock. Throughout the compartment there are small marshes and rock outcrops, and there is an alder meadow/thicket to the west of Wt1B. There is very little down woody debris (DWD) in this compartment and the canopy is open to closed, with open areas having very dense regeneration consisting of white pine, red oak, white oak and red maple. There is also a stream running through the southern portion and is oriented in a north-south direction. The edges of the stream are scattered with white birch. During periods of high rain or runoff there are several areas throughout the compartment that become flooded. There is new growth all along the edge of the stand, as moss grows across the rock outcrops.

The east side of the compartment is characterized by a younger forest than that on the west side of the bay. This section of the forest has an average age of 50 years, while that on the west side is roughly 89 years. As a result, the younger area contains a large amount of small trees, and the understory is quite dense with white pine. The west side has a much more open understory.

#### 7.2 Compartment Site Characteristics

Soil Type: Thin, sandy, shallow, exposed soil < 10 cm thick over granitic to

gabbroic bedrock with interspersed boulders.

Drainage: Mostly well-drained, some low lying poorly drained areas

Topography: Low, hilly terrain with 15 m local relief.

Water Features: Seasonally wet low areas on rock. Flooded beaver sloughs

common

Physical Features:

Access: Year round by foot, boat or snowmobile.

Other Features:

#### 7.3 Compartment History

There are cut stumps throughout sections of the compartment, which may be a result of trees being removed for firewood or dock stringers.

A fire burned for approximately six weeks in the months of July and August 1919, covering an area spanning from near Rabbit Lake (at the southeast end of compartment Wt1H), to behind the Trusler cottage on the shoreline west of this compartment. This fire was eventually extinguished by rainfall, although fire crews were employed to fight it. Evidence of this event may be found in the compartment, in the form of burned tree stumps and the average age of the stand.

# 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	#	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)	stems/ha	Area	
			for Comp.			(m²/ha)	
				By class		By class	
		71	16.1	for the		for the	
White Pine (Pw)	60			Comp.		Comp.	
Red Oak (Or)	20			10-25	803	20.88	
White Oak (Ow)	10			26-40	123	10.44	
Red Maple (Ms)				41-50	0	0	
Poplar (Po)	10			50+	3	0.88	
Wh. Cedar (Cw)							
Total	100				929	32.22	

**Summary of Tree Inventory**: Species Composition: Pw6Or2Ow1Po1 Height: 16.1 m Age: 71 years Basal Area: 32.22 m<sup>2</sup>/ha

# **Other Vegetation Assessment Table**

Plant Species Inventor	y: Compartment W2		
Common Name	Scientific Name	Common Name	Scientific Name
Bearberry	Arctostaphylos uva-ursi	Marginal wood fern	Dryopteris marginalis
Black cherry	Prunus serotina	Multicoloured blue flag	Iris versicolor
Black huckleberry	Gaylussucia baccata	Northern bugleweed	Lycopus uniflorus
Black spruce	Picea mariana	Pale corydalis	Corydalis sempervirens
Blue bead lily	Clintonia borealis	Pin cushion moss	Leucobryum glaucum
Boneset	Eupatorium maculatum	Pink lady slipper	Cypripedium acaule
Bracken fern	Pteridium aquilinum	Pinesap	Monotropa hypopitys
Bristly sarsparilla	Aralia hispida	Pipewort	Eriocaulon aquaticum
Bunchberry	Cornus canadensis	Poison Ivy	Toxicodendron radicans
Bush honeysuckle	Diervilla lonicera	Red maple	Acer rubrum
Canada mayflower	Maianthemum canadense	Red oak	Quercus rubra
Cardinal Flower	Lobelia cardinalis	Red Osier Dogwwod	Cornus stolonifera
Carex sp.	Carex sp.	Red pine	Pinus resinosa
Club moss sp	Lycopodium sp.	Reindeer lichen	Cladina rangiferina
Common Blackberry	Rubus allegheniensis	Rock tripe	Umbilicaria mammulata
Common elderberry	Sambucus Canadensis	Sensitive fern	Onoclea sensibilis
Common Hair Grass	Deschampsia flexuosa	Sheep sorel	Rumex acetosella
Common juniper	Juniperus communis	Smooth serviceberry	Amalanchier laevis
Common Polypody	Polypodium viginianum	Sphagnum moss	Sphagnum sp.
Cow wheat	Melampyrum lineare	Starflower	Trientalis borealis
Dwarf raspberry	Rubus pubescens	Tamarack	Larix laricina
Eastern white pine	Pinus stobus	Violet sp.	Viola sp.
Fragrant bedstraw	Galium triflorum	White birch	Betula papyrifera
Fragrant Water Lily	Nymphaea odorata	White cedar	Thuja occidentalis
Goldenrod sp.	Solidago sp.	White oak	Quercus alba

Ground pine	Lycopodium dendroideum	Wild lettuce	Latuca spp.
Hairy Solomon's seal	Polygonatum pubescens	Wild red raspberry	Rubus idaeus melanolasius
Honeysuckle sp.	Lonicera sp.	Wild sarsparilla	Aralia nudicaulis
Indian Pipe	Monotropa uniflora	Winterberry holly	Ilex verticillata
Jewelweed	Impatiens capensis	Wintergreen	Gaultheria procumbens
Lady's Thumb	Polygonum persicaria	Woodland Horsetail	Equisetum sylvaticum
Large leaved aster	Aster macrophyllus	Woodland strawberry	Fragaria vesca
Low sweet blueberry	Vaccinium angustifolium	Yellow Pond Lily	Nuphar variegatum

### 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White pine
Cavity Trees			
- nesting/roosting			
- feeding	✓.		
- escape	<b>√</b>		
Stick Nests		✓	
Fallen Dead Trees	✓		
(woody debris)			
Mast Trees	✓		Few
Supercanopy Trees	✓		
Conifer Thickets	✓		White pine, especially on
			the east side of the
			compartment
Other Food Sources	✓		Blueberries, huckleberries,
			black cherry
Surface Water			
- year round creek/pond	<b>√</b>		
- seasonal runoff	<b>√</b>		
- seasonal pond	✓		
Dens or Dug Holes	✓		
Others	✓		Burnt stumps

# **Wildlife Species Noted**

Species	Season	Habitat	Comments
Bullfrog	Summer	Marsh	
American Toad	Summer	Forest Floor	
Grey Tree Frog	Summer	Tree/Sphagnum Bog	
Deer	Summer	Forest	Scat observed
Rabbit	Summer	Forest	Scat observed
Painted Turtles	Summer	Water's edge	
Ruffed Grouse	Summer	Forest	
Beaver	Summer	Water	Swimming to lodge

# 7.6 Specific Compartment Objectives

## Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would

be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

### **Short Term (5 Years)**

To examine the potential of connecting this compartment to others, through the expansion of the Club's trail system. Club members could use these trails for recreation, as well as interpretive nature hikes.

### 7.7 Other Compartment Features

No other compartment features are noted.

# **Section 7: Managed Forest Compartment Descriptions**

Compartment No.: W3 Area: 96.2 acres (38.48 ha)

#### 7.1 General Description

Protection forest located on a peninsula jutting into Georgian Bay and surrounding a small lake (Lake St. Patrick). Of particular interest in this forest compartment is the high percentage of white pine. It makes up 70% of the forest canopy, which is high when compared to the other forest compartments. The understory is open to dense with the typical white pine, red oak, white oak and red maple regeneration establishing. The down woody debris varies throughout this compartment from areas that have several toppled trees to areas that barely have any branches on the ground.

There is a large speckled alder/winterberry holly thicket/marsh in the centre of this forest compartment. White birch is also found throughout the thicket.

This compartment has a power line corridor running through it, which is approximately 10-15 m wide, characterized by large exposed bedrock ridges overgrown with juniper. Scattered throughout the corridor are small white pine saplings as well. The corridor runs north-south and east-west as it approaches the shoreline.

#### 7.2 Compartment Site Characteristics

Soil Type: Thin, shallow, rocky, sandy soil, < 10 cm thick.

Drainage: Well to poorly drained

Topography: Low, hilly terrain with up to 15 m local relief.

Water Features: Mostly well drained, with small pockets that fill up after summer

storms. Adjacent to Georgian Bay and Lake St. Patrick.

Physical Features:

Access: On foot, or by boat

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	#	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)	stems/ha	Area	
			for Comp.			(m²/ha)	
				By Class		By class	
		106	15.6	for the		for the	
White Pine (Pw)	70			Comp.		Comp.	
Red Oak (Or)	20			10-25	709	18.44	
White Oak (Ow)	10			26-40	152	12.89	
Red Maple (Ms)				41-50	10	1.56	
				50+	1	0.22	
Total	100				872	33.11	

Summary of Tree Inventory:
Species Composition: Pw7Or2Ow1 Age: 106 years
Height: 15.6 m B. Basal Area: 33.11 m<sup>2</sup>/ha

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment W3				
Common Name	Scientific Name	Common Name	Scientific Name	
Arrow Leaved Tearthumb	Polygonum sagittatum	Northern bugleweed	Lycopus uniflorus	
Bearberry	Arctostaphylos uva-ursi	Northern white violet	Viola mackloskeyi ssp. pallens	
Bearded shorthusk	Brachyelytrum erectum	Northern wild raisin	Viburnum cassinoides	
Beautiful branch moss	Callicladium haldanianum	Orange hawkweed	Hieracium aurantiacum	
Black bindweed	Polygonum cilinode	Pale corydalis	Corydalis sempervirens	
Black cherry	Prunus serotina	Partridgeberry	Mitchella repens	
Black chokeberry	Aronia melanocarpa	Pickerelweed	Pontedaria cordata	
Black huckleberry	Gaylussucia baccata	Pin cushion moss	Leucobryum glaucum	
Blue bead lily	Clintonia borealis	Pink lady slipper	Cypripedium acaule	
Boneset	Eupatorium maculatum	Pinesap	Monotropa hypopitys	
Bracken fern	Pteridium aquilinum	Pipewort	Eriocaulon aquaticum	
Bristly sarsparilla	Aralia hispida	Plume moss	Ptilium crista-castrensis	
Bunchberry	Cornus canadensis	Poison Ivy	Toxicodendron radicans	
Bush honeysuckle	Diervilla lonicera	Red cedar	Thuja sp.	
Canada mayflower	Maianthemum canadense	Red maple	Acer rubrum	
Cardinal Flower	Lobelia cardinalis	Red oak	Quercus rubra	
Carex sp.	Carex sp.	Red osier dogwood	Cornus stolonifera	
Cattail	Typha latifolia	Red pine	Pinus resinosa	
Choke cherry	Prunus virginiana	Red twigged serviceberry	Amalanchier sanguinea	
Cinquefoil sp.	Potentilla sp.	Reindeer lichen	Cladina rangiferina	
Club moss sp	Lycopodium sp.	Ribes sp.	Ribes sp.	
Common Blue eyed grass	Sisyrinchium montanum	Rock tripe	Umbilicaria mammulata	
Common Hair Grass	Deschampsia flexuosa	Rough stemmed goldenrod	Solidago rugosa	
Common juniper	Juniperus communis	Round leaved pyrola	Pyrola americana	
Common Polypody	Polypodium viginianum	Rubus sp.	Rubus sp.	
Coral lichen	Cladina stellaris	Sensitive fern	Onoclea sensibilis	
Cow wheat	Melampyrum lineare	Shining club moss	Huperzia lucidula	
Dwarf raspberry	Rubus pubescens	Shrubby St.John's wort	Hypericum spathulatum	
Eastern white pine	Pinus stobus	Small sundrops	Oenothera perennis	
Bearberry	Arctostaphylos uva-ursi	Smooth blackberry	Rubus canadensis	
Boneset	Eupatorium maculatum	Smooth serviceberry	Amalanchier laevis	
False pixie cup	Cladonia chlorophaea	Speckled alder	Alnus incana spp.	
False solomon's seal	Maianthemum racemosum	Sphagnum moss	Sphagnum sp.	
Fly honeysuckle	Lonicera canadensis	Spinulose wood fern	Dryopteris carhusiana	
Fowl manna grass	Glyceria striata	Spreading dogbane	Apocynum androsaemifolium	
Fragrant bedstraw	Galium triflorum	Staghorn sumac	Rhus typhina	

Fragrant Water Lily	Nymphaea odorata	Starflower	Trientalis borealis
Goldenrod sp.	Solidago sp.	Tamarack	Larix laricina
Greenish flowered pyrola	Pyrola chlorantha	Tesselated rattlesnake plantain	Goodyera tesselata
Ground pine	Lycopodium dendroideum	Trembling aspen	Populus tremuloides
Hairy Solomon's seal	Polygonatum pubescens	Violet sp.	Viola sp.
Heal-all	Prunella vugaris	White adder's mouth	Malaxis brachypoda
Helleborine	Epipactus helleborine	White birch	Betula papyrifera
Honeysuckle	Lonicera sp.	White cedar	Thuja occidentalis
Indian cucumber root	Medeola viginiana	White lettuce	Prenanthes alba
Indian pipe	Monotropa uniflora	White oak	Quercus alba
Jewelweed	Impatiens capensis	Wild lettuce	Lactuca spp.
Ladys Thumb	Polygonum persicaria	Ratllesnake root	Prenanthes spp.
Large leaved aster	Aster macrophyllus	Wild red raspberry	Rubus idaeus melanolasius
Large toothed aspen	Populus grandidentata	Wild sarsparilla	Aralia nudicaulis
Low sweet blueberry	Vaccinium angustifolium	Winterberry holly	Ilex verticillata
Marginal wood fern	Dryopteris marginalis	Wintergreen	Gaultheria procumbens
Marsh fern	Thelypteris palustris	Woodland horsetail	Equisetum sylvaticum
Marsh St. John's Wort	Triadenum fraseri	Woodland strawberry	Fragaria vesca
Meadow sweet	Spiraea alba/latifolia	Yellow Pond Lily	Nuphar variegatum

Habitat Features	Present	Absent	Comments
Snags	✓		Red oak, white pine
Cavity Trees			
- nesting/roosting	✓		
- feeding	/		
- escape	<b>/</b>		
Stick Nests		✓	
Fallen Dead Trees	✓		
(woody debris)			
Mast Trees	✓		Few
Supercanopy Trees	✓		
Conifer Thickets	✓		White Pine
Other Food Sources	✓		Black Cherry, blueberries,
			huckleberry
Surface Water			
- year round creek/pond	✓		
- seasonal runoff	✓		
- seasonal pond			
Dens or Dug Holes	✓	_	
Others			

# Wildlife Species Noted

Species	Season	Habitat	Comments
Snowshoe Hare	Summer	Forest	Observed

## 7.6 Specific Compartment Objectives

## Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

## **Short Term (5 Years)**

To examine the potential of connecting this compartment to others, through the expansion of the Club's trail system. Club members could use these trails for recreation, as well as interpretive nature hikes.

## 7.7 Other Compartment Features

Compartment No.: W4 Area: A: 6.5 acres (2.6 ha)

B: 19.2 acres (7.68 ha)

#### 7.1 General Description

Protection forest with wetlands located throughout the compartment. There is thin soil cover over the bedrock and there are numerous exposed rocky ridges. This compartment is separated into two subunits by Riddell's Bay.

Down woody debris is variable throughout the compartment, as is the understory vegetation, which varies from very dense areas to open areas located on exposed bedrock. The dense areas are comprised mainly of white pine, red oak, white oak and red maple regeneration, and several are located in tree fall gaps. There is also evidence of white pine blister rust throughout this compartment and several *Ribes sp.* where observed while performing the timber cruise supporting that observation, as the *Ribes* genus is a host to the fungus during other stages of its life cycle. Located northeast of subunit W4B is a large marsh, which undoubtedly receives the runoff from that side of the compartment while Riddell's Bay receives the rest of the runoff.

#### 7.2 Compartment Site Characteristics

Soil Type: Sandy over intermittent sandy, cobble and boulder till >1 m thick. Drainage: Well to poorly drained, with numerous water filled depressions

Topography: Low, hilly terrain up to 10 m relief.

Water Features: Adjacent to shore wetlands at end of Riddell's Bay and several

inland marshes.

Physical Features:

Access: Year round by foot, boat or snowmobile.

Other Features

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	#	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)	stems/ha	Area	
			for Comp.			(m <sup>2</sup> /ha)	
				By class		By class	
		87	16.7	for the		for the	
White Pine (Po)	50			Comp.		Comp.	
Red Oak (Or)	20			10-25	600	15.6	
White Oak (Ow)	10			26-40	137	11.6	
Red Maple (Ms)	10			41-50	10	1.6	
Poplar (Po)	10			50+	3	0.8	
W. Birch (Bw)							
Red Pine (Pr)							
Total	100				750	29.6	

**Summary of Tree Inventory**: Species Composition: Pw5Or2Ow1Mr1Po1 Height: 16.7 m Age: 87 years Basal Area: 29.6 m<sup>2</sup>/ha

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment W4					
Common Name	Scientific Name	Common Name	Scientific Name		
Arrow Leaved Tearthumb	Polygonum saggitatum	Mountain holly	Nemopanthus mucronatus		
Bearberry	Arctostaphylos uva-ursi	Multicoloured blue flag	Iris versicolor		
Beautiful branch moss	Callicladium haldanianum	Northern bugleweed	Lycopus uniflorus		
Black cherry	Prunus serotina	us serotina Northern white violet			
Black huckleberry	Gaylussucia baccata	Northern wild raisin	Viburnum cassinoides		
Blue bead lily	Clintonia borealis	Pale corydalis	Corydalis sempervirens		
Boneset	Eupatorium perfoliatum	Perforated cladonia	Cladina multiformis		
Bracken fern	Pteridium aquilinum	Pickerelweed	Pontedaria cordata		
Bristly sarsparilla	Aralia hispida	Pin cushion moss	Leucobryum glaucum		
Bush honeysuckle	Diervilla lonicera	Pinesap	Monotropa hypopitys		
Canada mayflower	Maianthemum canadense	Pink lady slipper	Cypripedium acaule		
Cardinal Flower	Lobelia cardinalis	Red cedar	Thuja sp.		
Carex sp.	Carex sp.	Red maple	Acer rubrum		
Cinnamon fern	Osmunda cinnamomea	Red oak	Quercus rubra		
Club moss sp	Lycopodium sp.	Red osier dogwood	Cornus stolonifera		
Common Blackberry	Rubus alleghenensis	Red pine	Pinus resinosa		
Common Hair Grass	Deschampsia flexuosa	Reindeer lichen	Cladina rangiferina		
Common juniper	Juniperus communis	Rock tripe	Umbilicaria mammulata		
Common Polypody	Polypodium viginianum	Sensitive fern	Onoclea sensibilis		
Coral lichen	Cladina stellaris	Smooth serviceberry	Amalanchier laevis		
Cow wheat	Melampyrum lineare	Speckled alder	Alnus incana spp.		
Dwarf raspberry	Rubus pubescens	Sphagnum moss	Sphagnum sp.		
Dwarf rattlesnake plantain	Goodyera repens	Spinulose wood fern	Dryopteris carhusiana		
Eastern hemlock	Tsuga canadensis	Spotted joe-pye weed	Eupatorium maculatum		
Eastern white pine	Pinus stobus	Starflower	Trientalis borealis		
False pixie cup	Cladonia chlorophaea	Sweetgale	Myrica gale		
Fly honeysuckle	Lonicera canadensis	Tamarack	Larix laricina		
Goldenrod sp.	Solidago sp.	Tesselated rattlesnake plantain	Goodyera tesselata		
Grass	Carex sp.	Trembling aspen	Populus tremuloides		
Ground pine	Lycopodium dendroideum	Three-way sedge	Dulicichium arundinaceam		
Hairy honeysuckle	Lonicera hirsuta	White birch	Betula papyrifera		
Hairy Solomon's seal	Polygonatum pubescens	White cedar	Thuja occidentalis		
Indian pipe	Monotropa uniflora	White oak	Quercus alba		
Jewelweed	Impatiens capensis	White spruce	Picea glauca		
Large leaved aster	Aster macrophyllus	Wild black currant	Ribes americanum		
Leatherleaf	Chamaedaphne calyculata	Wild red raspberry	Rubus idaeus melanolasius		
Low sweet blueberry	Vaccinium angustifolium	Wild sarsparilla	Aralia nudicaulis		

Marginal wood fern	Dryopteris marginalis	Winterberry holly	Ilex verticillata
Marsh fern	Thelypteris palustris	Wintergreen	Gaultheria procumbens
Marsh St. John's Wort	Triadenum fraseri	Woodland strawberry	Fragaria vesca
Meadow sweet	Spiraea alba/latifolia		

Habitat Features	Present	Absent	Comments
Snags	✓		
Cavity Trees - nesting/roosting - feeding - escape	<i>y y y</i>		
Stick Nests		✓	
Fallen Dead Trees (woody debris)	<b>√</b>		
Mast Trees	✓		few
Supercanopy Trees	✓		
Conifer Thickets	✓		White Pine, Red Pine
Other Food Sources	<b>√</b>		Black Cherry, blueberries, huckleberry
Surface Water - year round creek/pond - seasonal runoff - seasonal pond	<i>y</i>		
Dens or Dug Holes	<b>√</b>		
Others			

## **Wildlife Species Noted**

Species	Season	Habitat	Comments
White Tailed Deer	Summer	Forest	Browse evident
Ruffed Grouse	Summer	Forest	

## 7.6 Specific Compartment Objectives

#### Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

#### **Short Term (5 Years)**

To examine the potential of connecting this compartment to others, through the expansion of the Club's trail system. Club members could use these trails for recreation, as well as interpretive nature hikes.

#### 7.7 Other Compartment Features

Compartment No.: W5 Area: 28.7 acres (11.5 ha)

## 7.1 General Description

This compartment is a protection forest, comprised mainly of white pine, with red maple, and red and white oak. Red pine and white birch are also present in the stand, and in the north end of the stand the canopy becomes mainly deciduous. There are several large white pines, with DBH values greater than 50cm, and some show evidence of white pine blister rust although no *Ribes sp.* were found in the compartment. There are several areas where windthrow has toppled very large trees, creating areas of exposed mineral soil where the root system has created tip ups. In the open areas created by these canopy gaps, white oak, red oak and especially white pine oak are successfully regenerating. There is also some poplar regeneration. While red pine is present in the canopy layer, no red pine regeneration is present in the understory layer.

The compartment is characterized by well to poorly drained, thin sandy soils, with standing surface water in small depressions. These depressions vary in size, and some contain dense fern and other vegetative growth. The ground vegetation in the blowdown areas is dense, and is dominated by bracken fern, large-leaved aster, and wild sarsaparilla. In other areas of the compartment the ground vegetation is not a complete cover.

A well-marked and cleared footpath runs through the north west end of the compartment from north to south, as well as through the south east area. This trail is part of the system being developed by the Madawaska Club for recreation and leisure. It is well maintained and marked, and connects this compartment with several other adjacent ones, including R2C to the north.

#### 7.2 Compartment Site Characteristics

Soil Type: Sandy over intermittent sandy, cobble and boulder till <0.5m thick,

incomplete ground cover. Peat and humus at edge of wetlands.

Drainage: Well to poorly drained, with standing water in depressions

Topography: Undulating, with exposed bedrock and boulders. Varies from low

lying, poorly drained, to well drained sandy areas and exposed

rocky high points. Low hills to 10m local relief.

Water Features: A small creek runs lengthways through the centre of the

compartment, connecting swampy areas. Adjacent to beaver

flooded sloughs and on peninsula jutting into Go Home Bay.

Physical Features: Many areas of exposed bedrock

Access: By boat or on foot

Other Features: There is some evidence of past fire in the compartment, in the form

of burnt stumps.

#### 7.3 Compartment History

A fire burned for approximately six weeks in the months of July and August 1919, covering an area spanning from near Rabbit Lake (at the southeast end of compartment Wt1H), to behind the Trusler cottage on the shoreline west of compartment W1. This fire was eventually extinguished

by rainfall, although fire crews were employed to fight it. Evidence of this event may be found in the compartment, in the form of burned tree stumps and the average age of the stand.

# 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	#	Basal	Comments
	Comp	(Years)	Height (m) for Comp.	DBH (cm)	stems/ha	Area (m²/ha)	
				By class		By class	
		108	17.3	for the		for the	
White Pine (Pw)	50			Comp.		Comp.	
Red Oak (Or)	10			10 - 25	677	17.6	
White Oak (Ow)	10			26 - 40	231	19.6	
Red Maple (Ms)	20			41 – 50	15	2.4	
Poplar (Po)	10			50+	3	0.8	
Red Pine (Pr)							
Total	100				926	40.4	

# **Summary of Tree Inventory**:

Species Composition: Pw5Or1Ow1Ms2Po1 Age: 108 years Height: 17.3 m Basal Area: 40.4m<sup>2</sup>

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment W5				
Common Name	Scientific Name	Common Name	Scientific Name	
Arrow-leaved tearthumb	Polygonum sagittatum	Pipewort	Eriocaulon aquaticum	
Bearded shorthusk	Brachyelytrum erectum	Poison Ivy	Toxicodendron radicans	
Black cherry	Prunus serotina	Powder horn lichen	Cladonia coniocraea	
Black huckleberry	Gaylussucia baccata	Prickly gooseberry	Ribes cynosbati	
Blue bead lily	Clintonia borealis	Purple stemmed aster	Aster puniceus	
Boneset	Eupatorium perfoliatum	Red maple	Acer rubrum	
Bracken fern	Pteridium aquilinum	Red oak	Quercus rubra	
Bristly sarsparilla	Aralia hispida	Red osier dogwood	Cornus stolonifera	
British soldiers	Cladonia cristatella	Red pine	Pinus resinosa	
Bush honeysuckle	Diervilla lonicera	Red twigged serviceberry	Amalanchier sanguinea	
Canada mayflower	Maianthemum canadense	Reindeer lichen	Cladina rangiferina	
Club moss sp	Lycopodium sp.	Ribes sp.	Ribes sp.	
Common Hair Grass	Deschampsia flexuosa	Round leaved pyrola	Pyrola americana	
Common juniper	Juniperus communis	Rubus sp.	Rubus sp.	
Common Polypody	Polypodium viginianum	Sensitive fern	Onoclea sensibilis	
Common strawberry	Fragaria virginiana	Small sundrops	Oenothera perennis	
Cow wheat	Melampyrum lineare	Speckled alder	Alnus incana spp.	
Dandelion	Taraxacum officinale	Spinulose wood fern	Dryopteris carhusiana	
Dwarf raspberry	Rubus pubescens	Spreading dogbane	Apocynum androsaemifolium	
Eastern white pine	Pinus stobus	Starflower	Trientalis borealis	
False pixie cup	Cladonia chlorophaea	Sweetgale	Myrica gale	
False solomon's seal	Maianthemum racemosum	Tamarack	Larix laricina	

Fringed sedge	Carex crinita	Trembling aspen	Populus tremuloides
Goldenrod sp.	Solidago sp.	Three-way sedge	Dulicichium arundinaceam
Ground pine	Lycopodium dendroideum	Water lobelia	Lobelia dortmanna
Hairy Solomon's seal	Polygonatum pubescens	White birch	Betula papyrifera
Large leaved aster	Aster macrophyllus	White oak	Quercus alba
Leatherleaf	Chamaedaphne calyculata	Wild columbine	Aquilegia canadensis
Low sweet blueberry	Vaccinium angustifolium	Wild lettuce	Prenanthes spp.
Marginal wood fern	Dryopteris marginalis	Wild red raspberry	Rubus idaeus melanolasius
Marsh fern	Thelypteris palustris	Wild yellow flax	Linum virginianum
Meadow sweet	Spiraea alba/latifolia	Winterberry holly	Ilex verticillata
Northern bugleweed	Lycopus uniflorus	Wintergreen	Gaultheria procumbens
Pale corydalis	Corydalis sempervirens	Woodland horsetail	Equisetum sylvaticum
Pickerelweed	Pontederia cordata	Woodland strawberry	Fragaria vesca
Pin cushion moss	Leucobryum glaucum	Yellow hawkweed	Hieracium caespitosum
Pinesap	Monotropa hypopitys	Yellow loosestrife	Lysimachia terrestris
Pink lady slipper	Cypripedium acaule		

Habitat Features	Present	Absent	Comments
Snags	✓		
Cavity Trees			
- nesting/roosting		✓	
- feeding	✓		
- escape	✓		
Stick Nests		✓	
Fallen Dead Trees	✓		Abundant large DWD, full
(woody debris)			boles and canopies
Mast Trees	<b>✓</b>		Mainly red oak
Supercanopy Trees	<b>✓</b>		White pine
Conifer Thickets	<b>✓</b>		White pine regeneration
Other Food Sources	✓		Many berry species – see
			compartment vegetation
			list
Surface Water			
- year round creek/pond	✓		Good amphibian breeding
- seasonal runoff		✓.	habitat
- seasonal pond		✓	
Dens or Dug Holes	<b>√</b>	_	Small mammals
Others			

# **Wildlife Species Noted**

Species	Season	Habitat	Comments

# 7.6 Specific Compartment Objectives

# Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due

to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

# **Short Term (5 Years)**

To examine the potential of connecting this compartment to others, through the expansion of the Club's trail system. Club members could use these trails for recreation, as well as interpretive nature hikes.

# 7.7 Other Compartment Features

Compartment No.: W6 Area: 148.52 acres (59.41 ha)

## 7.1 General Description

This is a large compartment that extends from the shore of Go Home Bay to the inland, forested edge of the property. It contains two large bays, and surrounds several wetland and rock compartments. Wetland compartment Wt1H transects the compartment, severing it into two sections. It is a protection forest, with a canopy composed mainly of white pine, red oak, white oak, and red maple. The stand also contains a small amount of red pine, beech, and trembling aspen, as well as areas that are almost purely white pine. The health of the red pines is poor, and they are not regenerating themselves in the understory. Due to windthrow in some areas most of the super canopy white pines have fallen or become snags (standing dead trees), and there are a number of large canopy gaps that contain a dense regeneration of white pine under 10cm DBH. A significant cover of ground vegetation, especially large-leaved aster characterizes these areas. In the areas where the canopy gaps occur above moist to wet soils, there is an abundance of black huckleberry. Throughout most of the compartment the canopy closure is approximately 75%, and the sub canopy red maple and red oak regeneration occasionally produce a more continuous cover than the main canopy.

The compartment is characterized by well to poorly drained, thin sandy soils, with standing surface water in small depressions. These depressions vary in size and are filled seasonally by spring runoff and precipitation, and contain organic soils and dense fern and other vegetative growth.

Due to the storm activity and blowdowns, there is a significant amount of downed woody debris, which creates excellent habitat for small mammals and other ground dwelling fauna. The blowdowns have also created soil tip ups that have exposed mineral soils.

A power corridor runs through part of the compartment, creating a corridor of open canopy filled with a ground vegetation consisting primarily of common juniper. Marked and cleared hiking trails also transect this compartment, opening it up for easy access to hikers and walkers in the community.

#### 7.2 Compartment Site Characteristics

Soil Type: Sandy over intermittent sandy, cobble and boulder till <0.5m thick.

Peat and humus at edge of wetlands and moist to wet depressions

Drainage: Poor to well drained, with exposed impermeable bedrock

Topography: Low hills to 15m local relief

Water Features: Adjacent to long linear beaver flooded sloughs and on peninsulas

jutting into Go Home Bay

Physical Features: None

Access: On foot or by boat

Other Features: Transected by marked hiking trails. Garbage dump located behind

community gas docks.

## 7.3 Compartment History

Located on the western edge of this compartment are the library and community centre. This dock was also used in the past as the port of call for boats bringing mail and supplies from the town of Midland, to Madawaska Club residents who were staying at their cottages for the summer. This site is now one of the gathering areas for the community.

## 7.4 Compartment Inventory

Tree Species	% Comp	Age (Years)	Average Height (m) for	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
			comp.	(cm)		(111 / 1111)	
				By class		By class	
		107	17.8	for the		for the	
White Pine (Pw)	60			Comp.		Comp.	
Red Oak (Or)	20			10 - 25	750	19.5	
White Oak (Ow)	10			26 - 41	215	18.25	
Red Maple (Ms)	10			42 - 48	16	2.5	
				50+	2	0.5	In decline and not
Red Pine (Pr)							regenerating
Poplar (Po)							
Total	100				983	40.75	

# **Summary of Tree Inventory:**

Species Composition: Pw6Or2Ow1Ms1 Age: 107 years

Height: 17.8 m Basal Area: 40.75 m<sup>2</sup>

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment W6						
Common Name	Scientific Name	Common Name	Scientific Name			
Bearded shorthusk	Brachyelytrum erectum	Pale corydalis	Corydalis sempervirens			
Black cherry	Prunus serotina	Partridgeberry	Mitchella repens			
Black chokeberry	Aronia melanocarpa	Pickerelweed	Pontederia cordata			
Black huckleberry	Gaylussucia baccata	Pin cushion moss	Leucobryum glaucum			
Blue bead lily	Clintonia borealis	Pinesap	Monotropa hypopitys			
Boneset	Eupatorium perfoliatum	Pink lady slipper	Cypripedium acaule			
Bracken fern	Pteridium aquilinum	Pipewort	Eriocaulon aquaticum			
Bunchberry	Cornus canadensis	Poison Ivy	Toxicodendron radicans			
Bush honeysuckle	Diervilla lonicera	Red maple	Acer rubrum			
Canada mayflower	Maianthemum canadense	Red oak	Quercus rubra			
Choke cherry	Prunus virginiana	Red osier dogwood	Cornus stolonifera			
Common Hair Grass	Deschampsia flexuosa	Red pine	Pinus resinosa			
Common hairgrass	Deschampsia flexuosa	Red twigged serviceberry	Amalanchier sanguinea			
Common juniper	Juniperus communis	Reindeer lichen	Cladina rangiferina			
Common Polypody	Polypodium viginianum	Rock tripe	Umbilicaria mammulata			
Cow wheat	Melampyrum lineare	Sensitive fern	Onoclea sensibilis			
Dwarf raspberry	Rubus pubescens	Sheep sorel	Rumex acetosella			
Eastern white pine	Pinus stobus	Smooth blackberry	Rubus canadensis			

46

Eastern Hemlock	Tsuga canadensis	Smooth serviceberry	Amalanchier laevis
False solomon's seal	Maianthemum racemosum	Speckled alder	Alnus incana spp.
Fringed sedge	Carex crinita	Sphagnum moss	Sphagnum sp.
Goldenrod sp.	Solidago sp.	Spinulose wood fern	Dryopteris carhusiana
Ground pine	Lycopodium dendroideum	Spreading dogbane	Apocynum androsaemifolium
Hairy Solomon's seal	Polygonatum pubescens	Starflower	Trientalis borealis
Hawthorn	Crataegus spp.	Sweetgale	Myrica gale
Horned bladderwort	Utricularia cornuta	Trembling aspen	Populus tremuloides
Indian Pipe	Monotropa uniflora	Water lobelia	Lobelia dortmanna
Large leaved aster	Aster macrophyllus	White birch	Betula papyrifera
Low sweet blueberry	Vaccinium angustifolium	White cedar	Thuja occidentalis
Marginal wood fern	Dryopteris marginalis	White oak	Quercus alba
Marsh cinquefoil	Potentilla palustris	Rattlesnake root	Prenanthes spp.
Marsh fern	Thelypteris palustris	Wild red raspberry	Rubus idaeus melanolasius
Meadow horsetail	Equisetum pratense	Wild sarsparilla	Aralia nudicaulis
Meadow sweet	Spiraea alba/latifolia	Winterberry holly	Ilex verticillata
Northern bugleweed	Lycopus uniflorus	Wintergreen	Gaultheria procumbens
Northern white violet	Viola mackloskeyi ssp. Pallens	Woodland horsetail	Equisetum sylvaticum
Northern wild raisin	Viburnum cassinoides	Woodland strawberry	Fragaria vesca
One sided wintergreen	Orthilia secunda	Yellow loosestrife	Lysimachia terrestris

Habitat Features	Present	Absent	Comments
Snags	<b>√</b>		Mostly white pine broken off due to storm windthrow
Cavity Trees - nesting/roosting - feeding - escape	<i>,</i>		-White oak -White pine
Stick Nests		✓	
Fallen Dead Trees (woody debris)	<b>✓</b>		Dead white pines
Mast Trees	✓		Mainly red oak
Supercanopy Trees	✓		Many have fallen due to storm windthrow
Conifer Thickets	✓		White pine regeneration
Other Food Sources	<b>√</b>		Many berry species – see compartment vegetation list
Surface Water - year round creek/pond - seasonal runoff - seasonal pond	<i>,</i>	✓	Many depressions are poorly drained, and are filled following rainfall and during the spring.
Dens or Dug Holes	✓		Small mammals
Others			

#### **Wildlife Species Noted**

Species	Season	Habitat	Comments
Chipmunks	Summer	Forest floor	
Water snake	Summer	Lake shore	
Rabbit	Summer	Forest floor	Observed scat
Deer	Summer	Forest floor	Observed scat
Brown tree frog	Summer		
Bufo americana	Summer		
Hairy woodpecker	Summer		
Grouse	Summer		

## 7.6 Specific Compartment Objectives

#### Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

#### **Short Term (5 Years)**

To continue to develop, maintain, and promote the hiking trail network. This will involve establishing new trails, and ensuring they are well marked and cleared for user safety. These trails will allow the Club members to have easy access to their forest, and may be used for interpretive nature hikes.

#### 7.7 Other Compartment Features

In the area immediately north of the community gas dock there is a small garbage dump. The majority of the garbage consists of kitchen appliances, equipment from the gas docks, and empty fuel and oil containers. It has been used over the years by successive caretakers, and is presumably no longer in use. The majority of the garbage is in one confined area, although wind has blown some of the lighter materials throughout the adjacent forest. Discarded equipment from the community gas dock has accumulated in the area, as well as appliances presumably from individual cottages. Furthermore, the remains of old docks, oil drums, and other materials may be found along the shoreline of the bay south of the gas dock. Most of these objects are located along the shoreline, but there are also dock cradles submerged in the water. The Club may wish to clean up this area as it is an eyesore and does little to improve the overall health of the forest in that compartment.

The following approach to addressing this situation has been proposed, and is to be presented to the Madawaska Club Ltd. directors:

- Stage 1: Evaluate and map out the extent of the affected area. Quantify the type and amount of garbage present, and determine whether it should go for kitchen waste disposal (Leonard King), or as solid item or large item recycling categories.
- Stage 2: Establish a timetable for clean-up in conjunction with Township pick-up of items, which usually occurs every couple of years
- Stage 3: Finance and carry out the clean-up using students during a summer period.

Compartment No.: W7 Area: 55.75 acres (22.3 ha)

## 7.1 General Description

This compartment is a protection forest with a canopy that varies from white pine, red oak and white oak in some areas, to mainly red and white oak and red maple in others. The stand also contains a small amount of red pine and poplar, and many supercanopy white pines. Regeneration in the stand varies from abundant white pine, red oak and red maple under a fairly open canopy in some areas, to very little regeneration at all in sections where the canopy cover is more complete. No red pine regeneration was found in the understory. There are a number of snags in the forest, many of which are supercanopy white pines that may now serve as raptor perches. Many of the oaks are in a state of decline, and have rotted and hollow interiors and large dead branches although there are also large healthy oak mast trees.

The compartment is characterized by well to poorly drained, thin sandy soils, with standing surface water or moist organic soils in small depressions. These depressions vary in size, and some contain dense fern and other vegetative growth. There is a fairly open understory, and large areas of poorly drained, moist soils characterize large portions of the compartment. In the southern end of the compartment there is a large amount of cedar regeneration under a closed canopy, and a small stream that contains surface water following spring melt and storm rainfall events. Open areas of bedrock are present within the compartment, and are characterized by juniper bushes, and scrubby white pines and oaks growing from soil in depressions or cracks in the rock. The depressions vary in size and are filled seasonally by spring runoff or precipitation, and contain organic soils and dense fern and other vegetative growth.

A power corridor runs along the southeastern edge of this compartment. It is roughly 10m wide, and is characterized by juniper and bare rock, and some shrub and herb species such as low sweet blueberry and wild columbine. An unmarked trail, approximately 2 m wide, runs from north to south within the compartment, and is presumably a skidoo trail. Harvesting may have taken place in this compartment in the past, as cut stumps were found throughout the forest here.

#### 7.2 Compartment Site Characteristics

Soil Type: Sandy over intermittent sandy, cobble and boulder till <1m thick

Drainage: Poor to well drained, with impermeable exposed bedrock

Topography: Low hills to 10m local relief

Water Features: Elevated water table in basinal areas, and dry uplands

Physical Features: None

Access: On foot or by boat

Other Features: Hydropower corridor runs northeast to southwest along the

southeast end of the compartment

#### 7.3 Compartment History

Refer to *Section 3.2 Logging History*.

# 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	#	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)	stems/ha	Area	
			for Comp.			(m²/ha)	
				By class		By class	
		94	17.8	for the		for the	
White Pine (Pw)	50			Comp.		Comp.	
Red Oak (Or)	30			10 - 25	477	12.4	
White Oak (Ow)	10			26 – 41	160	13.6	
Red Maple (Ms)	10			42 - 49	19	3.0	
Poplar (Po)				50+	2	0.6	
Red Pine (Pr)							
Total	100				658	29.6	

**Summary of Tree Inventory**: Species Composition: Pw5Or3Ow1Ms1 Height: 17.8 m Age: 94 years Basal Area: 29.6m<sup>2</sup>

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment W7						
Common Name	Scientific Name	Common Name	Scientific Name			
American beech	Fagus grandifolia	Meadow sweet	Spiraea alba			
Aster sp.	Aster sp.	Pale corydalis	Corydalis sempervirens			
Black cherry	Prunus serotina	Partridgeberry	Mitchella repens			
Black chokeberry	Aronia melanocarpa	Pin cushion moss	Leucobryum glaucum			
Black huckleberry	Gaylussucia baccata	Pink lady slipper	Cypripedium acaule			
Black snake root	Sanicula marilandica	Pipewort	Eriocaulon aquaticum			
Blue bead lily	Clintonia borealis	Poison Ivy	Toxicodendron radicans			
Boneset	Eupatorium perfoliatum	Prince's pine	Chimaphila umbellata cisatlantica			
Bracken fern	Pteridium aquilinum	Red maple	Acer rubrum			
Bristly sarsparilla	Aralia hispida	Red oak	Quercus rubra			
Bunchberry	Cornus canadensis	Red pine	Pinus resinosa			
Bush honeysuckle	Diervilla lonicera	Reindeer lichen	Cladina rangiferina			
Canada mayflower	Maianthemum canadense	Ribes sp.	Ribes sp.			
Cinnamon fern	Osmunda cinnamomea	Round leaved pyrola	Pyrola americana			
Club moss sp	Lycopodium sp.	Sheep sorel	Rumex acetosella			
Common Blue eyed grass	Sisyrinchium montanum	Slender white aster	Solidago borealis			
Common Hair Grass	Deschampsia flexuosa	Smooth blackberry	Rubus canadensis			
Common juniper	Juniperus communis	Smooth serviceberry	Amalanchier laevis			
Common Polypody	Polypodium viginianum	Speckled alder	Alnus incana spp.			
Cow wheat	Melampyrum lineare	Sphagnum moss	Sphagnum sp.			
Dwarf raspberry	Rubus pubescens	Spinulose wood fern	Dryopteris carhusiana			
Dwarf rattlesnake plantain	Goodyera repens	Spreading dogbane	Apocynum androsaemifolium			
Eastern hemlock	Tsuga canadensis	Starflower	Trientalis borealis			
False solomon's seal	Maianthemum racemosum	Striped maple	Acer pensylvanicum			
Fly honeysuckle	Lonicera canadensis	Sweet gale	Myrica gale			

Goldenrod sp.	Solidago sp.	Trembling aspen	Populus tremuloides
Grass	Carex sp.	Violet sp.	Viola sp.
Ground pine	Lycopodium dendroideum	Water lobelia	Lobelia dortmanna
Hairy Solomon's seal	Polygonatum pubescens	White birch	Betula papyrifera
Heal-all	Prunella vugaris	White cedar	Thuja occidentalis
Helleborine	Epipactus helleborine	White oak	Quercus alba
Hop clover	Trifolium agrarium	White pine	Pinus stobus
Indian Pipe	Monotropa uniflora	Wild lettuce	Latuca spp.
Large leaved aster	Aster macrophyllus	Wild red raspberry	Rubus idaeus melanolasius
Large toothed aspen	Populus grandidentata	Wild sarsparilla	Aralia nudicaulis
Low sweet blueberry	Vaccinium angustifolium	Winterberry holly	Ilex verticillata
Marginal wood fern	Dryopteris marginalis	Wintergreen	Gaultheria procumbens
Multicoloured blue flag	Iris versicolor	Woodland strawberry	Fragaria vesca

Habitat Features	Present	Absent	Comments
Snags	✓		Mainly white pine
Cavity Trees - nesting/roosting - feeding - escape	<i>y y</i>		-Red oak -White pine
Stick Nests		✓	
Fallen Dead Trees (woody debris)	<b>√</b>		Not much found DWD throughout the stand
Mast Trees	✓		Red and white oak
Supercanopy Trees	✓		White pine
Conifer Thickets		✓	White cedar regeneration in southeast area of comp.
Other Food Sources	/		Many berry species – see compartment vegetation list
Surface Water - year round creek/pond	,	<b>√</b>	, , ,
- seasonal runoff	<b>V</b>		-seasonal creek in
- seasonal pond	<b>V</b>		southeast end
Dens or Dug Holes	<b>✓</b>		Small mammals
Others	<b>√</b>		Fire scars on stumps

# Wildlife Species Noted

Species	Season	Habitat	Comments
Bufo americana	Summer	Forest floor	Observed
Leopard frog	Summer	Shoreline	Observed
White tailed deer	Summer	Forest floor	Observed scat
Eastern chipmunk	Summer	Forest floor	Observed
Downy woodpecker	Summer	Forest	Observed
Garter snake	Summer	Forest floor	Observed

51

# 7.6 Specific Compartment Objectives

## Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

## **Short Term (5 Years)**

To examine the potential of developing a trail system extending into the northern mainland portion of the Club property, connecting this compartment to others as far north as W10 and Iron City Bay, and inland to Crown lands.

## 7.7 Other Compartment Features

Compartment No.: W8 Area: 30.9 acres (12.36ha)

#### 7.1 General Description

This is a narrow, wooded compartment that is bound to the north by compartment R3A, an open, sloping rock compartment. The majority of the canopy in W8 is comprised of white pine, red oak, red maple, and white oak, although there are areas where the canopy is mainly red maple and oak. Poplar and supercanopy white pines are also present in the compartment. Overall there is a very open understory, although there is a balsam fir thicket in the middle of the compartment. The regeneration is mostly red maple, red and white oak, with most of this under 10cm DBH. The ground vegetation contains a large amount of common juniper. To the east end of the compartment there is a mainly deciduous understory, which lies beneath a canopy of white pine and white oak. In this area the regeneration layer is dense, as is the ground vegetation. Throughout the compartment there are a number of snags, many of which contain large cavities.

There are some open rocky areas in the compartment, and are characterized by common juniper bushes and low sweet blueberry. Standing water and organic soils are found in poorly drained low-lying areas. These contain poplar and white birch.

There is also evidence of past timber extraction in the compartment, in the form of cut stumps.

#### 7.2 Compartment Site Characteristics

Soil Type: Sandy over intermittent sandy, cobble and boulder till <1m thick

Drainage: Fair to well drained

Topography: Flat on sloping ground, with 10m local relief

Water Features: Adjacent to shore wetland on west. A creek drains through the

centre of the compartment into the lake.

Physical Features: None

Access: On foot or by boat.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

## 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	#	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)	stems/ha	Area	
			for Comp.			(m²/ha)	
				By class		By class	
		90	20.5	for the		for the	
White Pine (Pw)	40			Comp.		Comp.	
Red Oak (Or)	30			10 - 25	338	8.8	
White Oak (Ow)	10			26 – 41	164	14.0	
Red Maple (Ms)	20			42 – 49	18	2.8	
Poplar (Po)				50+	10	3.2	
Total	100				530	28.8	

**Summary of Tree Inventory**: Species Composition: Pw4Or3Ow1Ms2 Height: 20.5 m Age: 90 years Basal Area: 28.8 m<sup>2</sup>

# **Other Vegetation Assessment Table**

Plant Species Inventory: Co				
Common Name	Scientific Name	Common Name	Scientific Name	
American mountain ash	Sorbus americana	Partridgeberry	Mitchella repens	
Bearded shorthusk	Brachyelytrum erectum	Pickerelweed	Pontederia cordata	
Black cherry	Prunus serotina	Pin cushion moss	Leucobryum glaucum	
Black chokeberry	Aronia melanocarpa	Pink lady slipper	Cypripedium acaule	
Black huckleberry	Gaylussucia baccata	Pipewort	Eriocaulon aquaticum	
Black snakeroot	Sanicula marilandica	Poison Ivy	Toxicodendron radicans	
Blue bead lily	Clintonia borealis	Prunus sp.	Prunus sp.	
Bracken fern	Pteridium aquilinum	Red maple	Acer rubrum	
Bunchberry	Cornus canadensis	Red oak	Quercus rubra	
Bush honeysuckle	Diervilla lonicera	Red pine	Pinus resinosa	
Canada mayflower	Maianthemum canadense	Reindeer lichen	Cladina rangiferina	
Cinnamon fern	Osmunda cinnamomea	Ribes sp.	Ribes sp.	
Club moss sp	Lycopodium sp.	Rock tripe	Umbilicaria mammulata	
Common blackberry	Rubus allegheniensis	Rubus sp.	Rubus sp.	
Common Blue eyed grass	Sisyrinchium montanum	Sensitive fern	Onoclea sensibilis	
Common green peat moss	Sphagnum girgensohnii	Sheep sorel	Rumex acetosella	
Common hair grass	Deschampsia flexuosa	Smooth blackberry	Rubus canadensis	
Common juniper	Juniperus communis	Smooth serviceberry	Amalanchier laevis	
Common Polypody	Polypodium viginianum	Smooth wild rose	Rosa blanda	
Cow wheat	Melampyrum lineare	Speckled alder	Alnus incana spp.	
Dwarf raspberry	Rubus pubescens	Sphagnum moss	Sphagnum sp.	
False solomon's seal	Maianthemum racemosum	Spinulose wood fern	Dryopteris carhusiana	
Fly honeysuckle	Lonicera canadensis	Spreading dogbane	Apocynum androsaemifolium	
Fragrant bedstraw	Galium triflorum	Starflower	Trientalis borealis	
Goldenrod sp.	Solidago sp.	Sweet gale	Myrica gale	
Ground pine	Lycopodium dendroideum	Trembling aspen	Populus tremuloides	
Hairy Solomon's seal	Polygonatum pubescens	Violet sp.	Viola sp.	
Helleborine	Epipactus helleborine	White birch	Betula papyrifera	
Large leaved aster	Aster macrophyllus	White cedar	Thuja occidentalis	
Leather leaf	Chamaedaphne calyculata	White oak	Quercus alba	
Low sweet blueberry	Vaccinium angustifolium	White pine	Pinus stobus	
Marginal wood fern	Dryopteris marginalis	Wild lettuce	Latuca spp.	
Marsh cinquefoil	Potentilla palustris	Wild red raspberry	Rubus idaeus melanolasius	
Meadow horestail	Equisetum pratense	Wild sarsparilla	Aralia nudicaulis	
Mountain holly	Nemopanthus mucronatus	Winterberry holly	Ilex verticillata	
Mountain juneberry	Amelanchier bartramiana	Wintergreen	Gaultheria procumbens	

Meadow sweet	Spiraea alba/latifolia	Woodland horsetail	Equisetum sylvaticum
Northern bulgeweed	Lycopus uniflorus	Woodland horsetail	Equisetum sylvaticum
Northern wild raisin	Viburnum cassinoides	Woodland strawberry	Fragaria vesca

Habitat Features	Present	Absent	Comments
Snags	<b>√</b>		Mostly white pine & red oak
Cavity Trees - nesting/roosting - feeding - escape	<i>y y y</i>		-White pine, white birch
Stick Nests		✓	
Fallen Dead Trees (woody debris)	✓		
Mast Trees	✓		White and red oak
Supercanopy Trees	✓		White pine
Conifer Thickets	✓		Balsam fir
Other Food Sources	✓		Many berry species
Surface Water - year round creek/pond - seasonal runoff - seasonal pond	1	<i>,</i>	
Dens or Dug Holes	✓		Small mammals
Others			

## **Wildlife Species Noted**

Species	Season	Habitat	Comments
White tailed deer	Summer	Forest floor	Observed scat
Moose	Summer	Forest	Observed scat
Garter snake	Summer	Forest floor	Observed
Grey tree frog	Summer	Forest	Observed
Black bear	Summer	Forest	Observed scat

## 7.6 Specific Compartment Objectives

#### Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

## **Short Term (5 Years)**

To examine the potential of developing a trail system extending into the northern mainland portion of the Club property, connecting this compartment to others as far north as W10 and Iron City Bay, and inland to Crown lands.

## 7.7 Other Compartment Features

Compartment No.: W9 Area: 39.2 acres (15.68 ha)

## 7.1 General Description

This compartment forms the east bank of the Pittsburgh Channel, and a peninsula into the Inner Bay along a long rocky ridge. The composition of this stand is different than most found in the Madawaska Club property, in that red oak forms the largest component of the canopy (40%). The stand also contains a significant amount of sugar maple regeneration (<10cm DBH), although there is no sugar maple in the canopy layer. It is possible that this regeneration has spread from a sugar bush east of this compartment along the Go Home River, as no large sugar maples were found in any of the compartments surveyed. The canopy ranges from full closure to mostly open, and there is a dense understory of regeneration throughout. The regeneration consists of sugar maple, white oak, white pine, ironwood, poplar, striped maple, and a small component of white birch. In areas where the canopy is open, there is a dense ground vegetation cover containing many raspberry bushes. There are many snags throughout the compartment, many of which are oaks containing nesting and feeding cavities and there is some evidence of fire in the stand, in the form of fire scars on stumps.

The compartment has an undulating topography of thin sandy soil over bedrock, and along the Pittsburgh Channel it forms a steep southwest slope from the waterline. In the Inner Bay it forms a steeply sloped peninsula, with vertical rock faces from the water's edge.

## 7.2 Compartment Site Characteristics

Soil Type: Sandy over intermittent sandy, cobble and boulder till <1m thick

Drainage: Fair to well drained

Topography: One long sinuous hill, which rises steeply from the shoreline.

Water Features: Adjacent to Pittsburgh and shore wetlands

Physical Features: None

Access: Year round on foot, or by boat or snowmobile.

Other Features: Significant sugar maple regeneration

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp.	Age (Years)	Average Height (m)	Average DBH (cm)	# stems/ha	Basal Area	Comments
	· ·	(= ====)	for Comp.	(;;;)		(m <sup>2</sup> /ha)	
				By class		By class	
		91	22.3	for the		for the	
White Pine (Pw)	10			Comp.		Comp.	
Red Oak (Or)	40			10 - 25	519	13.5	
White Oak (Ow)	20			26 – 41	147	12.5	
Red Maple (Ms)	10			42 – 49	22	3.5	
Poplar (Po)	20			50+	5	1.5	
Total	100				693	31.0	

**Summary of Tree Inventory**: Species Composition: Pw1Or4Ow2Ms1Po2 Height: 22.3 m Age: 91 years Basal Area: 31.0 m<sup>2</sup>

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment W9					
Common Name	Scientific Name	Common Name	Scientific Name		
Arrow Leaved Tearthumb	Polygonum sagittatum	Meadow horsetail	Equisetum pratense		
Balsam fir	Abies balsamifera	Meadow sweet	Spiraea alba/latifolia		
Bearded shorthusk	Brachyelytrum erectum	Northern bulgeweed	Lycopus uniflorus		
Black cherry	Prunus serotina	Northern wild raisin	Viburnum cassinoides		
Black chokeberry	Aronia melanocarpa	Pale corydalis	Corydalis sempervirens		
Black huckleberry	Gaylussucia baccata	Partridgeberry	Mitchella repens		
Blue bead lily	Clintonia borealis	Pickerelweed	Pontederia cordata		
Boneset	Eupatorium perfoliatum	Pink lady slipper	Cypripedium acaule		
Bracken fern	Pteridium aquilinum	Pipewort	Eriocaulon aquaticum		
Bunchberry	Cornus canadensis	Poison Ivy	Toxicodendron radicans		
Bush honeysuckle	Diervilla lonicera	Red maple	Acer rubrum		
Canada mayflower	Maianthemum canadense	Red oak	Quercus rubra		
Club moss	Lycopodium sp.	Ribes sp.	Ribes sp.		
Common elderberry	Sambucus Canadensis	Rubus sp.	Rubus sp.		
Common hairgrass	Deschampsia flexuosa	Sensitive fern	Onoclea sensibilis		
Common juniper	Juniperus communis	Smooth serviceberry	Amalanchier laevis		
Common Polypody	Polypodium viginianum	Sphagnum moss	Sphagnum sp.		
Common St. Johnswort	Hypericum perforatum	Spinulose wood fern	Dryopteris carhusiana		
Common strawberry	Fragaria virginiana	Starflower	Trientalis borealis		
Cow wheat	Melampyrum lineare	Striped maple	Acer pensylvanicum		
Dwarf raspberry	Rubus pubescens	Sweet gale	Myrica gale		
Eastern white pine	Pinus stobus	Tesselated rattlesnake plantain	Goodyera tesselata		
False solomon's seal	Maianthemum racemosum	Trembling aspen	Populus tremuloides		
Fringed sedge	Carex crinita	Virginia creeper	Parthenocissus quinquefolia		
Goldenrod sp.	Solidago sp.	White birch	Betula papyrifera		
Ground pine	Lycopodium dendroideum	White lettuce	Prenanthes alba		
Hairy Solomon's seal	Polygonatum pubescens	White oak	Quercus alba		
Indian cucumber root	Medeola viginiana	Wild lettuce	Latuca spp.		
Lady's thumb	Polygonatum persicaria	Wild red raspberry	Rubus idaeus melanolasius		
Large leaved aster	Aster macrophyllus	Wild sarsparilla	Aralia nudicaulis		
Large toothed aspen	Populus grandidentata	Winterberry holly	Ilex verticillata		
Low sweet blueberry	Vaccinium angustifolium	Wintergreen	Gaultheria procumbens		
Marginal wood fern	Dryopteris marginalis	Woodland horsetail	Equisetum sylvaticum		
Marsh St. Johnswort	Triadenum fraseri				

Habitat Features	Present	Absent	Comments
Snags	✓		Red oak, white pine, white
			cedar
Cavity Trees			-Black cherry, White pine,
- nesting/roosting	✓.		red &white oak
- feeding	<b>√</b>		Several snags have feeding
- escape	✓		and nesting cavities in
			them
Stick Nests		✓	An osprey nesting
			platform has been erected
			on an island adjacent to the
			comp. in the Pittsburgh
			Channel
Fallen Dead Trees	✓		
(woody debris)			
Mast Trees	✓		Red & white oak, white
			pine
Supercanopy Trees	✓		White pine
Conifer Thickets		✓	
Other Food Sources	✓		Many berry species
Surface Water			
- year round creek/pond		✓.	
- seasonal runoff		<b>√</b>	
- seasonal pond		<b>✓</b>	
Dens or Dug Holes	✓		Small mammals
Others			

## **Wildlife Species Noted**

Species	Season	Habitat	Comments

## 7.6 Specific Compartment Objectives

#### Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

#### **Short Term (5 Years)**

To examine the potential of developing a trail system extending into the northern mainland portion of the Club property, connecting this compartment to others as far north as W10 and Iron City Bay, and inland to Crown lands. This compartment would also make an interesting stop along an interpretive nature trail, as it is different than the surrounding forest in the area.

#### 7.7 Other Compartment Features

Compartment No.: W10 Area: 19.7 acres (7.88 ha)

#### 7.1 General Description

This compartment is different than most in the property surveyed, as it is underlain by a thick sandy soil (>1m), and contains a pure white pine stand near the shoreline of Iron City Bay. To the southern end of the compartment there is a long, thin outcrop of bedrock, which is characterized by common juniper bushes, scrubby white pine and red oak, and low sweet blueberry bushes. This area is adjacent to a low-lying, poorly drained swampy area to the south, and the eastern end is adjacent to Tate Lake. In the area of pure white pine, there is a very open understory containing mainly white pine regeneration, with some red maple and red oak. The litter layer on the forest floor consists of white pine needles. There is a small (~40m x 20m) clearing in the forest, which is bound to the west by a thicket of white pine regeneration. The diversity of ground vegetation species in the compartment is small, as compared with some other compartments in the property, and consists mainly of starflower, Canada mayflower, bracken fern, with a few other species.

Further east from the shoreline the stand becomes more mixed, and has a large component of red oak and red maple, although the stand is primarily white pine throughout. There are many very large (50+ DBH) supercanopy white pines in the stand, ranging from 58 to 73 cm DBH. There are also some large (40 & 42 cm DBH) poplars in the stand. The compartment becomes swampy towards the northern end, where it meets a wetland that connects Tate Lake to Iron City Bay. The forest in this area contains some white and yellow birch regeneration, as well as speckled alder and red osier dogwood.

There are some narrow, unmaintained or marked footpaths running from the shoreline into the compartment.

#### 7.2 Compartment Site Characteristics

Soil Type: Sandy over intermittent sandy, cobbled moraine >1m thick Drainage: Well (under white pine stand) to poorly (at northern extent)

drained, with exposed impermeable bedrock outcrops

Topography: Low hills to 5m local relief

Water Features: Adjacent to marsh wetland at northern margin, adjacent to Iron City

Bay in the west, and Tate Lake and beaver sloughs to the east

Physical Features: There is a long rocky ridge transecting the compartment

Access: Year round on foot, or by boat or snowmobile.

Other Features: Unvegetated sandy clearing 50m from Iron City Bay shoreline

#### 7.3 Compartment History

The open, sandy clearing in the forest was originally used as a camping area for cottagers from the Pittsburgh area, known as the Iron City Club. It was also used in the past as a playing field for football and other social gatherings by the community youth. More recently, however, it has remained unused and begun to grow over.

# 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	#	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)	stems/ha	Area	
			for Comp.			(m²/ha)	
				By class		By class	
		122	21.0	for the		for the	
White Pine (Pw)	70			Comp.		Comp.	
Red Oak (Or)	20			10 - 25	538	14.0	
White Oak (Ow)				26 – 41	179	15.2	
Red Maple (Ms)	10			42 – 49	25	4.0	
White Ash (Aw)				50+	5	1.6	
Total	100				747	34.8	

**Summary of Tree Inventory**: Species Composition: Pw7Or2Ms1 Age: 122 years Basal Area: 34.8 m<sup>2</sup> Height: 21.0 m

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment W10A					
Common Name	Scientific Name	Common Name	Scientific Name		
Arrow Leaved Tearthumb	Polygonum sagittatum	Pale corydalis	Corydalis sempervirens		
Black cherry	Prunus serotina	Partridgeberry	Mitchella repens		
Blue bead lily	Clintonia borealis	Pickerelweed	Pontederia cordata		
Boneset	Eupatorium perfoliatum	Pipewort	Eriocaulon aquaticum		
Bracken fern	Pteridium aquilinum	Poison Ivy	Toxicodendron radicans		
Bush honeysuckle	Diervilla lonicera	Pussy willow	Salix discolor		
Canada mayflower	Maianthemum canadense	Red Cedar	Juniperus virginiana		
Canada St. John's wort	Hypericum canadense	Red maple	Acer rubrum		
Common hair grass	Deschampsia flexuosa	Red oak	Quercus rubra		
Common juniper	Juniperus communis	Red osier dogwood	Cornus stolonifera		
Common Polypody	Polypodium viginianum	Reindeer lichen	Cladina rangiferina		
Common St. Johnswort	Hypericum perforatum	Rock tripe	Umbilicaria mammulata		
Dwarf raspberry	Rubus pubescens	Royal fern	Osmunda regalis		
Eastern white pine	Pinus stobus	Skunk currant	Rubus glandulosum		
False solomon's seal	Maianthemum racemosum	Smooth serviceberry	Amalanchier laevis		
Fly honeysuckle	Lonicera canadensis	Speckled alder	Alnus incana spp.		
Fragrant bedstraw	Galium triflorum	Spinulose wood fern	Dryopteris carhusiana		
Hairy Solomon's seal	Polygonatum pubescens	Staghorn sumac	Rhus typhina		
Hard stemmed bulrush	Scirpus acutus	Starflower	Trientalis borealis		
Hoary vervain	Verbena stricta	Sugar maple	Acer saccharum		
Honeysuckle sp.	Lonicera sp.	Sweet gale	Myrica gale		
Indian pipe	Monotropa uniflora	Virginia creeper	Parthenocissus quinquefolia		
Ironwood	Ostrya virginiana	Water lobelia	Lobelia dortmanna		
Jewelweed	Impatiens capensis	White ash	Fraxinus americana		
Lady's thumb	Polygonatum persicaria	White birch	Betula papyrifera		

Large leaved aster	Aster macrophyllus	White oak	Quercus alba
Large toothed aspen	Populus grandidentata	Wild red raspberry	Rubus idaeus melanolasius
Low sweet blueberry	Vaccinium angustifolium	Wild sarsparilla	Aralia nudicaulis
Marginal wood fern	Dryopteris marginalis	Winterberry holly	Ilex verticillata
Marsh St. Johnswort	Triadenum fraseri	Wintergreen	Gaultheria procumbens
Meadow sweet	Spiraea alba/latifolia	Woodland strawberry	Fragaria vesca
Northern bulgeweed	Lycopus uniflorus		

Habitat Features	Present	Absent	Comments
Snags	✓		White pine, red oak
Cavity Trees - nesting/roosting - feeding - escape	<i>y y</i>	✓	-white pine
Stick Nests		✓	
Fallen Dead Trees (woody debris)	✓		Boles and canopies of fallen trees
Mast Trees	✓		Red oak
Supercanopy Trees	✓		There are many very large white pines in the comp.
Conifer Thickets	✓		White pine regeneration
Other Food Sources	1		Blueberry bushes are present throughout the comp.
Surface Water - year round creek/pond - seasonal runoff - seasonal pond	1	<b>*</b>	There are water and peat filled areas in poorly drained depressions in the bedrock. There is also a year round pond beyond the eastern boundary of the comp.
Dens or Dug Holes	✓		Small mammals
Others			

# **Wildlife Species Noted**

Species	Season	Habitat	Comments

# 7.6 Specific Compartment Objectives

## Long Term (20 years)

To develop this compartment as an area for land-based recreation. Historically, the clearing in this compartment was used as a playing field for sports such as football. This is the only space in the area that is conducive to such uses, and the community should strive to maintain it, as it makes an excellent recreational resource.

The trail system that has been proposed outlines a network that only covers the compartments south of the Go Home River. This system should be expanded through the forests on the east

side of the Pittsburgh Channel, north of the Go Home river, and connect to this compartment. It provides an excellent example of a pure white pine stand, and would be a valuable stop along an interpretive walk.

## **Short Term (5 Years)**

Recreation has been stated as one of the main objectives of the Madawaska Club, and this compartment represents an excellent example of where it might occur. The forest on the west side of the Pittsburgh Channel, extending down through W9, should be surveyed for trail development. Young tree regeneration should be removed from the compartment clearing to maintain it as a playing field. There is a large patch of poison ivy (10 m x 5 m) in the clearing in the compartment that should be removed so that the area might be safely used for sports and other recreational activities.

## 7.7 Other Compartment Features

Compartment No.: W11 Area: A: 109.3 acres (43.72 ha)

B: 82.2 acres (32.88 ha) C: 92.4 acres (36.96 ha)

#### 7.1 General Description

Located on Big Island, this compartment is comprised of white pine, red oak, white oak, and red maple. It is a protection forest and is separated into three subunits (A, B, & C). It consists of some low-lying wet areas to high rock ridges inter-dispersed throughout the forest. W11A is located on the lee side of Big Island, with the forest near the shore characterized by very dense understory growth. W11B is located around Lake Loudon, and W11C is located on the western side of Big Island. From the shores of Big Island inwards toward Lake Loudon there is a trail that is used by either the community or the local family that owns property on this portion of the island. Along with this trail is an entry point into Burwash Lake which has several canoes cached along the shore. These canoes are used for fishing and paddling around the inland lakes of Big Island.

Throughout this compartment the regeneration is variable. Some areas are dense with white pine, red oak, white oak, and red maple regeneration while others are sparse with very little regeneration. The ground vegetation is for the most part uniform in composition with large-leaved aster, bracken fern, starflower and Canada mayflower comprising the majority of the ground cover. White pine new growth at edge of the forest stand is prominent and poplar is common around the edge of sloughs and bays where the soil has a thicker humus layer. Fern growth is prominent in the understorey and blueberries are common throughout the forest. The down woody debris is also variable across this compartment with some areas having several blown down trees and others having only branches on the forest floor.

While performing the timber cruise on Big Island, signs of recent bear activity were frequently observed. On numerous occasions, patches of moss had been overturned, and bear prints were found in the underlying mud. Bear scat was also observed throughout the compartment.

#### 7.2 Compartment Site Characteristics

Soil Type: Thin soil cover. Mainly sandy with exposed rocks. <50 cm thick. Drainage: Well to poorly drained. Some low-lying areas consistently wet. Topography: Mainly flat with exposed bedrock ridges/cliffs and low hills up to

15 m local relief

Water Features: Some small, low, wet areas scattered throughout compartment.

Adjacent to extensive system of interlocking sloughs and lakes.

Physical Features: Mainly flat, with some small valleys between exposed ridges

Access: Year round on foot, by boat, or snowmobile.

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

# 7.4 Compartment Inventory

## W11A:

Tree Species	% Comp.	Age (Years)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
White Pine (Pw)	50	111	17.6	By class for the Comp.		By class for the Comp.	
Red Oak (Or)	20			Comp.		Comp.	
White Oak (Ow)	10			10-25	365	9.5	
Red Maple (Ms)	20			26-40	150	12.75	
				41-50	17	2.75	
				50+	4	1.25	
Total	100				536	26.25	

**Summary of Tree Inventory**: Species Composition: Pw5Or2Ow1Ms2

Age: 111 years Basal Area: 26.25 m<sup>2</sup>/ha Height: 17.6 m

## W11B:

Tree Species	% Comp.	Age (Years)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
			ior comp.			(III /IIII)	
				By class		By class	
		102	18.2	for the		for the	
White Pine (Pw)	50			Comp.		Comp.	
Red Oak (Or)	20						
White Oak (Ow)	10			10-25	630.77	16.4	
Red Maple (Ms)	20			26-40	103.53	8.8	
				41-50	10.07	1.6	
				50+	1.29	0.4	
Total	100				745.66	27.2	

**Summary of Tree Inventory**: Species Composition: Pw5 Or2 Ow1 Ms2

Age: 102 years Basal Area: 27.2 m<sup>2</sup>/ha Height: 18.2 m

#### **W11C:**

Tree Species	% Comp.	Age (Years)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
William Di	50	96	17.7	By class for the		By class for the	
White Pine Red Oak	50			Comp. 10-25	673.08	Comp. 17.5	
White Oak	10			26-40	111.77	9.5	
Red Maple	20			41-50	6.29	1.0	
				50+	3.24	1.0	
Total	100				794.37	29	

**Summary of Tree Inventory**: Species Composition: Pw5Or2Ow1Ms2 Height: 17.7 m Age: 96 years Basal Area: 29.0 m<sup>2</sup>/ha

# **Other Vegetation Assessment Table:**

Plant Species Inventory: Compartment W11						
Common Name	Scientific Name	Common Name	Scientific Name			
Arrow Leaved Tearthumb	Polygonum sagittatum	Northern white violet	Viola macloskeyi			
Balsam fir	Abies balsamifera	Northern wild raisin	Viburnum cassinoides			
Bastard toad flax	Comandra umbellata	Pale corydalis	Corydalis sempervirens			
Bearded shorthusk	Brachyelytrum erectum	Partridgeberry	Mitchella repens			
Black cherry	Prunus serotina	Pickerelweed	Pontderia cordata			
Black chokeberry	Aronia melanocarpa	Pin Cushion Moss	Leucobryum glaucum			
Black huckleberry	Gaylussucia baccata	Pink lady slipper	Cypripedium acaule			
Black snakeroot	Sanicula marilandica	Pipewort	Eriocaulon aquaticum			
Black spruce	Picea mariana	Poison Ivy	Toxicodendron radicans			
Blue bead lily	Clintonia borealis	Polytrichum sp.	Polytrichum sp.			
Boneset	Eupatorium maculatum	Prince's pine	Chimaphila umbellata cisatlantica			
Bracken fern	Pteridium aquilinum	Prunus sp.	Prunus sp.			
Bristly Sarspirilla	Aralia hispida	Rattlesnake root	Prenanthes spp.			
Broad-leaved arrowhead	Sagittaria latifolia	Red maple	Acer rubrum			
Bunchberry	Cornus canadensis	Red oak	Quercus rubra			
Bush honeysuckle	Diervilla lonicera	Red osier dogwood	Cornus stolonifera			
Canada mayflower	Maianthemum canadense	Red twigged serviceberry	Amalanchier sanguinea			
Cardinal flower	Lobelia cardinalis	Reindeer lichen	Cladina rangiferina			
Choke cherry	Prunus virginiana	Ribes sp.	Ribes sp.			
Cinnamon fern	Osmunda cinnamomea	Rock tripe	Umbilicaria mammulata			
Club moss sp	Lycopodium sp.	Rose pogonia	Pogonia ophioglossoides			
Common Blue eyed grass	Sisyrinchium montanum	Rough bedstraw	Galium asprellum			
Common elderberry	Sambucus Canadensis	Royal fern	Osmunda regalis			
Common green peat moss	Sphagnum girgensohnii	Rubus sp.	Rubus sp.			
Common hair cap moss	Polytrichum commune	Sensitive fern	Onoclea sensibilis			
Common hairgrass	Deschampsia flexuosa	Sheep laurel	Kalmia angustifolia			
Common juniper	Juniperus communis	Sheep sorel	Rumex acetosella			
Common Polypody	Polypodium viginianum	Shinning Club Moss	Huperzia lucidula			
Cow wheat	Melampyrum lineare	Smooth blackberry	Rubus canadensis			
Crested woodfern	Dryopteris cristata	Smooth serviceberry	Amalanchier laevis			
Downy juneberry	Amelanchier arborea	Southern Ground Cedar	Diphasiastrum digitatum			
Dwarf raspberry	Rubus pubescens	Speckled alder	Alnus incana spp.			
Dwarf rattlesnake plantain	Goodyera repens	Sphagnum moss	Sphagnum sp.			
Eastern hemlock	Tsuga canadensis	Spinulose wood fern	Dryopteris carhusiana			
Eastern white pine	Pinus stobus	Spotted Joe-Pye weed	Eupatorium maculatum			
False solomon's seal	Maianthemum racemosum	Spreading dogbane	Apocynum androsaemifolium			

Fly Honeysuckle	Lonicera canadensis	Starflower	Trientalis borealis
Fragrant bedstraw	Galium triflorum	Striped maple	Acer pensylvanicum
Fragrant white water lily	Nymphaea odorata	Sugar maple	Acer saccharum
Goldenrod sp.	Solidago sp.	Sweet Cicely	Osmorhiza claytonii
Ground pine	Lycopodium dendroideum	Sweetgale	Myrica gale
Hairy Solomon's seal	Polygonatum pubescens	Tamarack	Larix laricina
Hard stem bulrush	Scirpus acutus	Tesselated rattlesnake plantain	Goodyera tesselata
Honeysuckle	Lonicera dioica	Trembling Aspen	Populus tremuloides
Indian pipe	Monotropa uniflora	Velvet leaf blueberry	Vaccinium ovalifolium
Interrupted Club Moss	Lycopodium annotinum	Violet sp.	Viola sp.
Ironwood	Ostrya virginiana	Virginia creeper	Parthenocissus quinquefolia
Jewelweed	Impatiens capensis	Water Pimpernel	Samolus parviflorus
Lady fern	Athyrium filix-femina spp. angustum	White ash	Fraxinus americana
Lady's Thumb	Polygonum persicaria	White birch	Betula papyrifera
Large leaved aster	Aster macrophyllus	White Cedar	Thuja occidentalis
Large-fruited burreed	Sparganium eurycarpum	White oak	Quercus alba
Leatherleaf	Chamaedaphne calyculata	White spruce	Picea glauca
Low sweet blueberry	Vaccinium angustifolium	Wild lettuce	Latuca spp.
Marginal wood fern	Dryopteris marginalis	Wild red raspberry	Rubus idaeus melanolasius
Marsh cinquefoil	Potentilla palustris	Wild sarsparilla	Aralia nudicaulis
Marsh fern	Thelypteris palustris	Winterberry holly	Ilex verticillata
Marsh St. Johnswort	Triadenum fraseri	Wintergreen	Gaultheria procumbens
Meadow sweet	Spiraea alba/latifolia	Woodland strawberry	Fragaria vesca
Mountain holly	Nemopanthus mucronatus	Yellow birch	Betula alleghaniensis
Multi Couloured Blue Flag	Iris versicolor	Yellow loosestrife	Lysimachia terrestris
Northern bulgeweed	Lycopus uniflorus	Yellow pond lily	Nuphar variegatum
Northern comandra	Geocolon lividum		

Habitat Features	Present	Absent	Comments
Snags	✓		White pine, red oak
Cavity Trees - nesting/roosting - feeding - escape	<i>y y y</i>		White pine
Stick Nests		✓	
Fallen Dead Trees (woody debris)	<b>✓</b>		
Mast Trees	✓		Red and white oak
Supercanopy Trees	✓		White pine
Conifer Thickets	<b>✓</b>		White pine, white cedar (W11B)
Other Food Sources	<b>√</b>		Black cherry, blueberry, huckleberry
Surface Water			

66

- year round creek/pond	✓	
- seasonal runoff		
- seasonal pond		
Dens or Dug Holes	✓	Small mammal
Others		

## Wildlife Species Noted

Species	Season	Habitat	Comments
Chipmunk	Summer	Forest	In DWD
Red Squirrel	Summer	Forest	In trees
Black Bear	Summer	Forest	Observed scat, foot prints
Beaver	Summer	Shoreline	Observed hut
Ruffed grouse	Summer	Forest floor	Observed
Pileated woodpecker	Summer	Forest	Observed

# 7.6 Specific Compartment Objectives

## Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

## **Short Term (5 Years)**

To examine the potential of developing a trail and portage network throughout Big Island, connecting the forest, rock and wetland compartments, to promote the use of the forest by Club members, and encourage recreation and wilderness education.

## 7.7 Other Compartment Features

Compartment No.: W12 Area: 37.1 acres (14.84 ha)

## 7.1 General Description

This compartment is located in the centre of Big Island north of Burwash and Loudon Lakes and east of Galbraith Lake. The area is low lying and access is by foot, most readily from the north side of the island. There is an extensive system of interlocking lakes and sloughs to the south, recharged by drainage from the surrounding high areas, through this compartment and out to the system of lakes.

The majority of this compartment is atypical when compared to the rest of the forest compartments owned by the Madawaska Club. It has very sparse ground cover and regeneration consists of white pine, ironwood, black cherry, white oak, red oak, red maple, white cedar, and white birch and in several parts of the compartment, cedar regeneration is the primary species in the understory. There are also several holly thickets scattered throughout the area. Overall, the down woody debris is negligible, with only a few downed trees throughout the entire compartment.

#### 7.2 Compartment Site Characteristics

Soil Type: Thin soil cover. Mainly sandy with exposed rocks. <50 cm thick.

Drainage: Imperfect to poorly drained, low-lying area that is consistently wet.

Topography: Mainly flat with exposed bedrock ridges/cliffs and low hills up to

15 m local relief.

Water Features: Some small, low, wet areas scattered throughout compartment.

Adjacent to extensive system of interlocking sloughs and lakes.

Physical Features: Low land area located between high ridges. Access: Year-round by foot, boat and snowmobile.

Other Features

## 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp.	Age (Years)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
White Direc (Dec)	40	114	19.8	By class for the		By class for the	
White Pine (Pw) Red Oak (Or)	40			Comp. 10-25	569	Comp. 14.8	
White Oak (Ow)	10			26-40	198	16.8	
Red Maple (Ms)	10			41-50	20	3.2	
Poplar (Po)				50+	3	0.8	
W. Cedar (Cw)							
Total	100				790	35.6	

**Summary of Tree Inventory**: Species Composition: Pw4Or4Ow1Ms1 Height: 19.8 m Age: 114 Years Basal Area: 35.6 m<sup>2</sup>/ha

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment W12						
Common Name	Scientific Name	Common Name	Scientific Name			
Black Cherry	Prunus serotina	Pale corydalis	Corydalis sempervirens			
Black Huckleberry	Gaylussucia baccata	Pin cushion moss	Leucobryum glaucum			
Blue Bead Lily	Clintonia borealis	Pink lady slipper	Cypripedium acaule			
Bracken Fern	Pteridium aquilinum	Poison Ivy	Toxicodendron radicans			
Bunchberry	Cornus canadensis	Red Maple	Acer rubrum			
Canada Mayflower	Maianthemum canadense	Red Oak	Quercus rubra			
Club Moss	Lycopodium sp.	Red Osier Dogwwod	Cornus stolonifera			
Common Green Peat Moss	Sphagnum girgensohnii	Red Twigged Service Berry	Amalanchier sanguinea			
Common Hair Cap Moss	Polytrichum commune	Reindeer Lichen	Cladina rangiferina			
Common Juniper	Juniperus communis	Rock tripe	Umbilicaria mammulata			
Common Polypody	Polypodium viginianum	Sheep (Field) Sorrel	Rumex acetosella			
Cow Wheat	Melampyrum lineare	Smooth Service Berry	Amalanchier laevis			
Dwarf Rattlesnake Plantain	Goodyera repens	Sphagnum moss	Sphagnum sp.			
Eastern White Pine	Pinus stobus	Spinulose Wood Fern	Dryopteris carhusiana			
Fragrant Bedstraw	Galium triflorum	Starflower	Trientalis borealis			
Goldenrod sp.	Solidago sp.	Striped Maple	Acer pensylvanicum			
Hairy Solomon's Seal	Polygonatum pubescens	Tesselated Rattlesnake Plantain	Goodyera tesselata			
Ironwood	Ostrya virginiana	White Birch	Betula papyrifera			
Large Leaved Aster	Aster macrophyllus	White Cedar	Thuja occidentalis			
Large Toothed Aspen	Populus grandidentata	White Oak	Quercus alba			
Low Sweet Blueberry	Vaccinium angustifolium	Wild Sarsaparilla	Aralia nudicaulis			
Marginal Wood Fern	Dryopteris marginalis	Wintergreen	Gaultheria procumbens			

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White pine
Cavity Trees - nesting/roosting - feeding	<i>'</i>	<b>√</b>	White pine
- escape Stick Nests	•	✓	
Fallen Dead Trees (woody debris)	1		Very few
Mast Trees	✓		Red and white oak
Supercanopy Trees	✓		White pine
Conifer Thickets	✓		White cedar
Other Food Sources	<b>/</b>		Black cherry, blueberry, huckleberry
Surface Water - year round creek/pond	<i>J</i>		Depressions that fill after storms

<ul><li>seasonal runoff</li><li>seasonal pond</li></ul>		Cedar swamp to the S
Dens or Dug Holes	✓	Small mammal
Others		

## Wildlife Species Noted

Species	Season	Habitat	Comments
Chipmunk	Summer	Forest/DWD	Observed
Black Bear	Summer	Forest	Observed scat, old claw marks on beech tree
Vole	Summer	Forest edge	Observed

## 7.6 Specific Compartment Objectives

#### Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

#### **Short Term (5 Years)**

To examine the potential of developing a trail system and portage network throughout Big Island, connecting the forest, rock and wetland compartments. To promote the use of the forest by Club members, and encourage recreation and wilderness education.

## 7.7 Other Compartment Features

Compartment No.: W13 Area: 9.9 acres (3.96ha)

#### 7.1 General Description

This is a narrow compartment that lies at the north end of Big Island between Wt2A and Galbraith Lake, and adjacent to Sand Run. It is a protection forest, and the main tree species in the canopy is red oak, with red maple and white pine in the sub canopy. Unlike the remainder of the forest on Big Island, the dominant tree species in this compartment is red oak. The compartment has an open understory, with open rocky areas covered with common juniper bushes, low sweet blueberry, and scrubby white pines and red oaks, and low lying areas that are poorly drained and characterized by a dense cover of bracken fern. At the southwest end of the compartment, next to Wt2A, the forest floor is low lying and moist, supporting both large (>30cm DBH) eastern white cedar, as well as cedar regeneration.

A hydropower corridor passes from northeast to southwest through the compartment, creating a long, narow opening in the canopy. This corridor contains rocky high points covered with common juniper and low sweet blueberry, and low lying areas with a think cover of bracken ferns. There is almost a complete ground cover of these species in this area.

#### 7.2 Compartment Site Characteristics

Soil Type: Sandy over intermittent sandy, cobble and boulder till <0.5m thick,

and rock. Peat and humus at edge of wetlands

Drainage: Good to poor in low-lying areas

Topography: Undulating, with low hills to 15m local relief

Water Features: Adjacent to Sand Run and interlocking flooded beaver sloughs and

lakes

Physical Features:

Access: Year round on foot or by boat or snowmobile

Other Features: Hydropower corridor along the long axis of the compartment

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	#	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)	stems/ha	Area	
			for Comp.			(m²/ha)	
				By class		By class	
		99	19.9	for the		for the	
White Pine (Pw)	30			Comp.		Comp.	
Red Oak (Or)	50			10 - 25	538	14.0	
Red Maple (Ms)	20			26 – 41	110	9.33	
White Oak (Ow)				42 – 49	21	3.33	
				50+	2	0.67	
Total	100				671	27.33	

Summary of Tree Inventory: Species Composition: Pw3Or5Ms2 Height: 19.9 m Age: 99 years Basal Area: 27.33 m<sup>2</sup>

# **Other Vegetation Assessment Table**

<b>Plant Species Inventory</b>	Plant Species Inventory: Compartment W13					
Common Name	Scientific Name	Common Name	Scientific Name			
Black bindweed	Polygonum cilinode	Pickerelweed	Pontedaria cordata			
Black cherry	Prunus serotina	Pin Cushion Moss	Leucobryum glaucum			
Blue bead lily	Clintonia borealis	Pink lady slipper	Cypripedium acaule			
Boneset	Eupatorium perfolatium	Pipewort	Eriocaulon aquaticum			
Bracken fern	Pteridium aquilinum	Poison Ivy	Toxicodendron radicans			
Bush honeysuckle	Diervilla lonicera	Prince's pine	Chimaphila umbellata cisatlantica			
Canada mayflower	Maianthemum canadense	Prunus sp.	Prunus sp.			
Cinnamon fern	Osmunda cinnamomea	Red maple	Acer rubrum			
Club moss sp	Lycopodium sp.	Red oak	Quercus rubra			
Common Cattail	Typha latifolia	Red twigged serviceberry	Amalanchier sanguinea			
Common hair cap moss	Polytrichum commune	Reindeer lichen	Cladina rangiferina			
Common Hair Grass	Deschampsia flexuosa	Ribes sp.	Ribes sp.			
Common juniper	Juniperus communis	Royal fern	Osmunda regalis			
Common Polypody	Polypodium viginianum	Rubus sp.	Rubus sp.			
Cow wheat	Melampyrum lineare	Sensitive fern	Onoclea sensibilis			
Dwarf raspberry	Rubus pubescens	Sheep sorel	Rumex acetosella			
Eastern White Pine	Pinus stobus	Spinulose wood fern	Dryopteris carhusiana			
Goldenrod sp.	Solidago sp.	Spreading dogbane	Apocynum androsaemifolium			
Hairy Solomon's seal	Polygonatum pubescens	Starflower	Trientalis borealis			
Large leaved aster	Aster macrophyllus	Sweet gale	Myrica gale			
Low sweet blueberry	Vaccinium angustifolium	Tesselated rattlesnake plantain	Goodyera tesselata			
Marginal wood fern	Dryopteris marginalis	White cedar	Thuja occidentalis			
Marsh cinquefoil	Potentilla palustris	White oak	Quercus alba			
Marsh skullcap	Scutellaria galericulata	Wild columbine	Aquilegia canadensis			
Meadow sweet	Spirea alba	Wild red raspberry	Rubus idaeus melanolasius			
Multicoloured blue flag	Iris versicolor	Wild sarsparilla	Aralia nudicaulis			
Northern bugleweed	Lycopus uniflorus	Winterberry holly	Ilex verticillata			
Northern White Violet	Viola mackloskeyi	Wintergreen	Gaultheria procumbens			
Northern wild raisin	Viburnum cassinoides	Woodland strawberry	Fragaria fresca			
Pale corydalis	Corydalis sempervirens					

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White pine
Cavity Trees			
- nesting/roosting		✓	White pine
- feeding	✓		

- escape		J	
Stick Nests			
Fallen Dead Trees (woody debris)	<b>✓</b>	<u> </u>	
Mast Trees	✓		Red oak
Supercanopy Trees	✓		White pine
Conifer Thickets		✓	There is cedar regeneration in the stand, white pine in power line
Other Food Sources	<b>/</b>		Low sweet blueberries and other berry species – see compartment vegetation list
Surface Water - year round creek/pond - seasonal runoff - seasonal pond	<i>y</i>	✓	Low lying areas are poorly drained and may have standing surface water following rain
Dens or Dug Holes	✓		Small mammals
Others			

#### **Wildlife Species Noted**

Species	Season	Habitat	Comments
Beaver	Summer	Beaver sloughs and forest shoreline	Trees removed and some with evidence of beaver use
Grey tree frog	Summer	Forest	

#### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

To maintain this compartment as a protection forest. This compartment lies at the northern end of Big Island, and is easily accessible from Sand Run. The common property comes right to the edge of the water here, and it provides an easy access point to the northern end of Galbraith Lake. This compartment could be incorporated into a portage and canoe route system exploring the lakes, beaver sloughs, wetlands and forests on the island. No active management need be taken in this compartment, save for trail maintenance, and it should be maintained in its current state and allowed to evolve naturally.

#### **Short Term (5 Years)**

With the goal of enhancing recreational opportunities on the property, this compartment should be surveyed for the development of a trail system that would connect the lakes, wetlands and beaver sloughs on the island with a series of canoe routes and portages.

#### 7.7 Other Compartment Features

Compartment No.: W14A Area: 6.1 acres (2.44 ha)

### 7.1 General Description

This compartment is considered protection forest located on Long Island in Georgian Bay, flanked on one side by gently sloping rock shoreline and on the other by the direct shoreline. Long Island is located at the western most portion of the Club property and its west shoreline is exposed to the weather of Georgian Bay (i.e. wind, waves). A rock compartment that contains juniper patches as well as white and red cedar characterizes the western side of the island. The main tree species are eastern white pine, red oak, and red maple. The island is the only area of the property that does contain any white oak – either in the canopy or the regeneration layers. White pine is the most common regeneration species, followed by red oak and red maple.

Compartment W14A is located on the eastern side of Long Island and is the second largest forest compartment on the island. The forest has a rocky terrain with shallow soils and several plant species were found in this compartment that were not found anywhere else on the Club property.

Property owners on the island have reported observing spotted turtles in the marshy areas of the island during the spring, in several different years. This suggests that there may be one or more spotted turtle hibernacula on the island. These hibernacula are vital to the survival of this species, as they return to it each year. Destruction of this important habitat feature would be detrimental to the spotted turtle, and special care will be taken by the Club to ensure that it is protected.

#### 7.2 Compartment Site Characteristics

Soil Type: Thin soil cover. Mainly sandy with exposed rocks. <10 cm thick. Drainage: Well to poorly drained with numerous water filled depressions after

storms.

Topography: Mainly flat with exposed bedrock ridges/cliffs up to 5 m local

relief

Water Features: Some small, low, wet areas scattered throughout compartment.

Adjacent to Georgian Bay.

Physical Features: Adjacent to scenic, exposed rocky shoreline.

Access: Year round by foot, boat or snowmobile.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

Tree Species	% Comp.	Age (Years)	Avg. Height (m)	Average DBH (cm)	# stems/ha	Basal Area	Comments
			for Comp.			(m <sup>2</sup> /ha)	
				By Age		By Age	
		89	17.0	Class for		Class for	
White Pine (Pw)	40			Comp		Comp.	
Red Oak (Or)	50						
Red Maple (Ms)	10			10-25	528	13.71	
				26-40	114	9.71	
				41-50	16	2.57	
				50+	1	0.29	
Total	100				659	26.28	

Summary of Tree Inventory: Species Composition: Pw4Or5Ms1 Height: 17.0 m Age: 89 years Basal Area: 26.28 m<sup>2</sup>/ha

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment 14A						
Common Name	Scientific Name	Common Name	Scientific Name			
Arrow leaved tearthumb	Polygonum sagittatum	Pink lady slipper	Cypripedium acaule			
Black bindweed	Polygonum cilinode	False pixie cup	Cladonia chlorophaea			
Black cherry	Prunus serotina	Poison Ivy	Toxicodendron radicans			
Black huckleberry	Gaylussucia baccata	Powder Horn Lichen	Cladonia coniocraea			
Bracken fern	Pteridium aquilinum	Prince's pine	Chimaphila umbellata cisatlantica			
Bristly sarsparilla	Aralia hispida	Red Cedar	Juniperus virginiana			
Bush honeysuckle	Diervilla lonicera	Red maple	Acer rubrum			
Canada mayflower	Maianthemum canadense	Red oak	Quercus rubra			
Cattail	Typha latifolia	Reindeer lichen	Cladina rangiferina			
Club moss sp	Lycopodium sp.	Ribes sp.	Ribes sp.			
Common Blackberry	Rubus allegheniensis	Rock tripe	Umbilicaria mammulata			
Common elderberry	Sambucus Canadensis	Rough Bedstraw	Galium asprellum			
Common Hair Grass	Deschampsia flexuosa	Sea Lavendar	Llimonium nashii			
Common juniper	Juniperus communis	Sensitive fern	Onoclea sensibilis			
Common Polypody	Polypodium viginianum	Sheep sorel	Rumex acetosella			
Coral Lichen	Cladina stellaris	Skunk Currant	Ribes glandulosum			
Cow wheat	Melampyrum lineare	Small Purple Fringed Orchid	Platanthera psycodes			
Eastern white pine	Pinus stobus	Smooth blackberry	Rubus canadensis			
Goldenrod sp.	Solidago sp.	Smooth serviceberry	Amalanchier laevis			
Ground pine	Lycopodium dendroideum	Smooth wild rose	Rosa blanda			
Hairy Solomon's seal	Polygonatum pubescens	Speckled alder	Alnus incana spp.			
Helleborine	Epipactus helleborine	Sphagnum moss	Sphagnum sp.			
Honeysuckle	Lonicera sp.	Spinulose wood fern	Dryopteris carhusiana			
Horned Bladderwort	Utricularia cornuta	Spotted Joe-Pye Weed	Eupatorium maculatum			
Large leaved aster	Aster macrophyllus	Spreading dogbane	Apocynum androsaemifolium			

75

Large toothed aspen	Populus grandidentata	St. Johns Wort	Triadenum fraseri
Low sweet blueberry	Vaccinium angustifolium	Staghorn sumac	Rhus typhina
Marginal wood fern	Dryopteris marginalis	Starflower	Trientalis borealis
Marsh Fern	Thelypteris palustris	Striped maple	Acer pensylvanicum
Marsh St. John's Wort	Triadenum fraseri	Swamp Candles	Lysimachia terrestris
Meadow sweet	Spiraea alba/latifolia	Sweet gale	Myrica gale
Meadow sweet	Spiraea alba/latifolia	Tamarack	Larix laricina
Multicoloured blue flag	Iris versicolor	Three-way sedge	Dulicichium arundinaceam
Northern bugleweed	Lycopus uniflorus	Virginia creeper	Parthenocissus
			quinquefolia
Northern White Violet	Viola macloskeyi	White cedar	Thuja occidentalis
Northern wild raisin	Viburnum cassinoides	White Spruce	Picea glauca
Pale corydalis	Corydalis sempervirens	Wild red raspberry	Rubus idaeus melanolasius
Partridgeberry	Mitchella repens	Wild sarsparilla	Aralia nudicaulis
Pickerelweed	Pontedaria cordata	Winterberry holly	Ilex verticillata
Pin cushion moss	Leucobryum glaucum	Woodland strawberry	Fragaria vesca

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White pine, red oak
Cavity Trees			
- nesting/roosting	✓.		
- feeding	<b>√</b>		
- escape	✓		
Stick Nests		✓	
Fallen Dead Trees	✓		
(woody debris)			
Mast Trees	✓		few
Supercanopy Trees	✓		
Conifer Thickets	✓		White pine, red pine
Other Food Sources	✓		Blueberries, huckleberry
Surface Water			
- year round creek/pond	✓		
- seasonal runoff	✓		
- seasonal pond			
Dens or Dug Holes	$\sqrt{}$		Small mammal
Others		<u> </u>	Stumps (cut) evident

# Wildlife Species Noted

Species	Season	Habitat	Comments
White Throated Sparrow	Summer	Forest	Heard calling
White Tailed Deer	Summer	Forest	Observed scat
Grey Tree Frog	Summer	Forest Floor/Sphagnum	
Ruffed Grouse	Summer	Forest	
Black bear	Summer	Forest & near cottages	Observed scat & foot prints – also directly observed near cottages by Club members near Devil's Elbow

76

#### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

Of importance to wildlife values in the area is the presence of spotted turtles. This species has been frequently spotted on Long Island over the last several years and it si probable that there is a hibernaculum located somewhere on the island. These turtles rely on a hibernaculum for their survival, returning to it annually. The Club will strive to maintain this important habitat feature, and will not develop the area in any manner that will be detrimental to the turtle's survival.

#### Short Term (5 Years)

To examine the potential of developing a formal trail system, in addition to the private trails developed by Club members with cottages on the island.

Through consultation with the NHIC and a professional herpetologist, one of whom is a member of the Madawaska Club, the Club will work to determine what habitat the spotted turtle requires, and how to best protect it. The Club will also notify the NHIC and inform them of the whereabouts of the hibernacula, so that it may be added to their database. This may also help to qualify the wetland habitat as a Significant Wetland, further reducing the tax burden of the common lands.

### 7.7 Other Compartment Features

Compartment No.: W14B Area: 60.6 acres (24.24 ha)

### 7.1 General Description

This compartment is a protection forest located on Long Island in Georgian Bay, flanked on one side by gently sloping rock shoreline, and on the other by the direct shoreline. Long Island is located at the western most portion of the Club property and its west shoreline is exposed to the weather of Georgian Bay (i.e. wind, waves). A rock compartment that contains juniper patches as well as white and red cedar characterizes the western side of the island. The main tree species are eastern white pine, red oak, red maple, white spruce and tamarack in the wet areas. There are also white birch scattered throughout the compartment. The island is the only area of the property that does not contain any white oak – either in the canopy or the regeneration layers. The regeneration consists mainly of white pine and white birch. There is some tamarack regeneration as well as some red oak and red maple in the drier, rocky areas of this compartment.

This compartment is located near the southern portion of Long Island and is characterized by numerous low-lying wet areas that consist mainly of winterberry holly, tamarack and white spruce. The site has a fairly open canopy with a thin soil cover and is exposed to western winds off Georgian Bay.

#### 7.2 Compartment Site Characteristics

Soil Type: Thin soil cover. Mainly sandy with exposed rocks. <10 cm thick. Drainage: Mainly poorly drained with numerous several low wet areas.

Topography: Mainly flat with exposed bedrock ridges/cliffs

Water Features: Numerous small, low, wet areas. Adjacent to Georgian Bay. Physical Features: Entire area is mainly a marsh with a few high rock ridges.

Adjacent to scenic, exposed rocky shoreline.

Access: Year round by foot, boat or snowmobile.

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

Tree Species	% Comp.	Age (Years)	Avg. Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
White Pine (Pw)	50	91	14.9	By class for the Comp.		By class for the Comp.	
Red Oak (Or)	10			•		•	
Red Maple (Ms)	10			10-25	1000	26	
Tamarack (T)	10			26-40	108	9.2	
White Birch (Bw)	10			41-50	5	0.8	
W. Spruce (Sw)	10			50+	0	0	
Total	100				1113	36	

Summary of Tree Inventory: Species Composition: Pw5Or1Ms1T1Bw1Sw1 Height: 14.9 m Age: 91 years Basal Area: 36 m<sup>2</sup>/ha

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment W14B						
Common Name	Scientific Name	Common Name	Scientific Name			
Arrow Leaved Tearthumb	Polygonum sagittatum	Partridgeberry	Mitchella repens			
Black cherry	Prunus serotina	Pickerelweed	Pontedaria cordata			
Black huckleberry	Gaylussucia baccata	Pin cushion moss	Leucobryum glaucum			
Black spruce	Picea mariana	Pink lady slipper	Cypripedium acaule			
Blue bead lily	Clintonia borealis	False pixie cup	Cladonia chlorophaea			
Boneset	Eupatorium maculatum	Poison Ivy	Toxicodendron radicans			
Bracken fern	Pteridium aquilinum	Red Cedar	Juniperus virginiana			
Bristly sarsparilla	Aralia hispida	Red maple	Acer rubrum			
Bush honeysuckle	Diervilla lonicera	Red oak	Quercus rubra			
Canada mayflower	Maianthemum canadense	Reindeer lichen	Cladina rangiferina			
Cardinal Flower	Lobelia cardinalis	Rock tripe	Umbilicaria mammulata			
Club moss sp	Lycopodium sp.	Rough Cinquefoil	Pottentillanor vegiaca			
Common Blackberry	Rubus allegheniensis	Royal fern	Osmunda regalis			
Common Hair Grass	Dryopteris flexuosa	Sheep sorel	Rumex acetosella			
Common juniper	Juniperus communis	Small Sundrops	Oenothera perennis			
Common Polypody	Polypodium viginianum	Smooth blackberry	Rubus canadensis			
Common strawberry	Fragaria virginiana	Smooth serviceberry	Amalanchier laevis			
Cow wheat	Melampyrum lineare	Smooth wild rose	Rosa blanda			
Dwarf raspberry	Rubus pubescens	Speckled alder	Alnus incana spp.			
Eastern white pine	Pinus stobus	Sphagnum moss	Sphagnum sp.			
Goldenrod sp.	Solidago sp.	Spinulose wood fern	Dryopteris carhusiana			
Hairy Solomon's seal	Polygonatum pubescens	Starflower	Trientalis borealis			
Horned Bladderwort	Utricularia cornuta	Tamarack	Larix laricina			
Labrador Tea	Ledum groenlandicum	Three-leaved Smilacina	Smilacina trifolia			
Large leaved aster	Aster macrophyllus	Trembling aspen	Populus tremuloides			
Leatherleaf	Chamaedaphne calyculata	Three-way sedge	Dulicichium arundinaceam			
Low sweet blueberry	Vaccinium angustifolium	White birch	Betula papyrifera			
Marginal wood fern	Dryopteris marginalis	White cedar	Thuja occidentalis			
Marsh Fern	Thelypteris palustris	White Grass	Oryzopis asperifolia			
Marsh St. John's Wort	Triadenum fraseri	White Spruce	Picea glauca			
Meadow sweet	Spiraea alba/latifolia	Wild sarsparilla	Aralia nudicaulis			
Mountain holly	Nemopanthus mucronatus	Winterberry holly	Ilex verticillata			
Northern bugleweed	Lycopus uniflorus	Woodland strawberry	Fragaria vesca			
Northern wild raisin	Viburnum cassinoides	Yellow Birch	Betula alleghaniensis			
Pale corydalis	Corydalis sempervirens					

### 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		
Cavity Trees			None observed, mainly a
- nesting/roosting		$\checkmark$	marshy area
- feeding		✓.	
- escape		✓	
Stick Nests		✓	
Fallen Dead Trees	✓		
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets	✓		White spruce, tamarack,
			white pine
Other Food Sources		✓	Blueberry, huckleberry
Surface Water			
- year round creek/pond	✓		
- seasonal runoff			
- seasonal pond			
Dens or Dug Holes	<b>√</b>		Small mammal
Others		_	

#### **Wildlife Species Noted**

Species	Season	Habitat	Comments

## 7.6 Specific Compartment Objectives

#### Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

#### **Short Term (5 Years)**

To examine the potential of developing a formal trail system, in addition to the private trails developed by Club members with cottages on the island.

#### 7.7 Other Compartment Features

Compartment No.: I1 Area: 7.16 acres (2.86 ha)

### 7.1 General Description

This island grouping consists of several islands located in Georgian Bay. They are the western most portions of the property and are exposed to significant wave action. Area typified by thin to no soil on bedrock. The few species present on these islands are highly stressed. There are two few trees present for this compartment to qualify for the MFTIP.

There are several groups of islands that comprise this compartment. Some are forested while the majority are barren rock islands. The compartment is split into nine island groups located just offshore of the club property. The tree species found on the islands consist mainly of white pine, red oak, white birch and white cedar. There is some red cedar located on some of the island as well. The dominant ground vegetation is mainly lichen, which covers most of the rock. There is some low sweet blueberry along with scattered patches of various raspberry and blackberry species.

#### 7.2 Compartment Site Characteristics

Soil Type: Thin to no soil cover. Mainly exposed bedrock. Drainage: Rapid into Georgian Bay and small pools in rock.

Topography: Low generally to 4 metres.

Water Features: Surrounded by Georgian Bay and subject to being completely

awash during storms.

Physical Features: These islands act as breakers for islands and mainland to the east.

Access: By boat.

Other Features

### 7.3 Compartment History

Refer to Section 3.2 Logging History.

Tree Species	% Comp.	Age (Yrs)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
White Pine (Pw)				By Class for the Comp		By class for the Comp	
Red Oak (Or)				10-25	No prism		
White Birch (Bw)				26-40	sweep was		
White Cedar (Cw)				41-50	performed		
Red Cedar (Cr)				50+			
Total							

**Summary of Tree Inventory**: Species Composition: N/A Height: N/A Age: N/A

Basal Area: N/A

# **Other Vegetation Assessment Table:**

<b>Plant Species Inventory</b>	Plant Species Inventory: Compartment I1						
Common Name	Scientific Name	Common Name	Scientific Name				
Boneset	Eupatorium maculatum	Lesser duckweed	Lemma minor				
Black Cherry	Prunus serotina	Meadow sweet	Spiraea alba/latifolia				
Bristly sarsparilla	Aralia hispida	Rattlesnake root	Prenanthes spp.				
Common hairgrass	Deschampsia flexuosa	Red oak	Quercus rubra				
Common juniper	Juniperus communis	Red osier dogwood	Cornus stolonifera				
Common St. Johnswort	Hypericum perforatum	Ribes sp.	Ribes sp.				
Dwarf raspberry	Rubus pubescens	Sweetgale	Myrica gale				
Eastern red cedar	Juniperus virginiana	Three-way sedge	Dulicichium arundinaceam				
Eastern white pine	Pinus stobus	White birch	Betula papyrifera				
Lady's thumb	Polygonum persicaria	White cedar	Thuja occidentalis				

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		
Cavity Trees			
- nesting/roosting		$\checkmark$	
- feeding		<b>√</b>	
- escape		<b>√</b>	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees		✓	few
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		<b>√</b>	Black cherry, low sweet blueberry
Surface Water			
- year round creek/pond			
- seasonal runoff		<b>√</b>	
- seasonal pond		<b>√</b>	
Dens of Dug Holes		✓	
Others			

# **Wildlife Species Noted**

Species	Season	Habitat	Comments
Seabirds	Summer	Bedrock	Colonies

## 7.6 Specific Compartment Objectives

### Long Term (20 years)

Little activities can be performed on these islands. The main use of the islands is for day trips by club members, therefore simple cleanup activities will be performed by members who use the islands.

### **Short Term (5 Years)**

This area will be assessed for use as a recreational resource, through the development of picnic sites and swimming spots. These will encourage the use of the island by Club members. The presence of numerous bird colonies and shallow pools, which are ideal habitat for frogs, represent an excellent site for nature interpretation, as well as bird and animal watching.

### 7.7 Other Compartment Features

Compartment No.: I2 Area: 4.0 acres (1.6 hectares)

#### 7.1 General Description

This island compartment consists of two island groups located in Georgian Bay and further east in Go Home Bay. The Cecil Islands are located in the western most portions of the property and are exposed to significant wave action due to the large fetch (i.e. the distance from the western shoreline of Lake Huron to the eastern shoreline of Georgian Bay). Sunset Island is located in the Go Home Bay area and is an area is typified by thin to no soil on bedrock. The few species present on these islands are highly stressed.

Sunset Island is forested while the Cecil Islands are essentially barren rock islands. The tree species found on the islands consist mainly of white pine, red oak, white birch and white cedar, with some soft maple also present on Sunset Island. The major ground vegetation found on Cecil Island is mainly lichen while Sunset Island has a more typical forest flora consisting of wild sarsaparilla and Canada Mayflower. Due to the lack of forest cover, this compartment is not eligible.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally bare but some areas have a thin soil cover < 0.1 m thick.

Drainage: Rapid into Georgian Bay and small depressions in rock.

Topography: Cecil islands have gently sloping rock no more than 4 m local

relief. Sunset Island has a large cliff on the eastern side with at

least 7 m local relief

Water Features: Wind exposed shoreline of Georgian Bay sometimes washes and

sprays all of island in storms. Some puddled fens supporting

sedges and moss.

Physical Features: Cecil islands act as breakers for islands and mainland to the east.

Sunset Island is a favourable picnic spot due to its high elevation

Access: By boat.

Other Features

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

Tree Species	% Comp.	Age (Yrs)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
White Pine (Pw)				By Class for the Comp.		By class for the Comp.	
Red Oak (Or)							
White Birch (Bw)				10-25	No prism		
Poplar (Po)				26-40	sweep was		

Red Maple (Ms)		41-50	performed	
White Cedar (Cw)		50+		
Red Cedar (Cr)				
Total				

**Summary of Tree Inventory**: Species Composition: N/A Height: N/A Age: N/A Basal Area: N/A

# **Other Vegetation Assessment Table**

<b>Plant Species Invent</b>	Plant Species Inventory: Compartment I2						
Common Name	Scientific Name	Common Name	Scientific Name				
Black Cherry	Prunus serotina	Low sweet blueberry	Vaccinium angustifolium				
Black huckleberry	Gaylussucia baccata	Meadow sweet	Spiraea alba/latifolia				
Boneset	Eupatorium maculatum	Rattlesnake root	Prenanthes spp.				
Canada mayflower	Maianthemum canadense	Red osier dogwood	Cornus stolonifera				
Common hairgrass	Deschampsia flexuosa	Ribes sp.	Ribes sp.				
Common juniper	Juniperus communis	Rock tripe	Umbilicaria mammulata				
Dwarf raspberry	Rubus pubescens	Three-way sedge	Dulicichium arundinaceam				
Eastern white pine	Pinus stobus	White cedar	Thuja occidentalis				
Lady's thumb	Polygonum persicaria	White lettuce	Prenanthes alba				
Lesser duckweed	Lemma minor						

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		
Cavity Trees			On Sunset Island
- nesting/roosting		$\checkmark$	
- feeding	✓		
- escape		✓	
Stick Nests		✓	
Fallen Dead Trees	✓		On Sunset Island
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		<b>√</b>	Black cherry, low sweet blueberry
Surface Water			
- year round creek/pond		✓.	
- seasonal runoff		<b>√</b>	
- seasonal pond		<b>✓</b>	
Dens of Dug Holes		✓	
Others			

# **Wildlife Species Noted**

Species	Season	Hahitat	Comments
Species	Scason	Habitat	Comments

Seabirds	Summer	Bedrock	Colonies
Beadings	Summer	Bedrock	Colonies

# 7.6 Specific Compartment Objectives

## Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

#### **Short Term (5 Years)**

This area will be assessed for use as a recreational resource, through the development of picnic sites and swimming spots. These will encourage the use of the island by Club members. The presence of numerous bird colonies and shallow pools, which are ideal habitat for frogs, represent an excellent site for nature interpretation, as well as bird and animal watching.

### 7.7 Other Compartment Features

Compartment No.: I3 Area: 3.5 acres (1.4 hectares)

### 7.1 General Description

This island compartment consists of several rock island groups located in Georgian Bay and further inland in Go Home Bay.

There are several groups of islands that comprise this compartment and some are forested, although the majority are barren rock, which is why this island group is not elegible to qualify for the MFTIP. The compartment is split into numerous island groups located just offshore throughout the club property. The tree species found on the islands consist mainly of white pine, red oak, white birch and white cedar. There is red cedar located on some of the islands as well. The ground vegetation is primarily lichen, which covers most of the rock, but on some of the forested islands there is a ground flora more typical of the surrounding mainland forest consisting of wild sarsaparilla and Canada Mayflower. There is some low sweet blueberry along with scattered patches of various raspberry and blackberry species present on the rocky areas.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally bare but some islands have a thin soil cover < 0.1 m

thick.

Drainage: Rapid into Georgian Bay and small depressions in rock.

Topography: Low generally to 4 m, but sometimes to 10.

Water Features: Wind exposed shoreline of Georgian Bay sometimes washes and

sprays all of island in storms. Some puddled fens supporting

sedges and moss.

Physical Features: Outer islands act as breakers for islands and mainland to the east.

Access: By boat.

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

Tree Species	% Comp.	Age (Yrs)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
				By Class		By class	
				for the		for the	
White Pine (Pw)				Comp.		Comp.	
Red Oak (Or)							
White Birch (Bw)				10-25	No prism		
Poplar (Po)				26-40	sweep was		
Red Maple (Ms)				41-50	Performed		
White Cedar (Cw)				50+			
Red Cedar (Cr)							
Total							

# **Summary of Tree Inventory:**

Species Composition: N/A Age: N/A

Height: N/A Basal Area: N/A

## **Other Vegetation Assessment Table**

<b>Plant Species Invento</b>	Plant Species Inventory: Compartment I3				
Common Name	Scientific Name	Common Name	Scientific Name		
Black Cherry	Prunus serotina	Low sweet blueberry	Vaccinium angustifolium		
Boneset	Eupatorium maculatum	Meadow sweet	Spiraea alba/latifolia		
Canada mayflower	Maianthemum canadense	Pickerelweed	Pontderia cordata		
Cardinal flower	Lobelia cardinalis	Pin cushion moss	Leucobryum glaucum		
Common hairgrass	Deschampsia flexuosa	Pipewort	Eriocaulon aquaticum		
Common juniper	Juniperus communis	Red oak	Quercus rubra		
Common Polypody	Polypodium viginianum	Starflower	Trientalis borealis		
Eastern red cedar	Juniperus virginiana	Three-way sedge	Dulicichium arundinaceam		
Eastern white pine	Pinus stobus	White cedar	Thuja occidentalis		

## 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		
Cavity Trees - nesting/roosting - feeding - escape	✓	✓ ✓	
Stick Nests		✓	
Fallen Dead Trees (woody debris)	<b>✓</b>		
Mast Trees		<b>✓</b>	
Supercanopy Trees		<b>✓</b>	
Conifer Thickets		<b>✓</b>	
Other Food Sources		<b>✓</b>	Black cherry, low sweet blueberry
Surface Water			
<ul> <li>year round creek/pond</li> </ul>		<b>✓</b>	
- seasonal runoff		/	
- seasonal pond		<b>,</b>	
Dens of Dug Holes		✓	
Others			

Wildlife Species Noted

Species	Season	Habitat	Comments
Seabirds	Summer	Bedrock	Colonies

# 7.6 Specific Compartment Objectives

# Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would

be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

## **Short Term (5 Years)**

This area will be assessed for use as a recreational resource, through the development of picnic sites and swimming spots. These will encourage the use of the island by Club members. The presence of numerous bird colonies and shallow pools, which are ideal habitat for frogs, represent an excellent site for nature interpretation, as well as bird and animal watching.

### 7.7 Other Compartment Features

Compartment No.: I4 Area: 7.4 acres (2.96 ha)

### 7.1 General Description

Forest located on three islands in the Pittsburgh Marsh/Iron City Bay area. The area is typified by thin soil cover over sandy, cobbled moraine and bedrock. Of importance in this area is the presence of Atlantic Coastal Plain Species on the shoreline such as Horned Bladderwort (*Utricularia cornuta*), Yellow-Eyed Grass (*Xyris difformis*) and Virginia Chain Fern (*Woodwardia virginica*). The dominant tree species found in the forest are white pine, red oak, and red maple. There was also some white ash found on I4A.

Of the three islands, the largest one (I4A) has a very dense understory growth consisting mainly of red maple, with some white birch and red oak. An area where the canopy has been removed by storm activity characterizes its highest point, and this area contains a dense region of raspberry bushes. On an island south of I4A, which is not owned by the Club, there is a red shouldered hawks nest that was not in use at the time of the survey. I4B is an island at the north end of Iron City Bay. On either side of the point there is a considerable marsh area, which is part of the greater Moreaus Bay area that has been identified as a significant wetland habitat.

#### 7.2 Compartment Site Characteristics

Soil Type: Thin soil cover. Mainly sandy with exposed rocks. < 1 m thick.

Drainage: Well drained.

Topography: I4A has two high points, I4B is located in Iron City Bay, and I4C is

a smaller island that is relatively flat, with some low hills

Water Features: Numerous, small, low, wet areas scattered throughout compartment.

Physical Features: This compartment in split into three islands.

Access: By boat or snow machine

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

Tree Species	% Comp.	Age (Years)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
H1: D: (D.)	40	104	19	By Class for the		By class for the	
White Pine (Pw)	40			Comp		Comp	
Red Oak (Or)	50						
Red Maple (Ms)	10			10-25	384.61	10	
White Ash (Aw)				26-40	221.17	18.8	
				41-50	32.70	5.2	
				50+	2.58	0.8	
Total	100				641.06	34.8	

**Summary of Tree Inventory**: Species Composition: Pw3Or5Ms2 Height: 19 m Age: 104 Basal Area: 34.8 m<sup>2</sup>

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment I4					
Common Name	Scientific Name	Common Name	Scientific Name		
Arrow-leaved tearthumb	Polygonum sagittatum	Meadow sweet	Spiraea alba/latifolia		
Aster sp.	Aster sp.	Northern wild raisin	Viburnum cassinoides		
Black cherry	Prunus serotina	Partridgeberry	Mitchella repens		
Blue bead lily	Clintonia borealis	Pickerelweed	Ponederia cordata		
Boneset	Eupatorium maculatum	Pin cushion moss	Leucobryum glaucum		
Bracken fern	Pteridium aquilinum	Pipewort	Eriocaulon aquaticum		
Bush honeysuckle	Diervilla lonicera	Poison Ivy	Toxicodendron radicans		
Canada mayflower	Maianthemum canadense	Prince's pine	Chimaphila umbellata cisatlantica		
Cattail	Typha latifolia	Rattlesnake root	Prenanthes spp.		
Club moss sp	Lycopodium sp.	Red maple	Acer rubrum		
Common Blackberry	Rubus allegheniensis	Red oak	Quercus rubra		
Common hair grass	Deschamsia flexuosa	Red twigged serviceberry	Amalanchier sanguinea		
Common juniper	Juniperus communis	Reindeer lichen	Cladina rangiferina		
Common Polypody	Polypodium viginianum	Ribes sp.	Ribes sp.		
Common Skullcap	Scuttellaria galicericulata	Rock tripe	Umbilicaria mammulata		
Common St. Johnswort	Hypericum perforatum	Skunk currant	Ribes glandulosum		
Cow wheat	Melampyrum lineare	Slender white aster	Aster borealis		
Dandelion	Taraxacum officinale	Smooth blackberry	Rubus canadensis		
Downy juneberry	Amelanchier arborea	Smooth serviceberry	Amalanchier laevis		
Dwarf raspberry	Rubus pubescens	Spreading dogbane	Apocynum androsaemifolium		
Eastern white pine	Pinus stobus	Staghorn sumac	Rhus typhina		
False solomon's seal	Maianthemum racemosum	Starflower	Trientalis borealis		
Goldenrod sp.	Solidago sp.	Striped maple	Acer pensylvanicum		
Hairy Solomon's seal	Polygonatum pubescens	Sugar maple	Acer saccharum		
Hard stemmed bullrush	Scirpus acutus	Tufted loosestrife	Lysimachia thrysiflora		
Hoary vervain	Verbena stricta	Violet sp.	Viola sp.		
Honeysuckle sp.	Lonicera sp.	White birch	Betula papyrifera		
Indian pipe	Monotropa uniflora	Wild mint	Mentha arvensis		
Large leaved aster	Aster macrophyllus	Wild red raspberry	Rubus idaeus melanolasius		
Low sweet blueberry	Vaccinium angustifolium	Wild sarsparilla	Aralia nudicaulis		
Marginal wood fern	Dryopteris marginalis	Woodland strawberry	Fragaria vesca		

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White pine
Cavity Trees			
- nesting/roosting	✓		-Red oak
- feeding	<b>✓</b>		-White pine

- escape	✓		
Stick Nests		✓	
Fallen Dead Trees	✓		
(woody debris)			
Mast Trees	✓		Few
Supercanopy Trees	✓		
Conifer Thickets		✓	
Other Food Sources	<b>✓</b>		Black cherry, low sweet blueberry
Surface Water - year round creek/pond - seasonal runoff	/		
- seasonal pond			
Dens or Dug Holes		✓	
Others			

#### **Wildlife Species Noted**

Species	Season	Habitat	Comments

#### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

To maintain the compartment as a protection forest no management activities need to occur. Due to the thin soils and the history of logging and fire in the area, any disturbance in the forest would be detrimental, adversely affecting the ability of the forest to provide habitat and ecological values.

## **Short Term (5 Years)**

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur.

#### 7.7 Other Compartment Features

Compartment No.: I5 Area: 5.3 acres (2.12 ha)

### 7.1 General Description

This compartment is a protection forest located on Pig Island, which is surrounded by Go Home Bay, directly west of the community dock and library. It is separated into two distinct sections, north and south, by a rocky highpoint.

The northern half of the compartment consists of a dense understory of eastern white cedar regeneration, under a canopy that has been opened by storm activity. There is also a small amount of white pine and red maple regeneration in the stand. Due to the storm activity there are many fallen trees, and these provide abundant ground cover and habitat for small mammals. The canopy contains many gaps, and is made up of white cedar, white pine, red and white oak, and red maple. Many of the live and dead cedars and white pines have cavities in them. There is a large, poorly drained area lying between two hills, which contains a thick cover of winterberry holly bushes and marsh ferns. There are other small, poorly drained areas in the stand, and these contain surface water following rainstorms.

On the southern end of the island the forest cover is quite different, consisting of a very open understory under a canopy of red and white oak. There is no white pine in the canopy in this part of the compartment, although some regeneration was present. Eastern white cedar is absent from this half of the compartment, and common juniper makes up the majority of the ground cover. Red and white oak, as well as red maple are also present in the regeneration layer. There is also a large amount of prince's pine growing in this area of the compartment.

Dividing these two areas is a rocky highpoint covered by common juniper, low sweet blueberry, and some scrubby white pines and oaks. This area opens up down to the waterline on the west side of the island.

#### 7.2 Compartment Site Characteristics

Soil Type: Sandy over intermittent sandy, cobble and boulder till <0.5m thick

Drainage: Poor to well drained, with standing water in depressions

Topography: Low hill rises to a height of 5m. Northeast corner of the island has

a 3 metre high rock cliff which enters the water directly. Southwest

side has an open rocky outcrop that slopes down to the waterline

Water Features: Surrounded by Go Home Bay, some standing surface water in

poorly drained low lying areas

Physical Features:

Access: Year round on foot or by boat

Other Features:

#### 7.3 Compartment History

Pig Island was given its name around the turn of the last century, when a number of pigs were put on the island to decimate the fox snake population. A microburst touched down in this compartment in 1990, felling many larger trees, and creating the canopy openings in the northern

end of the compartment. These openings have lead to the development of the very dense understory containing a large amount of down woody debris, as well as the creation of many habitat trees, in the form of broken off cedars and white pines.

# 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	#	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)	stems/ha	Area	
			for Comp.			$(m^2/ha)$	
				By class		By class	
		110	16.1	for the		for the	
White Pine (Pw)	20			Comp.		Comp.	
Red Oak (Or)	20			10 - 25	718	18.67	
White Oak (Ow)	20			26 – 41	118	10.0	
Red Maple (Ms)	10			42 – 49	8	1.33	
White Cedar (Cw)	30			50+	4	1.33	Cedar thicket at
							northern end of the
							comp.
Total	100				848	31.33	

## **Summary of Tree Inventory:**

Species Composition: Pw2Or2Ow2Ms1Cw3 Age: 110 years

Height: 16.1 m Basal Area: 31.33 m<sup>2</sup>

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment I5				
Common Name	Scientific Name	Common Name	Scientific Name	
Black bindweed	Polygonum cilinode	Northern wild raisin	Viburnum cassinoides	
Black cherry	Prunus serotina	Pale corydalis	Corydalis sempervirens	
Black huckleberry	Gaylussucia baccata	Panicled aster	Solidago lanceolatus	
Boneset	Eupatorium perfoliatum	Pin cushion moss	Leucobryum glaucum	
Bracken fern	Pteridium aquilinum	Pink lady slipper	Cypripedium acaule	
Bristly sarsparilla	Aralia hispida	Prince's pine	Chimaphila umbellata cisatlantica	
Bush honeysuckle	Diervilla lonicera	Pussy willow	Salix discolor	
Canada mayflower	Maianthemum canadense	Red maple	Acer rubrum	
Club moss sp	Lycopodium sp.	Red oak	Quercus rubra	
Common Hair Grass	Deschampsia flexuosa	Red twigged serviceberry	Amalanchier sanguinea	
Common juniper	Juniperus communis	Reindeer lichen	Cladina rangiferina	
Common Polypody	Polypodium viginianum	Rock tripe	Umbilicaria mammulata	
Dwarf raspberry	Rubus pubescens	Round-leaved sundew	Drosera rotundifolia	
Eastern white cedar	Thuja occidentalis	Shrubby St.Johnswort	Hypericum spathulatum	
Eastern white pine	Pinus stobus	Skunk Currant	Ribes glandulosum	
Fly honeysuckle	Lonicera canadensis	Small sundrops	Oenothera perennis	
Goldenrod sp.	Solidago sp.	Smooth serviceberry	Amalanchier laevis	
Hairy Solomon's seal	Polygonatum pubescens	Speckled alder	Alnus incana spp.	
Honeysuckle sp.	Lonicera sp.	Sphagnum moss	Sphagnum sp.	
Horned bladderwort	Utricularia cornuta	Spinulose wood fern	Dryopteris carhusiana	

Large leaved aster	Aster macrophyllus	Staghorn sumac	Rhus typhina
Large-leaved goldenrod	Solidago macrophylla	Starflower	Trientalis borealis
Low sweet blueberry	Vaccinium angustifolium	Water lobelia	Lobelia dortmanna
Marginal wood fern	Dryopteris marginalis	White birch	Betula papyrifera
Marsh cinquefoil	Potentilla palustris	White oak	Quercus alba
Meadow sweet	Spiraea alba/latifolia	Wild red raspberry	Rubus idaeus melanolasius
Mild water pepper	Polygonum hydropiperoides	Wild sarsparilla	Aralia nudicaulis
Mountain holly	Nemopanthus mucronatus	Winterberry holly	Ilex verticillata
Multicoloured blue flag	Iris versicolor	Wintergreen	Gaultheria procumbens
Nannyberry	Viburnum lentago	Woodland strawberry	Fragaria vesca

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White cedar and white
			pine broken off by wind
			storm, and naturally dead
			trees in northern end, oaks
			in southern end
Cavity Trees			
- nesting/roosting	<b>√</b>		
- feeding	<b>√</b>		
- escape	<b></b>		
Stick Nests		<b>✓</b>	
Fallen Dead Trees	✓		Abundant DWD in
(woody debris)			northern end of
			compartment, less in
			southern end
Mast Trees	✓		Oaks in southern end of
			Comp.
Supercanopy Trees	✓		White pines in northern
			end
Conifer Thickets	✓		Abundant white cedar
			regeneration in northern
			end
Other Food Sources	✓		Many berry species – see
			compartment vegetation
a a ***			list
Surface Water			Poorly drained depressions
- year round creek/pond	,	<b>✓</b>	are water logged following
- seasonal runoff	✓		spring runoff and
- seasonal pond		<b>'</b>	rainstorms
Dens or Dug Holes	<b>√</b>		Small mammals
Others			

# Wildlife Species Noted

Species	Season	Habitat	Comments

#### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

This compartment should be maintained and protected in its natural state, and allowed to develop and evolve naturally. No direct management activities should take place in the forest.

This compartment represents an excellent example of the recovery of a forest following major storm activity. The northern end, where the storm activity and microburst affects were most severe, could be used as an example of how a forest recovers and develops following a major natural disturbance. Permanent sample plots could be used to monitor the stand through time, and a complete record of succession produced. In the long run it would provide educational information to the younger generation which meets with the Clubs educational goals. Such a study could be carried out by a student or naturalist or by interested members of the community.

#### **Short Term (5 Years)**

This compartment represents a valuable asset for the Club, and may be used to meet the educational objective of the management plan. The Club should establish permanent sample plots in the damaged area, and produces a complete record of the flora and fauna within it. This plot should then be revisited annually and monitored as it recovers, developing a thorough database of its recovery. This information would be valuable both as an educational resource for the community, but may also be combined with research conducted throughout the Georgian Bay shoreline area, enhancing those other studies.

#### 7.7 Other Compartment Features

Compartment No.: L1 Area: A (Burwash Lake) 38.8 acres (17.04 ha)

B (Loudon Lake) 21.6 acres (8.64 ha)

C (Galbraith Lake) 29.65 acres (11.86 ha)

#### 7.1 General Description

These three lakes are located on Big Island, and form a bog/lake chain located throughout the interior of Big Island. All of these lakes have been dammed by beavers and are ringed by sections of floating sphagnum moss. Atlantic Coastal Plain Species can be found along the shore in several areas, such as Yellow-eyed grass (*Zires diformis*), Virginia chain fern (*Woodwardia virginica*), and horned bladderwort (*Utricularia cornuta*). Members of the community use the lakes for fishing and there are several canoes stored along the shoreline of Burwash Lake. These lakes are not eligible for inclusion in the management plan since there are no living trees and only a few dead trees in them, but they are essential components of this ecosystem and considered valuable by the community members.

### 7.2 Compartment Site Characteristics

Soil Type: Clay base overlain in places by sand and organic accumulations

although in some places the peaty material is directly on bedrock.

Drainage: Lake Loudon is at 181 m ASL and is at the highest elevation of the

three lakes and flows into Burwash Lake which is at 179 m ASL. Galbraith Lake is at the same level as Burwash Lake and it empties

into the Pittsburgh Channel.

Topography: Low rocky and forested areas surround the lakes. There are several

rock islands located in the middle of the lakes.

Water Features: Galbraith and Loudon Lakes are less than 2 metres deep while

Burwash Lake is up to 6 metres deep.

Physical Features:

Access: By foot. Some people portage into Burwash Lake at its southwest

end.

Other Features

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp.	Age (Years)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
No Live Trees							
Present							

#### **Summary of Tree Inventory:**

Species Composition: N/A Age: N/A

Height: N/A Basal Area: N/A

### 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		Very few
Cavity Trees			
- nesting/roosting		✓	
- feeding		<b>√</b>	
- escape		<b>/</b>	
Stick Nests		✓	
Fallen Dead Trees	✓		Logs under water
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water			
- year round creek/pond	✓		Year round Lakes
- seasonal runoff			
- seasonal pond			
Dens or Dug Holes		✓	
Others			Sphagnum Bogs
			surrounding lakes along
			the shoreline

### **Wildlife Species Noted**

Species	Season	Habitat	Comments
Black ducks	Summer	Water	
Loons	Summer	Water	
Great Blue Heron	Summer	Shoreline	
Beaver	Summer	Lake edges	

#### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

To maintain this area as a natural wildlife area for all forms of wildlife. Beavers will maintain water levels naturally. Monitoring of lake levels should occur to ensure high water levels due to beaver dams do not threaten cottages.

#### **Short Term (5 Years)**

Trapping will continue to be allowed in the area to keep control of the beaver population, and help reduce the risk of flooding damage to cottage properties associated with beaver dam construction

This area will be assessed for use as a recreational resource, through the development of an interconnecting network of canoe routes, trails and portages. These will encourage the use of the island by Club members. The sphagnum mats present along the shorelines represent an excellent site for nature interpretation, as well as bird and animal watching.

The Club will examine the potential for having this area classified as a conservation land area,

and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

**7.7 Other Compartment Features**No other compartment features are noted.

Compartment No.: L2 Area: (Lake St. Patrick) 23 acres (9.2 ha)

#### 7.1 General Description

Lake-bog chain on mainland. This lake has been dammed by beavers and is partially ringed by floating sphagnum bogs. There are numerous snags scattered along the shoreline as well. This lake is not eligible for inclusion in the management plan since there are no living trees and only a few dead trees in it, but it is an essential component of this ecosystem and considered valuable by the community members.

#### 7.2 Compartment Site Characteristics

Soil Type: Clay base overlain in places by sand and organic accumulations

although in some places the peaty material is directly on bedrock..

Drainage: Lake St. Patrick is at 178 m ASL and is separated from Georgian

Bay by less than 15 metres at the closest point. Runoff from the

surrounding slopes drains into the lake.

Topography: Low rocky and forested areas surround the lakes. There are several

rock islands located in the middle of the lake.

Water Features: Lake St. Patrick is up to 10 metres deep.

Physical Features: Lake.

Access: By foot. Some people portage into Lake St. Patrick at its southwest

end.

Other Features

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	# stems/ha	Basal	Comments
	Comp.	(Years)	Height (m)	DBH		Area	
	_		for Comp.	(cm)		(m²/ha)	
No Live Trees							
Present							

#### **Summary of Tree Inventory:**

Species Composition: N/A Age: N/A

Height: N/A Basal Area: N/A

#### 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		Very few
Cavity Trees - nesting/roosting - feeding - escape		<i>y y y</i>	

Stick Nests		✓	
Fallen Dead Trees	✓		Logs under water
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water			
<ul> <li>year round creek/pond</li> </ul>	✓		Year round lake
- seasonal runoff		✓	
- seasonal pond		✓ ·	
Dens or Dug Holes		<b>✓</b>	
Others			Floating Sphagnum bogs
			surrounding lake along the
			shoreline

## **Wildlife Species Noted**

Species	Season	Habitat	Comments
Black ducks	Summer	Water	
Loons	Summer	Water	
Great blue heron	Summer	Shoreline	
Beaver	Summer	Lake edges	

#### 7.6 Specific Compartment Objectives

### Long Term (20 years)

To maintain this area as a natural wildlife area for all forms of wildlife. Beavers will maintain water levels naturally. Monitoring of lake levels should occur to ensure high water levels due to beaver dams do not threaten cottages.

#### **Short Term (5 Years)**

Trapping will continue to be allowed in the area to keep control of the beaver population, and help reduce the risk of flooding damage to cottage properties associated with beaver dam construction.

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

## 7.7 Other Compartment Features

Compartment No.: R1 Area: 5.2 acres (2.08 ha)

### 7.1 General Description

This is a small rock compartment located in the southern part of the common property. It extends from behind several cottage properties inland into forest compartment W1. It is bordered to the north by the limits of the club property. It has an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. There are several forest pockets scattered throughout the compartment, which consists of scrubby white pines, red oaks, and white birch. The compartment is extremely well drained, due to the impermeability of the rock surface. Water collects in some depressions, creating fens, which provide suitable habitat for ferns, alders, and some other moist environment vegetation species.

Common juniper bushes, white pines, and red oaks cover roughly 45% of the compartment, so only 2.34 acres (0.94 ha) are considered eligible under the MFTIP guidelines, while 2.86 acres (1.14 ha) are not considered eligible and are excluded from the plan.

There is a partially maintained hiking/biking trail through this compartment and it extends back into W1 where it becomes less maintained and eventually disappears.

## **7.2 Compartment Site Characteristics**

Soil Type: Generally bare, but some patches of thin soil with relict boulders

locally – generally <0.3 m thick. Organic soil in surface

depressions.

Drainage: Rapid drainage on bare rock, with water collecting in depressions.

Topography: Low hills to 10 m local relief.

Water Features: Small fens supporting sedges, birches, poplars, and ferns. Adjacent

to small bay on Georgian Bay.

Physical Features: None

Access: Year round on foot or by snowmobile.

Other Features:

### 7.3 Compartment History

Throughout this section of the common property there was extensive logging in the late 19<sup>th</sup> century followed most likely by human and naturally caused fires on the large amounts of slash left over after logging. This is evident by the numerous burnt stumps found throughout the entire property. It is possible that this area was once soil covered prior to the fires, but burned off during the fires.

Tree Species	% Comp.	Age (Years)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
				By class for the		By class for the	

White Pine (Pw)	40	78	13	Comp.		Comp.	
Red Oak (Or)	10			10 - 25	653.85	17.00	
White Birch (Bw)	10			26 – 41	82.35	7.00	
Common juniper	30			42 – 49	25.16	4.00	
				50+	0.00	0.00	
Total					761.36	28.00	

**Summary of Tree Inventory**: Species Composition: Pw5Or1Bw1Jun3

Age: 78 years Basal Area: 28 m<sup>2</sup>/ha Height: 13 m

# **Other Vegetation Assessment Table:**

Plant Species Inventory: Compartment R1						
Common Name	Scientific Name	Common Name	Scientific Name			
Black huckleberry	Gaylussucia baccata	Low sweet blueberry	Vaccinium angustifolium			
Bracken fern	Pteridium aquilinum	Marsh fern	Thelypteris palustris			
Bristly sarsparilla	Aralia hispida	Meadow sweet	Spiraea alba/latifolia			
Canada mayflower	Maianthemum canadense	Pin cushion moss	Leucobryum glaucum			
Club moss sp	Lycopodium sp.	Red oak	Quercus rubra			
Common hairgrass	Deschampsia flexuosa	Reindeer lichen	Cladina rangiferina			
Common juniper	Juniperus communis	Sphagnum moss	Sphagnum sp.			
Dense Cottongrass	Eriophorum vaginatum	Starflower	Trientalis borealis			
Eastern white pine	Pinus stobus	Tawny Cottongrass	Eriocaulum virginicum			
False pixie cup	Cladonia chlorophaea	White birch	Betula papyrifera			
Leatherleaf	Chamaedaphne calyculata	White oak	Quercus alba			

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		
Cavity Trees			
- nesting/roosting		✓	
- feeding		✓.	
- escape		<b>√</b>	
Stick Nests		✓	
Fallen Dead Trees		$\checkmark$	
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	Juniper forms dense
			bushes which provide
			habitat for five lined skink,
			Massassauga rattlesnake
Other Food Sources	<b>√</b>		Blueberry bushes
Surface Water		_	
- year round creek/pond		✓	Runoff collects in

<sup>\*</sup> common juniper density was not able to be determined but the coverage is quite dense in most areas.

- seasonal runoff	✓		depressions following
- seasonal pond		✓	rainfall
Dens or Dug Holes		✓	
Others			

### **Wildlife Species Noted**

Species	Season	Habitat	Comments
Massassauga Rattlesnake	Summer	Rocks, boulders	Basking
Five Lined Skink	Summer	Juniper	Basking

#### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur.

#### **Short Term (5 Years)**

To continue to develop, maintain, and promote the hiking trail network. This will involve establishing new trails, and ensuring they are well marked and cleared for user safety. These trails will allow the Club members to have easy access to their forest, and may be used for interpretive nature hikes.

#### 7.7 Other Compartment Features

There is a large sphagnum bog to the north of the compartment that contains large amounts of alder and holly. Numerous bird species can be seen and heard throughout the area as well.

Compartment No.: R2A **Area:** 21.6 acres (8.64 ha)

### 7.1 General Description

This is a small, somewhat open rock compartment located in the southern part of the common property. It is situated between Georgian Bay and Lake St. Patrick and is bordered to the south by the limits of the club property. It has an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. There are numerous forested pockets consisting of scrubby white pines and red oaks, and white birch growing in cracks and soil filled depressions in the rock. Extremely well drained due to the impermeability of the rock surface. Water collects in some depressions, creating fens, which provide suitable habitat for ferns, alders, and some other moist environment vegetation species.

Common juniper bushes, white pines, and red oaks cover roughly 45% of the compartment, so only 9.72 acres (3.9 ha) are considered eligible under the MFTIP guidelines, while 11.88 acres (4.75 ha) do not meet the MFTIP eligibility guidelines and are excluded from the management plan area.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally bare, but some patches of thin soil with relict boulders

locally – generally <0.3 m thick. Also organic soil in surface

depressions

Drainage: Rapid drainage on bare rock, with water collecting in depressions Topography:

Low hills to 10 m local relief, several steep cliffs up to 5 m local

relief.

Small fens supporting sedges, birches, poplars, and ferns. Water Features:

Physical Features:

Access: Year round on foot or by snowmobile

Other Features:

#### 7.3 Compartment History

Throughout this section of the common property there was extensive logging in the late 19<sup>th</sup> century followed most likely by human and naturally caused fires on the large amounts of slash left over after logging. This is evident by the numerous burnt stumps found throughout the entire property. A fire burned for approximately six weeks in the months of July and August 1919, covering an area spanning from near Rabbit Lake (at the southeast end of compartment Wt1H), to behind the Trusler cottage on the shoreline west of this compartment. This fire was eventually extinguished by rainfall, although fire crews were employed to fight it. This resulted in the much younger ages of trees found in this area. Due to the fire much of the soil and vegetative matter was burnt away which resulted in the numerous rocky outcrops and shallow soil that is typical of Georgian Bay.

Tree Species	%	Age	Average	Average	# stems/ha	Basal	Comments
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	Comp.	(Years)	Height (m)	DBH (cm)		Area	
			for Comp.			(m²/ha)	
				By class		By class	
				for the		for the	
White Pine (Pw)	50	86	12	Comp.		Comp.	
Red Oak (Or)	20			10 - 25	423.08	11.00	
White Birch (Bw)	10			26 – 41	94.12	8.00	
Common juniper	20			42 - 49	6.29	1.00	
				50+	0.00	0.00	
Total					523.48	20.00	

# **Summary of Tree Inventory:**

Species Composition: Pw5Or2Bw1Jun2

Age: 78 years Basal Area: 20 m<sup>2</sup>/ha Height: 12 m

## **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment R2A					
Common Name	Scientific Name	Common Name	Scientific Name		
Club moss sp	Lycopodium sp.	Red oak	Quercus rubra		
Common hairgrass	Deschampsia flexuosa	Reindeer lichen	Cladina rangiferina		
Common juniper	Juniperus communis	Sheep sorel	Rumex acetosella		
Coral lichen	Cladina stellaris	Skunk currant	Ribes glandulosum		
Eastern white pine	Pinus stobus	Smooth blackberry	Rubus canadensis		
Leatherleaf	Chamaedaphne calyculata	Sweetgale	Myrica gale		
Low sweet blueberry	Vaccinium angustifolium	Trembling aspen	Populus tremuloides		
Pin cushion moss	Leucobryum glaucum	White birch	Betula papyrifera		

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		
Cavity Trees			
- nesting/roosting		✓	
- feeding		✓.	
- escape		✓	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	Juniper forms dense
			bushes which provide
			habitat five lined skink,
			Massassauga rattlesnake
Other Food Sources	✓		Blueberry bushes
Surface Water		_	
- year round creek/pond		✓	Runoff collects in

106

<sup>\*</sup> common juniper density was not able to be determined but the coverage is quite dense in most areas.

- seasonal runoff	✓		depressions following
- seasonal pond		✓	rainfall
Dens or Dug Holes		✓	
Others			

### **Wildlife Species Noted**

Species	Season	Habitat	Comments
Massassauga Rattlesnake	Summer	Rocks, boulders	Basking
Five Lined Skink	Summer	Juniper	Basking

#### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur

#### **Short Term (5 Years)**

To continue to develop, maintain, and promote the hiking trail network. This will involve establishing new trails, and ensuring they are well marked and cleared for user safety. These trails will allow the Club members to have easy access to their forest, and may be used for interpretive nature hikes.

#### 7.7 Other Compartment Features

There is a large sphagnum bog to the north of the compartment that contains large amounts of alder and holly. Numerous bird species can be seen and heard throughout the area as well.

Compartment No.: R2B Area: 25.9 acres (10.36 ha)

### 7.1 General Description

This is a large rock compartment located in the southern part of the common property, along the north shore of Lake St. Patrick. There are many large pockets of forest scattered over the compartment mainly consisting of scrubby white pines, red oaks, and white birch growing in cracks and soil filled depressions in the rock. It has an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. The forested pockets are mainly well drained with the exception of a few small depressions in which fens have been created. These provide suitable habitat for ferns, alders, and some other moist environment vegetation species. The rest of the rock is extremely well drained due to the impermeability of the surface.

Common juniper bushes and forested pockets cover roughly 45% of the compartment, so only 11.65 acres (4.66 ha) are considered eligible under the MFTIP guidelines, while 14.25 acres (5.7 ha) are not considered eleigible to be included in the management area.

There is a partially maintained trail throughout this compartment and it leads into the forest compartment W4. It generally follows along the edge of Lake St. Patrick until it comes out on the shoreline of Riddells Bay.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally bare, but some patches of thin soil with relict boulders

locally – generally <0.3 m thick. Also organic soil in surface

depressions

Drainage: Rapid drainage on bare rock, with water collecting in depressions

Topography: Low hills to 10 m local relief.

Water Features: Small fens supporting sedges, birches, poplars, and ferns.

Physical Features: None

Access: Year round on foot or by snowmobile

Other Features:

#### 7.3 Compartment History

Throughout this section of the common property there was extensive logging in the late 19<sup>th</sup> century followed most likely by human and naturally caused fires on the large amounts of slash left over after logging. This is evident by the numerous burnt stumps found throughout the entire property A fire burned for approximately six weeks in the months of July and August 1919, covering an area spanning from near Rabbit Lake (at the southeast end of compartment Wt1H), to behind the Trusler cottage on the shoreline west of this compartment. This fire was eventually extinguished by rainfall, although fire crews were employed to fight it. This resulted in the much younger ages of trees found in this area. Due to the fire much of the soil and vegetative matter was burnt away which resulted in the numerous rocky outcrops and shallow soil that is typical of Georgian Bay.

# 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	# stems/ha	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)		Area	
			for Comp.			(m²/ha)	
				By class		By class	
				for the		for the	
White Pine (Pw)	50			Comp.		Comp.	
Red Oak (Or)	20			10 - 25	500.00	13.00	
White Birch (Bw)	10			26 – 41	105.88	9.00	
Common juniper	20			42 – 49	18.87	3.00	
				50+	1.62	0.50	
Total					626.37	25.50	

### **Summary of Tree Inventory:**

Species Composition: Pw5Or2Bw1Jun1 Age: 106

Height: 15 m Basal Area: 25.5 m<sup>2</sup>/ha

# **Other Vegetation Assessment Table**

<b>Plant Species Inventor</b>	Plant Species Inventory: Compartment R2B						
Common Name	Scientific Name	Common Name	Scientific Name				
Bracken fern	Pteridium aquilinum	Pine sap	Monotropa hypopitys				
Bristly sarsparilla	Aralia hispida	Red oak	Quercus rubra				
Canada mayflower	Maianthemum canadense	Reindeer lichen	Cladina rangiferina				
Club moss sp	Lycopodium sp.	Rock tripe	Umbilicaria mammulata				
Common hairgrass	Deschampsia flexuosa	Skunk currant	Ribes glandulosum				
Common juniper	Juniperus communis	Staghorn sumac	Rhus typhina				
Common Polypody	Polypodium viginianum	Starflower	Trientalis borealis				
Coral lichen	Cladina stellaris	White birch	Betula papyrifera				
Cow wheat	Melampyrum lineare	White oak	Quercus alba				
Eastern white pine	Pinus stobus	Wild sarsparilla	Aralia nudicaulis				
False pixie cup	Cladonia chlorophaea	Wintergreen	Gaultheria procumbens				
Goldenrod sp.	Solidago sp.	Woodland strawberry	Fragaria vesca				
Low sweet blueberry	Vaccinium angustifolium						

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		
Cavity Trees - nesting/roosting - feeding	<i>y</i>	<b>√</b>	
- escape			
Stick Nests		<b>√</b>	

109

<sup>\*</sup> common juniper density was not able to be determined but the coverage is quite dense in most areas.

Fallen Dead Trees		✓	
(woody debris)			
Mast Trees	✓		
Supercanopy Trees	✓		
Conifer Thickets		✓	Juniper forms dense
			bushes which provide
			some habitat for species
			such as five lined skink,
			Massassauga rattlesnake
Other Food Sources	✓		Blueberry bushes
Surface Water			
- year round creek/pond		✓	Runoff collects in
- seasonal runoff	✓		depressions following
- seasonal pond		✓	rainfall
Dens or Dug Holes		✓	
Others			

Species	Season	Habitat	Comments
Bear	Summer		Overturned moss with
			prints in it.

### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur

#### **Short Term (5 Years)**

To continue to develop, maintain, and promote the hiking trail network. This will involve establishing new trails, and ensuring they are well marked and cleared for user safety. These trails will allow the Club's members to have easy access to their forest, and may be used for interpretive nature hikes.

#### 7.7 Other Compartment Features

The northeast section of Lake St. Patrick turns into wetland compartment Wt1C and this area provides habitat for many species of wildlife ranging from birds to small mammals due to its dense cover of alder and holly.

Compartment No.: R2C Area: 64.8 acres (27.52 ha)

#### 7.1 General Description

This is a long, thin open rocky compartment, extending from behind the community gas docks, to the southeastern border of the common property. It has an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. Scrubby white pines and red oaks grow in cracks and soil filled depressions in the rock. Extremely well drained due to the impermeability of the rock surface. Water collects in some depressions, creating fens, which provide suitable habitat for ferns, alders, and some other moist environment vegetation species.

Common juniper bushes, white pines, and red oaks cover roughly 65% of the compartment, so only 42 acres (16.8 ha) are considered eligible under the MFTIP guidelines, while 22.8 acres (9.12 ha) are considered to be ineligible to qualify for the management area and are excluded from the plan.

A well-marked and maintained hiking trail passes through this compartment, and connects it with compartments W5, W6, and Crown lands further inland.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally bare, but some patches of thin soil with relict boulders

locally – generally <0.3 m thick. Also organic soil in surface

depressions

Drainage: Rapid drainage on bare rock, with water collecting in depressions

Topography: Low hills to 10 m local relief

Water Features: Small fens supporting sedges, birches, poplars, and ferns.

Physical Features: None

Access: Year round on foot or by snowmobile

Other Features: Garbage dump at northern end of compartment, behind caretaker's

house

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

Tree Species	%	Age	Average	Average	# stems/ha	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)		Area	
			for Comp.			(m²/ha)	
				By class		By class	
				for the		for the	
White Pine (Pw)	40	97	14	Comp.		Comp.	
Red Oak (Or)	30			10 - 25	538.46	14.00	
Common juniper	30			26 – 41	125.49	10.67	
				42 – 49	25.16	4.00	
				50+	2.16	0.67	
Total					691.27	29.33	

**Summary of Tree Inventory**: Species Composition: Pw4Or3Jun2

Age: 97 years Basal Area: 29.33 m<sup>2</sup>/ha Height: 14 m

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment R2C						
Common Name	Scientific Name	Common Name	Scientific Name			
Bracken Fern	Pteridium aquilinum	Red maple	Acer rubrum			
Club Moss	Lycopodium sp.	Red Oak	Quercus rubra			
Common Hair Grass	Deschampsia flexuosa	Reindeer Lichen	Cladina rangiferina			
Common juniper	Juniperus communis	Smooth serviceberry	Amalanchier laevis			
Coral Lichen	Cladina stellaris	White birch	Betula papyrifera			
Eastern white pine	Pinus strobus	Rock tripe	Umbilicaria mammulata			
Hairy Solomon's Seal	Polygonatum pubescens	Sheep sorel	Rumex acetosella			
Low sweet blueberry	Vaccinium angustifolium	Winterberry holly	Ilex verticillata			
Meadow sweet	Spiraea alba/	Wintergreen	Gaultheria procumbens			
Pale corydalis	Corydalis sempervirens					

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags		✓	
Cavity Trees			
- nesting/roosting			
- feeding			
- escape			
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees			
Supercanopy Trees		✓	
Conifer Thickets		✓	Juniper forms dense
			bushes which provide
			some habitat for species
			such as five lined skink,
			Massassauga rattlesnake
Other Food Sources	✓		Blueberry bushes
Surface Water			
<ul> <li>year round creek/pond</li> </ul>		$\checkmark$	Runoff collects in
- seasonal runoff	✓		depressions following
- seasonal pond		✓	rainfall
Dens or Dug Holes		<b>√</b>	
Others			

<sup>\*</sup> common juniper density was not able to be determined but the coverage is quite dense in most areas.

Species	Species Season		Comments	

#### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur

### **Short Term (5 Years)**

To continue to develop, maintain, and promote the hiking trail network. This will involve establishing new trails, and ensuring they are well marked and cleared for user safety. These trails will allow the Club members to have easy access to their forest, and may be used for interpretive nature hikes.

#### 7.7 Other Compartment Features

There is a garbage dump located behind the caretaker's house, at the northern end of the compartment. The majority of the garbage consists of kitchen appliances, equipment from the gas docks, and empty fuel and oil containers. It has been used over the years by successive caretakers, and is presumably no longer in use. The area has accumulated discarded equipment from the community gas dock, as well as appliances presumably from individual cottages. Also, the remains of old docks, oil drums, and other materials on the shoreline of the bay south of the gas dock. Most of these objects are located along the shoreline, but there are also used dock cradles submerged in the water. The Club may wish to clean this area since it is an eyesore and provides no value for wildlife.

The following approach to addressing this situation has been proposed, and is to be presented to the Madawaska Club Ltd. directors:

- Stage 1: Evaluate and map out the extent of the affected area. Quantify the type and amount of garbage present, and determine whether it should go for kitchen waste disposal (Leonard King), or as solid item or large item recycling categories.
- Stage 2: Establish a timetable for clean-up in conjunction with Township pick-up of items, which usually occurs every couple of years
- Stage 3: Finance and carry out the clean-up using students during a summer period.

Compartment No.: R2D Area: 3.4 acres (1.36 ha)

### 7.1 General Description

This is small rock unit located along the northern shore of Riddells Bay. It has an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. Scrubby white pines and red oaks grow in cracks and soil filled depressions in the rock. Extremely well drained due to the impermeability of the rock surface. Water collects in some depressions, creating fens, which provide suitable habitat for ferns, alders, and some other moist environment vegetation species.

There is insufficient tree coverage in this compartment for it to qualify for the forest management plan.

### 7.2 Compartment Site Characteristics

Soil Type: Generally bare, but some patches of thin soil with relict boulders

locally – generally <0.3 m thick. Also organic soil in surface

depressions.

Drainage: Rapid drainage on bare rock, with water collecting in depressions.

Topography: Low hills to 10 m local relief.

Water Features: Small fens supporting sedges, birches, poplars, and ferns.

Physical Features: None

Access: Year round on foot or by snowmobile.

Other Features:

#### 7.3 Compartment History

Throughout this section of the common property there was extensive logging in the late 19<sup>th</sup> century followed most likely by human and naturally caused fires on the large amounts of slash left over after logging. This is evident by the numerous burnt stumps found throughout the entire property. A fire burned for approximately six weeks in the months of July and August 1919, covering an area spanning from near Rabbit Lake (at the southeast end of compartment Wt1H), to behind the Trusler cottage on the shoreline west of this compartment. This fire was eventually extinguished by rainfall, although fire crews were employed to fight it. This resulted in the much younger ages of trees found in this area. Due to the fire much of the soil and vegetative matter was burnt away which resulted in the numerous rocky outcrops and shallow soil that is typical of Georgian Bay.

Tree Species	%	Age	Average	Average	# stems/ha	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)		Area	
			for Comp.			(m²/ha)	
				By class		By class	
				for the		for the	
White Pine (Pw)				Comp.		Comp.	
Red Oak (Or)				10 - 25	No prism		

White Birch (Bw)		26 - 41	Sweep was	
Common juniper		42 - 49	Performed	
		50+		
Total				

**Summary of Tree Inventory**: Species Composition: N/A Height: N/A Age: N/A Basal Area: N/A

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment R2D						
Common Name	Scientific Name	Common Name	Scientific Name			
Bracken fern	Pteridium aquilinum	Pine sap	Monotropa hypopitys			
Bristly sarsparilla	Aralia hispida	Red oak	Quercus rubra			
Canada mayflower	Maianthemum canadense	Reindeer lichen	Cladina rangiferina			
Club moss sp	Lycopodium sp.	Rock tripe	Umbilicaria mammulata			
Common hairgrass	Deschampsia flexuosa	Skunk currant	Ribes glandulosum			
Common juniper	Juniperus communis	Staghorn sumac	Rhus typhina			
Common Polypody	Polypodium viginianum	Starflower	Trientalis borealis			
Coral lichen	Cladina stellaris	White birch	Betula papyrifera			
Cow wheat	Melampyrum lineare	White oak	Quercus alba			
Eastern white pine	Pinus stobus	Wild sarsparilla	Aralia nudicaulis			
False pixie cup	Cladonia chlorophaea	Wintergreen	Gaultheria procumbens			
Goldenrod sp.	Solidago sp.	Woodland strawberry	Fragaria vesca			
Low sweet blueberry	Vaccinium angustifolium					

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags		✓	
Cavity Trees			
- nesting/roosting		✓	
- feeding	<b>✓</b>		
- escape		$\checkmark$	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees	<b>√</b>		
Supercanopy Trees		✓	
Conifer Thickets		✓	Juniper forms dense
			bushes which provide
			some habitat for species
			such as five lined skink,
			Massassauga rattlesnake
Other Food Sources	<b>√</b>		Blueberry bushes
Surface Water			

<sup>\*</sup> common juniper density was not able to be determined but the coverage is quite dense in most areas.

- year round creek/pond		✓	Runoff collects in
- seasonal runoff	✓		depressions following
- seasonal pond		✓	rainfall
Dens or Dug Holes		✓	
Others			

Species	Season	Habitat	Comments	

### 7.6 Specific Compartment Objectives

### Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur

# **Short Term (5 Years)**

To continue to develop, maintain, and promote the hiking trail network. This will involve establishing new trails, and ensuring they are well marked and cleared for user safety. These trails will allow the Club members to have easy access to their forest, and may be used for interpretive nature hikes.

#### 7.7 Other Compartment Features

Compartment No.: R2E Area: 8.6 acres (3.44 ha)

### 7.1 General Description

This is small rock unit located north of Riddells Bay. It has an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. Scrubby white pines and red oaks grow in cracks and soil filled depressions in the rock. Extremely well drained due to the impermeability of the rock surface. Water collects in some depressions, creating fens, which provide suitable habitat for ferns, alders, and some other moist environment vegetation species.

There is insufficient tree coverage in this compartment for it to qualify for the forest management plan.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally bare, but some patches of thin soil with relict boulders

locally – generally <0.3 m thick. Also organic soil in surface

depressions.

Drainage: Rapid drainage on bare rock, with water collecting in depressions.

Topography: Low hills to 10 m local relief.

Water Features: Small fens supporting sedges, birches, poplars, and ferns.

Physical Features: None

Access: Year round on foot or by snowmobile.

Other Features:

#### 7.3 Compartment History

Throughout this section of the common property there was extensive logging in the late 19<sup>th</sup> century followed most likely by human and naturally caused fires on the large amounts of slash left over after logging. This is evident by the numerous burnt stumps found throughout the entire property. A fire burned for approximately six weeks in the months of July and August 1919, covering an area spanning from near Rabbit Lake (at the southeast end of compartment Wt1H), to behind the Trusler cottage on the shoreline west of this compartment. This fire was eventually extinguished by rainfall, although fire crews were employed to fight it. This resulted in the much younger ages of trees found in this area. Due to the fire much of the soil and vegetative matter was burnt away which resulted in the numerous rocky outcrops and shallow soil that is typical of Georgian Bay.

Tree Species	% Comp.	Age (Years)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
White Pine (Pw)			101 0011171	By class for the Comp.		By class for the Comp.	
Red Oak (Or)				10 – 25	No prism	•	
White Birch (Bw)				26 - 41	Sweep was		

Common juniper		42 – 49	Performed	
		50+		
Total				

# **Summary of Tree Inventory**:

Species Composition: N/A Age: N/A

Height: N/A Basal Area: N/A

### **Other Vegetation Assessment Table**

<b>Plant Species Inventor</b>	Plant Species Inventory: Compartment R2E							
Common Name	Scientific Name	Common Name	Scientific Name					
Bracken fern	Pteridium aquilinum	Pine sap	Monotropa hypopitys					
Bristly sarsparilla	Aralia hispida	Red oak	Quercus rubra					
Canada mayflower	Maianthemum canadense	Reindeer lichen	Cladina rangiferina					
Club moss sp	Lycopodium sp.	Rock tripe	Umbilicaria mammulata					
Common hairgrass	Deschampsia flexuosa	Skunk currant	Ribes glandulosum					
Common juniper	Juniperus communis	Staghorn sumac	Rhus typhina					
Common Polypody	Polypodium viginianum	Starflower	Trientalis borealis					
Coral lichen	Cladina stellaris	White birch	Betula papyrifera					
Cow wheat	Melampyrum lineare	White oak	Quercus alba					
Eastern white pine	Pinus stobus	Wild sarsparilla	Aralia nudicaulis					
False pixie cup	Cladonia chlorophaea	Wintergreen	Gaultheria procumbens					
Goldenrod sp.	Solidago sp.	Woodland strawberry	Fragaria vesca					
Low sweet blueberry	Vaccinium angustifolium							

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags		✓	
Cavity Trees			
- nesting/roosting		✓	
- feeding	✓		
- escape		<b>√</b>	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees	✓		
Supercanopy Trees		✓	
Conifer Thickets		✓	Juniper forms dense
			bushes which provide
			some habitat for species
			such as five lined skink,
			Massassauga rattlesnake
Other Food Sources	<b>√</b>		Blueberry bushes
Surface Water			
<ul> <li>year round creek/pond</li> </ul>		✓	Runoff collects in

<sup>\*</sup> common juniper density was not able to be determined but the coverage is quite dense in most areas.

- seasonal runoff	✓		depressions following
- seasonal pond		✓	rainfall
Dens or Dug Holes		✓	
Others			

Species	Season	Habitat	Comments

### 7.6 Specific Compartment Objectives

### Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur

### **Short Term (5 Years)**

To continue to develop, maintain, and promote the hiking trail network. This will involve establishing new trails, and ensuring they are well marked and cleared for user safety. These trails will allow the Club members to have easy access to their forest, and may be used for interpretive nature hikes.

#### 7.7 Other Compartment Features

Compartment No.: R2F Area: 16.7 acres (6.47 ha)

### 7.1 General Description

This rock compartment is located just south of Rabbit Lake. It has an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. Scrubby white pines and red oaks grow in cracks and soil filled depressions in the rock. Extremely well drained due to the impermeability of the rock surface. Water collects in some depressions, creating fens, which provide suitable habitat for ferns, alders, and some other moist environment vegetation species.

Common juniper bushes, white pines, and red oaks cover roughly 40% of the compartment, so only 6.68 acres (2.67 ha) are considered eligible under the MFTIP guidelines, while 10.02 acres are ineligible and are excleded from the plan.

### 7.2 Compartment Site Characteristics

Soil Type: Generally bare, but some patches of thin soil with relict boulders

locally – generally <0.3 m thick. Also organic soil in surface

depressions.

Drainage: Rapid drainage on bare rock, with water collecting in depressions.

Topography: Low hills to 10 m local relief.

Water Features: Small fens supporting sedges, birches, poplars, and ferns.

Physical Features: None

Access: Year round on foot or by snowmobile.

Other Features:

#### 7.3 Compartment History

Throughout this section of the common property there was extensive logging in the late 19<sup>th</sup> century followed most likely by human and naturally caused fires on the large amounts of slash left over after logging. This is evident by the numerous burnt stumps found throughout the entire property. A fire burned for approximately six weeks in the months of July and August 1919, covering an area spanning from near Rabbit Lake (at the southeast end of compartment Wt1H), to behind the Trusler cottage on the shoreline west of this compartment. This fire was eventually extinguished by rainfall, although fire crews were employed to fight it. This resulted in the much younger ages of trees found in this area. Due to the fire much of the soil and vegetative matter was burnt away which resulted in the numerous rocky outcrops and shallow soil that is typical of Georgian Bay. A local artist erected approximately 14 stone statues in a straight line, along a 1km stretch of outcrop in this compartment during the late 1980s.

Tree Species	% Comp.	Age (Years)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
				By class		By class	
				for the		for the	
White Pine (Pw)	40	102	14	Comp.		Comp.	

Red Oak (Or)	40		10 - 25	538.46	14.00	
White Birch (Bw)	10		26 - 41	94.12	8.00	
Common juniper	10		42 - 49	18.87	3.00	
			50+	0.00	0.00	
Total				651.45	25.00	

# **Summary of Tree Inventory**:

Species Composition: Pw4Or4Bw1Jun1 Age: 102 years Height: 14 m Basal Area: 25 m²/ha

# **Other Vegetation Assessment Table**

<b>Plant Species Inventor</b>	Plant Species Inventory: Compartment R2F						
Common Name	Scientific Name	Common Name	Scientific Name				
Black Cherry	Prunus serotina	Meadow sweet	Spirea alba				
Bracken fern	Pteridium aquilinum	Pine sap	Monotropa hypopitys				
Bristly sarsparilla	Aralia hispida	Red oak	Quercus rubra				
Canada mayflower	Maianthemum canadense	Reindeer lichen	Cladina rangiferina				
Club moss sp	Lycopodium sp.	Rock tripe	Umbilicaria mammulata				
Common hairgrass	Deschampsia flexuosa	Skunk currant	Ribes glandulosum				
Common juniper	Juniperus communis	Staghorn sumac	Rhus typhina				
Common Polypody	Polypodium viginianum	Starflower	Trientalis borealis				
Coral lichen	Cladina stellaris	White birch	Betula papyrifera				
Cow wheat	Melampyrum lineare	White oak	Quercus alba				
Eastern white pine	Pinus stobus	Wild sarsparilla	Aralia nudicaulis				
False pixie cup	Cladonia chlorophaea	Wintergreen	Gaultheria procumbens				
Goldenrod sp.	Solidago sp.	Woodland strawberry	Fragaria vesca				
Low sweet blueberry	Vaccinium angustifolium						

### 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags		✓	
Cavity Trees - nesting/roosting - feeding	✓ ·	✓	
- escape		$\checkmark$	
Stick Nests		✓	
Fallen Dead Trees (woody debris)		<b>√</b>	
Mast Trees	✓		
Supercanopy Trees		✓	
Conifer Thickets		<b>/</b>	Juniper forms dense bushes which provide some habitat for species such as five lined skink, Massassauga rattlesnake

<sup>\*</sup> common juniper density was not able to be determined but the coverage is quite dense in most areas.

Other Food Sources	<b>✓</b>		Blueberry bushes
Surface Water			
- year round creek/pond		<b>/</b>	Runoff collects in
- seasonal runoff	<b>✓</b>		depressions following
- seasonal pond		<b>V</b>	rainfall
Dens or Dug Holes		<i>J</i>	
Others			

Species	Season	Habitat	Comments
Massassauga Rattlesnake	Summer	Juniper	Basking
Five Lined Skink	Summer	Rocks	Basking

### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur

#### **Short Term (5 Years)**

To continue to develop, maintain, and promote the hiking trail network. This will involve establishing new trails, and ensuring they are well marked and cleared for user safety. These trails will allow the Club members to have easy access to their forest, and may be used for interpretive nature hikes.

#### 7.7 Other Compartment Features

Compartment No.: R2G Area: 10.5 acres (4.2 ha)

### 7.1 General Description

This rock unit is located on the eastern border of the club land, south of Go Home River. It has an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. Scrubby white pines and red oaks grow in cracks and soil filled depressions in the rock. It is extremely well drained, due to the impermeability of the rock surface. Water collects in some depressions, creating fens, which provide suitable habitat for ferns, alders, and some other moist environment vegetation species. There are several small pools of water scattered over the rock surface that are home to numerous frog species and are undoubtedly significant habitat.

Common juniper bushes, white pines, and red oaks cover roughly 20% of the compartment, so only 2.1 acres (0.84 ha) are considered eligible under the MFTIP guidelines, while 8.4 acres are considered ineligible to be included in the management plan and have been excluded.

### 7.2 Compartment Site Characteristics

Soil Type: Generally bare, but some patches of thin soil with relict boulders

locally – generally <0.3 m thick. Also organic soil in surface

depressions.

Drainage: Rapid drainage on bare rock, with water collecting in depressions.

Topography: Low hills to 10 m local relief.

Water Features: Small fens supporting sedges, birches, poplars, and ferns.

Physical Features: None

Access: Year round on foot or by snowmobile.

Other Features:

#### 7.3 Compartment History

Throughout this section of the common property there was extensive logging in the late 19<sup>th</sup> century followed most likely by human and naturally caused fires on the large amounts of slash left over after logging. This is evident by the numerous burnt stumps found throughout the entire property.

Tree Species	% Comp.	Age (Years)	Average Height (m) for Comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
				By class		By class	
				for the		for the	
White Pine (Pw)	30	93	13	Comp.		Comp.	
Red Oak (Or)	30			10 – 25	596.15	15.50	
White Birch (Bw)	20			26 – 41	82.35	7.00	
Common juniper	20			42 – 49	12.58	2.00	
				50+	0.00	0.00	
Total					691.09	24.50	

# **Summary of Tree Inventory**:

Species Composition: Pw3Or3Bw2Jun2

Age: 93 years Basal Area: 24.5 m<sup>2</sup>/ha Height: 13 m

# **Other Vegetation Assessment Table**

Plant Species Inventor	Plant Species Inventory: Compartment R2G				
Common Name	Scientific Name	Common Name	Scientific Name		
Black Cherry	Prunus serotina	Meadow sweet	Spirea alba		
Bracken fern	Pteridium aquilinum	Pine sap	Monotropa hypopitys		
Bristly sarsparilla	Aralia hispida	Red oak	Quercus rubra		
Canada mayflower	Maianthemum canadense	Reindeer lichen	Cladina rangiferina		
Club moss sp	Lycopodium sp.	Rock tripe	Umbilicaria mammulata		
Common hairgrass	Deschampsia flexuosa	Skunk currant	Ribes glandulosum		
Common juniper	Juniperus communis	Staghorn sumac	Rhus typhina		
Common Polypody	Polypodium viginianum	Starflower	Trientalis borealis		
Coral lichen	Cladina stellaris	White birch	Betula papyrifera		
Cow wheat	Melampyrum lineare	White oak	Quercus alba		
Eastern white pine	Pinus stobus	Wild sarsparilla	Aralia nudicaulis		
False pixie cup	Cladonia chlorophaea	Wintergreen	Gaultheria procumbens		
Goldenrod sp.	Solidago sp.	Woodland strawberry	Fragaria vesca		
Low sweet blueberry	Vaccinium angustifolium				

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags		✓	
Cavity Trees		,	
- nesting/roosting		•	
- feeding	<b>7</b>	,	
- escape		<b>✓</b>	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees	✓		
Supercanopy Trees		✓	
Conifer Thickets		✓	Juniper forms dense
			bushes which provide
			some habitat for species
			such as five lined skink,
			Massassauga rattlesnake
Other Food Sources	✓		Blueberry bushes
Surface Water			
<ul> <li>year round creek/pond</li> </ul>		✓	Runoff collects in
- seasonal runoff	✓		depressions following
- seasonal pond		✓	rainfall

<sup>\*</sup> common juniper density was not able to be determined but the coverage is quite dense in most

Dens or Dug Holes	✓	
Others		

Species	Season	Habitat	Comments

### 7.6 Specific Compartment Objectives

# Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur

### **Short Term (5 Years)**

To continue to develop, maintain, and promote the hiking trail network. This will involve establishing new trails, and ensuring they are well marked and cleared for user safety. These trails will allow the Club members to have easy access to their forest, and may be used for interpretive nature hikes.

#### 7.7 Other Compartment Features

Compartment No.: R3 Area: A: 21.2 acres (8.48 ha)

B: 3.3 acres (1.32 ha)

#### 7.1 General Description

These are open rocky compartments, located in the northeast end of the property, which form broad slopes that drain into W8. They have an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. Scrubby white pines, red oaks and white oaks, grow in cracks and soil filled depressions in the rock. White birch can also be found on the west side of R3A, adjacent to the wetland. These compartments are extremely well drained due to the impermeability of the rock surface. Water collects in some depressions, creating fens, which provide suitable habitat for ferns, alders, and some other moist environment vegetation species.

There is insufficient forest coverage to include these in the managed forest plan. However, management activities will still take place in this comaprtment

### 7.2 Compartment Site Characteristics

Soil Type: Generally bare, but some patches of thin soil with relict boulders

locally – generally <0.3 m thick. Also organic soil in surface

depressions

Drainage: Rapid drainage on bare rock, with water collecting in depressions

Topography: Top of hill - flat to low slope 5 m local relief

Water Features: Small fens supporting sedges, birches, poplars, and ferns.

Physical Features: None

Access: Year round on foot or by snowmobile.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	# stems/ha	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)		Area	
			for Comp.			(m <sup>2</sup> /ha)	
				By class		By class	
				for the		for the	
White Pine (Pw)				Comp.		Comp.	
Red Oak (Or)				10 - 25	No prism		
White Oak (Ow)				26 – 41	Sweep was		
Red Maple (Ms)				42 – 49	Performed		
				50+			
Total							

#### **Summary of Tree Inventory:**

Species Composition: N/A Age: N/A

Height: N/A Basal Area: N/A

# **Other Vegetation Assessment Table**

<b>Plant Species Inventor</b>	Plant Species Inventory: Compartment R3A & B				
Common Name	Scientific Name	Common Name	Scientific Name		
Black Cherry	Prunus serotina	Meadow sweet	Spirea alba		
Bracken fern	Pteridium aquilinum	Pine sap	Monotropa hypopitys		
Bristly sarsparilla	Aralia hispida	Red oak	Quercus rubra		
Canada mayflower	Maianthemum canadense	Reindeer lichen	Cladina rangiferina		
Club moss sp	Lycopodium sp.	Rock tripe	Umbilicaria mammulata		
Common hairgrass	Deschampsia flexuosa	Skunk currant	Ribes glandulosum		
Common juniper	Juniperus communis	Staghorn sumac	Rhus typhina		
Common Polypody	Polypodium viginianum	Starflower	Trientalis borealis		
Coral lichen	Cladina stellaris	White birch	Betula papyrifera		
Cow wheat	Melampyrum lineare	White oak	Quercus alba		
Eastern white pine	Pinus stobus	Wild sarsparilla	Aralia nudicaulis		
False pixie cup	Cladonia chlorophaea	Wintergreen	Gaultheria procumbens		
Goldenrod sp.	Solidago sp.	Woodland strawberry	Fragaria vesca		
Low sweet blueberry	Vaccinium angustifolium				

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		On the edge of W8
Cavity Trees			
- nesting/roosting		$\checkmark$	
- feeding		✓.	
- escape		<b>√</b>	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees			
Supercanopy Trees		✓	
Conifer Thickets		✓	Juniper forms dense
			bushes which provide
			habitat for five lined skink,
			Massassauga rattlesnake
Other Food Sources	✓		Blueberries
Surface Water			
<ul> <li>year round creek/pond</li> </ul>		✓	
- seasonal runoff	✓		Following rainfall, in
- seasonal pond		✓	depressions
Dens or Dug Holes		✓	
Others	1		Large boulders and juniper provide habitat

# Wildlife Species Noted

Species Season Habitat	Comments
------------------------	----------

Massassauga rattlesnake	Summer	Open rock and under	Observed in open area	
		boulders	near large boulder in R3A	
Black bear	Summer	Forest	Observed bear scat	

### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur.

### **Short Term (5 Years)**

To examine the potential of developing a trail system extending into the northern mainland portion of the Club property, connecting this compartment to others as far north as W10 and Iron City Bay, and inland to Crown lands. This compartment would also make an interesting stop along an interpretive nature trail, as it is different than the surrounding forest in the area.

#### 7.7 Other Compartment Features

Compartment No.: R4 Area: 3.1 acres (1.24 ha)

### 7.1 General Description

This is a small rock compartment located in the southern part of the common property. It extends from behind several cottage properties inland into forest compartment W1. It is bordered to the north by the limits of the club property. It has an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. There is a forest pocket located in the centre of the compartment that consists of scrubby white pines and red oaks. It is extremely well drained due to the impermeability of the rock surface. Water collects in some depressions, creating fens, which provide suitable habitat for ferns, alders, and some other moist environment vegetation species.

There is insufficient tree coverage to include this compartment in the managed forest plan. However, management activities will still take place in this comaprtment.

### **7.2 Compartment Site Characteristics**

Soil Type: Generally bare, but some patches of thin soil with relict boulders

locally – generally <0.3 m thick. Also organic soil in surface

depressions.

Drainage: Rapid drainage on bare rock, with water collecting in depressions.

Topography: Low hills to 10 m local relief.

Water Features: Small fens supporting sedges, birches, poplars, and ferns. Beside

small bay on Georgian Bay.

Physical Features: None

Access: Year round on foot or by snowmobile.

Other Features:

#### 7.3 Compartment History

Throughout this section of the common property there was extensive logging in the late 19<sup>th</sup> century followed most likely by human and naturally caused fires on the large amounts of slash left over after logging. This is evident by the numerous burnt stumps found throughout the entire property.

Tree Species	%	Age	Average	Average	# stems/ha	Basal	Comments
	Comp.	(Years)	Height (m)	DBH (cm)		Area	
			for Comp.			(m <sup>2</sup> /ha)	
				By class		By class	
				for the		for the	
White Pine (Pw)				Comp.		Comp.	
Red Oak (Or)				10 - 25	No prism		
White Birch (Bw)				26 – 41	Sweep was		
Common juniper				42 – 49	Performed		
				50+			
Total							

**Summary of Tree Inventory: Species Composition:** N/A

Species Composition: N/A
Height: N/A
Basal Area: N/A

# **Other Vegetation Assessment Table**

<b>Plant Species Invento</b>	Plant Species Inventory: Compartment R4						
Common Name	Scientific Name	Common Name	Scientific Name				
Black huckleberry	Gaylussucia baccata	Low sweet blueberry	Vaccinium angustifolium				
Bracken fern	Pteridium aquilinum	Pink lady slipper	Cypripedium acaule				
Canada mayflower	Maianthemum canadense	Red maple	Acer rubrum				
Club moss sp	Lycopodium sp.	Red oak	Quercus rubra				
Common hairgrass	Deschampsia flexuosa	Reindeer lichen	Cladina rangiferina				
Common juniper	Juniperus communis	Rock tripe	Umbilicaria mammulata				
Common Polypody	Polypodium viginianum	Starflower	Trientalis borealis				
Cow wheat	Melampyrum lineare	White oak	Quercus alba				
Eastern white pine	Pinus stobus	Wild sarsparilla	Aralia nudicaulis				
False pixie cup	Cladonia chlorophaea						

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		
Cavity Trees		,	
- nesting/roosting			
- feeding			
- escape		· ·	
Stick Nests		<b>√</b>	
Fallen Dead Trees		<b>✓</b>	
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	Juniper forms dense
			bushes which provide
			some habitat for species
			such as five lined skink,
			Massassauga rattlesnake
Other Food Sources	✓		Blueberry bushes
Surface Water			
<ul> <li>year round creek/pond</li> </ul>		✓	Runoff collects in
- seasonal runoff	✓		depressions following
- seasonal pond		✓	rainfall
Dens or Dug Holes		✓	
Others			

# **Wildlife Species Noted**

Species	Season	Habitat	Comments

### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur

#### **Short Term (5 Years)**

To continue to develop, maintain, and promote the hiking trail network. This will involve establishing new trails, and ensuring they are well marked and cleared for user safety. These trails will allow the Club members to have easy access to their forest, and may be used for interpretive nature hikes.

### 7.7 Other Compartment Features

This rock unit is located on a small bay on Georgian Bay.

Compartment No.: R5 Area: A: 10.5 acres (4.2 ha)

B: 2.5 acres (1.0 ha) C: 7.4 acres (2.96 ha) D: 7.4 acres (2.96 ha) E: 6.2 acres (2.48 ha)

#### 7.1 General Description

This is an open rocky compartment on Big Island, surrounded by W14L and W14J. It has an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. Scrubby white pines, red oaks and white oaks grow in variable sized pockets that connect with the surrounding forest cover but are intermittently broken up by rocky openings. It is extremely well drained due to the impermeability of the rock surface. Water collects in some depressions, creating fens, which provide suitable habitat for ferns, alders, and some other moist environment vegetation species.

Common juniper bushes, white pines, and red oaks cover approximately 10% of each compartment. Therefore only 1.05 acres of R5A, 0.25 acres of R5B, 0.74 acres of R5C, 0.74 acres of R5D and 0.62 acres of R5E are considered eligible under the MFTIP guidelines. The rest of these compartments do not meet the eligibility requirements for the management plan and are excluded (9.45 acres of R5A, 2.25 acres of R5B, 6.66 acres of both R5C and R5D, and 5.58 acres of R5E).

### 7.2 Compartment Site Characteristics

Soil Type: Generally bare, but some patches of thin soil with relict boulders

locally – generally <0.3 m thick. Also organic soil in surface

depressions.

Drainage: Rapid drainage on bare rock, with water collecting in depressions.

Topography: Low hills up to 5 m local relief.

Water Features: Small fens supporting sedges, birches, poplars, and ferns.

Physical Features: None

Access: Year round on foot or by snowmobile.

Other Features:

#### 7.3 Compartment History

Throughout this section of the common property there was extensive logging in the late 19<sup>th</sup> century followed most likely by human and naturally caused fires on the large amounts of slash left over after logging. This is evident by the numerous burnt stumps found throughout the entire property.

Tree Species	%	Age	Average	Average	# stems/ha	Basal	Comments
	Comp	(Years)	Height (m)	DBH (cm)		Area	
			for comp.			(m <sup>2</sup> /ha)	

				By class for the		By class for the	
White Pine (Pw)	50	101	15	Comp.		Comp.	
Red Oak (Or)	30			10 - 25	487.18	12.67	
White Oak (Ow)	20			26 – 41	70.59	6.00	
				42 – 49	16.77	2.67	
				50+	0.00	0.00	
Total					574.54	21.33	

# **Summary of Tree Inventory:**

Species Composition: Pw5Or3Ow2

Age: 101 years Basal Area: 21.33 m<sup>2</sup>/ha Height: 15 m

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment R5 A,B,C,D,E,F					
Common Name	Scientific Name	Common Name	Scientific Name		
Black cherry	Prunus serotina	Hairy Solomon's seal	Polygonatum pubescens		
Black huckleberry	Gaylussucia baccata	Low sweet blueberry	Vaccinium angustifolium		
Bristly sarsparilla	Aralia hispida	Meadow sweet	Spiraea alba/latifolia		
Canada mayflower	Maianthemum canadense	Pale corydalis	Corydalis sempervirens		
Club moss sp	Lycopodium sp.	Pin cushion moss	Leucobryum glaucum		
Common blackberry	Rubus allegheniensis	Pink lady slipper	Cypripedium acaule		
Common hairgrass	Deschampsia flexuosa	Red maple	Acer rubrum		
Common juniper	Juniperus communis	Red oak	Quercus rubra		
Common Polypody	Polypodium viginianum	Reindeer lichen	Cladina rangiferina		
Coral lichen	Cladina stellaris	Rock tripe	Umbilicaria mammulata		
Dandelion	Taraxacum officinale	Sheep sorel	Rumex acetosella		
Eastern white pine	Pinus stobus	White oak	Quercus alba		
False pixie cup	Cladonia chlorophaea				

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		On edge of W14J & W14L
Cavity Trees			
- nesting/roosting		✓	
- feeding		✓.	
- escape		✓	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees			
Supercanopy Trees		✓	
Conifer Thickets		✓	Juniper forms dense
			bushes which provide
			some habitat for species

133

<sup>\*</sup> common juniper density was not able to be determined but the coverage is quite dense in most areas.

			such as five lined skink, Massassauga rattlesnake
Other Food Sources	✓		Blueberries
Surface Water - year round creek/pond - seasonal runoff - seasonal pond	<b>√</b>	✓ ✓	Following rainfall, in depressions
Dens or Dug Holes		✓	
Others			

Species	Season	Habitat	Comments
Fox snake	Summer	Forest edge and open	Observed in small patch of
		rocky clearings	grass between rocky
			clearings on edge of W11

### 7.6 Specific Compartment Objectives

### Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur

#### **Short Term (5 Years)**

This area will be assessed for use as a recreational resource, through the development of an interconnecting network of canoe routes, trails and portages. These will encourage the use of the island by Club members. The sphagnum mats present along the shorelines of L1 represent an excellent site for nature interpretation, as well as bird and animal watching.

#### 7.7 Other Compartment Features

Compartment No.: R5 Area: F: 9.3 acres (3.72 ha)

G: 16.7 acres (6.68 ha) H: 3.1 acres (1.24 ha)

#### 7.1 General Description

This is an open rocky compartment on Big Island, surrounded by W11C. It has an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. Scrubby white pines, red oaks and white oaks grow in cracks and soil filled depressions in the rock which range in size from a few squarte meters to almost an acre. It is extremely well drained due to the impermeability of the rock surface. Water collects in some depressions, creating fens, which provide suitable habitat for ferns, alders, and some other moist environment vegetation species.

Common juniper bushes, white pines, and red oaks cover approximately 50% of each compartment. Therefore only 4.65 acres (1.86 ha) of R5F, 8.35 acres (3.34 ha) of R5G, and 1.55 acres (0.62 ha) of R5H are considered eligible under the MFTIP guidelines, while 4.65 acres, 8.35 acres and 1.55 acres will be excluded from R5F, R5G, and R5H respectively due to their lack of tree coverage.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally bare, but some patches of thin soil with relict boulders

locally – generally <0.3 m thick. Also organic soil in surface

depressions

Drainage: Rapid drainage on bare rock, with water collecting in depressions

Topography: Top of hill to 5 m local relief

Water Features: Small fens supporting sedges, birches, poplars, and ferns, adjacent

to wetlands Wt2F and Wt2G, and Burwash Lake (L1A)

Physical Features: None

Access: Year round on foot or by snowmobile.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

Tree Species	%	Age	Average	Average	# stems/ha	Basal	Comments
	Comp	(Years)	Height (m)	DBH (cm)		Area	
			for comp.			(m <sup>2</sup> /ha)	
				By class		By class	
				for the		for the	
White Pine (Pw)	60	95	14.5	Comp.		Comp.	
Red Oak (Or)	20			10 - 25	538.46	14.00	
White Oak (Ow)	20			26 – 41	70.59	6.00	
				42 – 49	12.58	2.00	
				50+	0.00	0.00	

Total			621.63	22.00	

**Summary of Tree Inventory**: Species Composition: Pw6Or2Ow2

Age: 95 years Basal Area: 22 m<sup>2</sup>/ha Height: 14.5 m

# **Other Vegetation Assssment Table**

Plant Species Inventor	Plant Species Inventory: Compartment R5 F,G,H						
Common Name	Scientific Name	Common Name	Scientific Name				
Black cherry	Prunus serotina	Hairy Solomon's seal	Polygonatum pubescens				
Black huckleberry	Gaylussucia baccata	Low sweet blueberry	Vaccinium angustifolium				
Bristly sarsparilla	Aralia hispida	Meadow sweet	Spiraea alba/latifolia				
Canada mayflower	Maianthemum canadense	Pale corydalis	Corydalis sempervirens				
Club moss sp	Lycopodium sp.	Pin cushion moss	Leucobryum glaucum				
Common blackberry	Rubus allegheniensis	Pink lady slipper	Cypripedium acaule				
Common hairgrass	Deschampsia flexuosa	Red maple	Acer rubrum				
Common juniper	Juniperus communis	Red oak	Quercus rubra				
Common Polypody	Polypodium viginianum	Reindeer lichen	Cladina rangiferina				
Coral lichen	Cladina stellaris	Rock tripe	Umbilicaria mammulata				
Dandelion	Taraxacum officinale	Sheep sorel	Rumex acetosella				
Eastern white pine	Pinus stobus	White oak	Quercus alba				
False pixie cup	Cladonia chlorophaea						

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		On edge of W11C
Cavity Trees			
- nesting/roosting		✓	
- feeding		<b>√</b>	
- escape		<b>✓</b>	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees			
Supercanopy Trees		✓	
Conifer Thickets		✓	Juniper forms dense
			bushes which provide
			some habitat for species
			such as five lined skink,
			Massassauga rattlesnake
Other Food Sources	✓		Blueberries
Surface Water			
- year round creek/pond		✓	
- seasonal runoff	✓		Following rainfall, in
- seasonal pond		✓	depressions

<sup>\*</sup> common juniper density was not able to be determined but the coverage is quite dense in most areas.

Dens or Dug Holes	✓	
Others		

Species	Season	Habitat	Comments
Fox snake	Summer	Forest edge and open rocky clearings	Observed in small patch of grass between rocky clearings on edge of W11C

### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur.

#### **Short Term (5 Years)**

This area will be assessed for use as a recreational resource, through the development of an interconnecting network of canoe routes, trails and portages. These will encourage the use of the island by Club members. The sphagnum mats present along the shorelines of L1 represent an excellent site for nature interpretation, as well as bird and animal watching.

### 7.7 Other Compartment Features

Compartment No.: R6 Area: 46.8 acres (18.72 ha)

### 7.1 General Description

This is an open rocky compartment located on the west side of Long Island. It is directly adjacent to Georgian Bay, and has an incomplete cover of common juniper, low sweet blueberry, reindeer lichen and moss. Scrubby white pines, red oaks, and red maples grow in cracks and soil filled depressions in the rock. It is extremely well drained due to the impermeability of the rock surface. Water collects in some depressions, creating fens, which provide suitable habitat for ferns, alders, and some other moist environment vegetation species.

Along the shoreline there are small pools which are maintained through the year, and are continually flushed by wave action. Tadpoles were observed in these pools.

This compartment is exposed to weather blowing off Georgian Bay, has very little soil cover, and is generally unvegetated. Since common juniper bushes, white pines, and red oaks cover less than 10% of the area, this compartment is not considered to be eligible under the MFTIP guidelines. It should, however, be assessed as an important wildlife habitat or conservation land, as it maintains small pools and ponds which are important breeding habitats for frogs, and acts as a wind break for the rest of the property.

This compartment is often used for recreation, hiking, and swimming, and several stone fireplaces can be found along the shoreline. Small campfires, bonfires and picnics take place here, and it is a popular destination for Club members.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally bare, but some patches of very thin soil with relict

boulders locally – generally <0.3 m thick. Also organic soil in

surface depressions

Drainage: Rapid drainage on bare rock, with water collecting in depressions

Topography: Low hills to 5 m local relief

Water Features: Small fens supporting sedges, birches, poplars, berry bushes, and

ferns.

Physical Features: None

Access: Year round. On foot from the east side of the island, or by boat.

Cottagers on the east side have formed several trails. These are marked with small stone markers of the island, and terminate at

various places along the west side of the compartment.

Other Features: There is a stone monument/sculpture located in the middle of the

compartment. Built by one of the Club members, it consists of two

large boulders on end, creating a 'gateway'.

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

# 7.4 Compartment Inventory

Tree Species	%	Age	Average	Average	# stems/ha	Basal	Comments
	Comp	(Years)	Height (m)	DBH (cm)		Area	
			for comp.			(m <sup>2</sup> /ha)	
				By class		By class	
				for the		for the	
White Pine (Pw)				Comp.		Comp.	
Red Oak (Or)				10 - 25	No prism		
White Oak (Ow)				26 – 41	Sweep was		
Red Maple (Ms)				42 – 49	Performed		
				50+			
Total							

**Summary of Tree Inventory**: Species Composition: N/A Height: N/A

Age: N/A Basal Area: N/A

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment R6						
Common Name	Scientific Name	Common Name	Scientific Name			
Black cherry	Prunus serotina	Hairy Solomon's seal	Polygonatum pubescens			
Black huckleberry	Gaylussucia baccata	Low sweet blueberry	Vaccinium angustifolium			
Bristly sarsparilla	Aralia hispida	Meadow sweet	Spiraea alba/latifolia			
Canada mayflower	Maianthemum canadense	Pale corydalis	Corydalis sempervirens			
Club moss sp	Lycopodium sp.	Pin cushion moss	Leucobryum glaucum			
Common blackberry	Rubus allegheniensis	Pink lady slipper	Cypripedium acaule			
Common hairgrass	Deschampsia flexuosa	Red maple	Acer rubrum			
Common juniper	Juniperus communis	Red oak	Quercus rubra			
Common Polypody	Polypodium viginianum	Reindeer lichen	Cladina rangiferina			
Coral lichen	Cladina stellaris	Rock tripe	Umbilicaria mammulata			
Dandelion	Taraxacum officinale	Sheep sorel	Rumex acetosella			
Eastern white pine	Pinus stobus	White oak	Quercus alba			
False pixie cup	Cladonia chlorophaea					

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags		<b>✓</b>	
Cavity Trees			
- nesting/roosting		✓	
- feeding		<b>/</b>	
- escape		<b>/</b>	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		<b>✓</b>	
Conifer Thickets		<b>✓</b>	Juniper forms dense

139

			bushes which provide some habitat for species such as five lined skink, Massassauga rattlesnake
Other Food Sources	✓		Blueberry and blackberry
Surface Water - year round creek/pond - seasonal runoff - seasonal pond	<i>' ' '</i>		Small pools along the shoreline which are maintained by wave action, as well as pools which collect rainfall
Dens or Dug Holes		<b>y</b>	
Others			

Species	Season	Habitat	Comments
Ring billed gulls	Summer	Shoreline	
Common terns	Summer	Shoreline	

### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wildlife area for all types of wildlife. No management activities need to occur.

### **Short Term (5 Years)**

The Club will examine the potential to have the area classified as a significant wetland habitat, or conservation land.

The Club will consider developing permanent picnic facilities, such as fire pits and picnic tables, to improve the human and environmental safety, and to reduce the impact of using this area on the forest

This unique area provides an excellent example of the Georgian Bay and Atlantic Coast ecosystems, and will continue to be used by the Club for interpretive nature walks and rock walks. These efforts will serve to heighten the awareness and appreciation of the Club for their surroundings, and encourage them to take advantage of the natural resource for education and recreation.

#### 7.7 Other Compartment Features

Compartment No.: Wt1A Area: 9.5 acres (3.8 ha)

#### 7.1 General Description

This wetland compartment, surrounded by compartment W1, is an area of open water. There are some snags along the shoreline, at the edge of the forest, but this compartment is not considered to be eligible for the MFTIP program.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally a clay to silty base with up to 0.15 m of sand overlain by

peat and muck

Drainage: Poor

Topography: A basinal area with gently sloping edges

Water Features: Standing water

Physical Features: None

Access: Year round by foot or snowmobile.

### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp.	Age (Years)	Average Height (m)	Average Diameter Breast Height (cm)	# stems/ha	Basal Area (m²/ha)	Comments
Tamarack				By class for the Comp.		By class for the Comp.	
White spruce				10 – 25	No prism	•	
White pine				26 – 41	Sweep was		
				42 - 49	Conducted		
				50+			
Total							

#### **Summary of Tree Inventory:**

Species Composition: N/A Age: N/A

Height: N/A Basal Area: N/A

#### **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt1A						
Common Name Scientific Name Common Name Scientific Name						
Bunchberry	Cornus canadensis	Pickerelweed	Pontederia cordata			
Common Cattail	Typha latifolia	Red maple	Acer rubrus			
Common Blackberry	Rubus allegheniensis	Red Oak	Quercus rubra			

Fragrant White Water Lily	Nymphaea odorata	Red Osier Dogwwod	Cornus stolonifera
Goldenrod sp.	Solidago sp.	Speckeled Alder	Alnus incana
Jewelweed	Impatiens capensis	Sphagnum	Sphagnum sp.
Leatherleaf	Chamaedaphne calyculata	Tamarack	Larix laricana
Marsh Fern	Thelypteris palustris	White birch	Betula papyrifera
Marsh St. Johns Wort	Triadenum fraseri	White Spruce	Picea glauca
Meadow sweet	Spirea alba/latifolia	Winterberry holly	Ilex verticillata
Northern bugleweed	Lycopus uniflorus	Yellow Pond Lily	Nuphar variegatum
Northern wild raisin	Viburnum cassinoides		

#### 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White pine
Cavity Trees			
- nesting/roosting		✓	
- feeding	✓		-White pine
- escape		<b>√</b>	
Stick Nests		✓	
Fallen Dead Trees		$\checkmark$	
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water			
- year round creek/pond	✓		
- seasonal runoff		✓.	
- seasonal pond		<b>√</b>	
Dens or Dug Holes		✓	
Others			

### **Wildlife Species Noted**

Species Season		Habitat	Comments	
Beaver	Summer	Water	Lodge and dams	

#### 7.6 Specific Compartment Objectives

# Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place.

#### **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

#### 7.7 Other Compartment Features

Compartment No.: Wt1B Area: 15.1 acres (6.04 ha)

### 7.1 General Description

This wetland compartment is surrounded by compartment W2, and is comprised of densely holly and alder with some white pine, white spruce and tamarack. The density of holly trees in the centre area is roughly 7 stems/10 m², although this coverage does not extend throughout the entire compartment. The vegetation consists of tamarack and white spruce with DBH values between 10 and 20 cm, along with a dense cover of leatherleaf, Meadow sweet and pond lilies. There are some snags along the shoreline at the edge of the forest, many of which are white pine.

This compartment represents an excellent breeding area for duck and herpetofaunal species, and also contains a beaver lodge.

### 7.2 Compartment Site Characteristics

Soil Type: Generally a clay to silty base with up to 0.15 m of sand overlain by

peat and muck

Drainage: Poor

Topography: A basinal area with gently sloping edges

Water Features: Standing water

Physical Features: None

Access: Year round by foot or snowmobile.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

### 7.4 Compartment Inventory

Tree Species	% Comp.	Age (Years)	Average Height (m)	Average Diameter Breast Height	# stems/ha	Basal Area (m²/ha)	Comments
				(cm)			
				By class		By class	
				for the		for the	
Tamarack (T)	30	75	16	Comp.		Comp.	
White spruce (Sw)	30			10 - 25	576.92	15.00	
White pine (Pw)	30			26 – 41	82.35	7.00	
Red Maple (Ms)	10			42 – 49	0.00	0.00	
				50+	0.00	0.00	
Total					659.28	22.00	

**Summary of Tree Inventory:** 

Species Composition: T3Sw3Pw3Ms1 Age: 75 years

Height: 16 m Basal Area: 22 m<sup>2</sup>/ha

## **Tree Regeneration Assessment Table**

Stage of Development	Species	Quantity	Pattern of Distribution
	Tamarack (T)	Little	Scattered
Early	White birch (Bw)	Little	Scattered
(>0.5 m tall)	White Spruce (Sw)	Little	Scatterd
	Winterberry Holly (Hw)	Ample	Uniform
	Tamarack	Little	Scattered
	Speckled alder (As)	Little	Scattered
Advanced	White birch	Little	Scattered
(>0.5 m tall)	White spruce	Little	Scattered
	White pine (Pw)	Some	Scattered
	Winterberry holly (Hw)	Ample	Uniform

Note Quantity: little < 10%

Ample 31-60%

some 11 – 30% heavy >60%

Pattern of Distribution: scattered

uniform

patchy

#### **Summary of Tree Inventory:**

Species Composition: Hw5Pw2Ps1Bw1Sw1 Age: 76 years

Height: Variable (Hw – 5 m; Pw 14 m) Densitities\*: Hw: 614 stems/ha As: 463 stems/ha

### **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt1B						
Common Name	Scientific Name	Common Name	Scientific Name			
American Bugleweed	Lycopus americanus	Pickerel Plant	Pontederia cordata			
Common Cattail	Typha latifolia	Red maple	Acer rubrus			
Fragrant White Water Lily	Nymphaea odorata	Red Oak	Quercus rubra			
Goldenrod sp.	Solidago sp.	Red Osier Dogwwod	Cornus stolonifera			
Jewelweed	Impatiens capensis	Speckeled Alder	Alnus incana			
Leatherleaf	Chamaedaphne calyculata	Sphagnum sp.	Sphagnum sp.			
Marsh Fern	Thelypteris palustris	Tamarack	Larix laricana			
Marsh St. Johns Wort	Triadenum fraseri	White birch	Betula papyrifera			
Meadow sweet	Spirea alba/latifolia	White Spruce	Picea glauca			
Northern bugleweed	Lycopus uniflorus	Winterberry holly	Ilex verticillata			
Northern wild raisin	Viburnum cassinoides	Yellow Pond Lily	Nuphar variegatum			

### 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	<b>√</b>		White pine, white spruce
Cavity Trees - nesting/roosting - feeding - escape	<i>'</i>		-White pine
Stick Nests		<b>√</b>	
Fallen Dead Trees		✓ ·	

<sup>\*</sup> densities were determined by counting the number of stems in a 10 m<sup>2</sup> quadrat randomly placed 4 times throughout the compartment

(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water - year round creek/pond	✓		Open water around the edges of the compartment,
- seasonal runoff		✓.	with dense vegetation in
- seasonal pond		✓	the middle.
Dens or Dug Holes	·	✓	
Others			

### **Wildlife Species Noted**

Species	Season	Habitat	Comments
Beaver	Summer	Swamp edge	Beaver lodge observed

### 7.6 Specific Compartment Objectives

### Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place.

### **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

### 7.7 Other Compartment Features

Compartment No.: Wt1C Area: 12.4 acres (4.96 ha)

### 7.1 General Description

This wetland compartment lies at the north end of compartment W2 and opens up into Lake St. Patrick at its western end. It is comprised of areas of open water and dense vegetation with a tree density of approximately 6 stems/m². The majority of the trees in the wetland are speckled alder, winterberry holly and white pine, and marsh ferns and sphagnum mosses grow along the edge. There are some snags along the shoreline at the edge of the forest, most of which are white pine. This compartment represents an excellent breeding area for duck and herpetofaunal species.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally a clay to silty base with up to 0.15 m of sand overlain by

peat and muck

Drainage: Poor

Topography: A basinal area with gently sloping edges

Water Features: Standing water

Physical Features: None

Access: Year round by foot or snowmobile.

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

#### **Tree Regeneration Assessment Table**

Stage of Development	Species	Quantity	Pattern of Distribution
	Mountain Holly (Hm)	Ample	Uniform
Early	Tamarack (T)	Little	Scattered
(>0.5 m tall)	White birch (Bw)	Ample	Uniform
	Winterberry Holly (Hw)	Ample	Uniform
	Mountain Holly (Hm)	Ample	Uniform
	Tamarack	Little	Scattered
Advanced	Speckled alder (As)	Little	Scattered
(>0.5 m tall)	White birch	Little	Scattered
	White pine (Pw)	Some	Scattered
	Winterberry holly (Hw)	Ample	Uniform

Note Quantity: little < 10% some 11 - 30%

Ample 31-60% heavy >60%

#### **Summary of Tree Inventory:**

Species Composition: Hw5Pw2Ps1Bw1Sw1 Age: 76 years

Height: Variable (Hw 5 m; Pw 14 m) Densitities\*: Hw: 765 stems/ha

Hm: 683 stems/ha As: 261 stems/ha

uniform

patchy

Pattern of Distribution: scattered

\* densities were determined by counting the number of stems in a  $10~\text{m}^2$  quadrat randomly placed 4 times throughout the compartment

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt1C					
Common Name	Scientific Name	Common Name	Scientific Name		
American Bugleweed	Lycopus americanus	Northern bugleweed	Lycopus uniflorus		
Common Cattail	Typha latifolia	Northern wild raisin	Viburnum cassinoides		
Dense Cottongrass	Eriophorum vaginatum	Pickerel Plant	Pontederia cordata		
Fragrant White Water Lily	Nymphaea odorata Red maple		Acer rubrus		
Goldenrod sp.	Solidago sp. Red Oak		Quercus rubra		
Jewelweed	Impatiens capensis Speckeled Alder		Alnus incana		
Labrador Tea	Ledum groenlandicum	Sphagnum sp.	Sphagnum sp.		
Leatherleaf	Chamaedaphne calyculata	Tamarack	Larix laricana		
Marsh Fern	Thelypteris palustris	White birch	Betula papyrifera		
Marsh St. Johns Wort	Triadenum fraseri	fraseri White Spruce Picea gla			
Meadow sweet	Spirea alba/latifolia	Winterberry holly	Ilex verticillata		
Mountain holly	Nemopanthus mucronatus	Yellow Pond Lily	Nuphar variegatum		

## 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White pine
Cavity Trees			
- nesting/roosting	✓		
- feeding	$\checkmark$		
- escape		✓	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water			
- year round creek/pond	✓		
- seasonal runoff		✓.	
- seasonal pond		✓	
Dens or Dug Holes	·	✓	
Others	·		

# **Wildlife Species Noted**

Species	Season	Habitat	Comments

# 7.6 Specific Compartment Objectives

# Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place.

### **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

## 7.7 Other Compartment Features

Compartment No.: Wt1D Area: 2.5 acres (1 ha)

### 7.1 General Description

This wetland compartment lies at the southwest end of Riddell's Bay, and is an area of open water that extends to the forest edge. The edges of the compartment are ringed by wetland vegetation, but it does not contain any component of living or dead trees. Therefore, this area is not considered to be eligible for the program.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally a clay to silty base with up to 0.15 m of sand overlain by

peat and muck

Drainage: Poor

Topography: A basinal area with gently sloping edges

Water Features: Standing water

Physical Features: None

Access: Year round by foot, boat, or snowmobile.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp.	Age (Years)	Average Height (m)	Average Diameter Breast Height (cm)	# stems/ha	Basal Area (m²/ha)	Comments
				By class for the		By class for the	
White Spruce (Sw)				Comp.		Comp.	
White Birch (Bw)				10 - 25	No prism		
Tamarack (T)				26 – 41	Sweep was		
				42 - 49	Conducted		
				50+			
Total							

#### **Summary of Tree Inventory:**

Species Composition: N/A Age: N/A

Height: N/A Basal Area: N/A

## **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt1D					
Common Name	Scientific Name	Common Name	Scientific Name		
American Bugleweed	Lycopus americanus	Northern wild raisin	Viburnum cassinoides		
Common Cattail	Typha latifolia	Pickerel Plant	Pontederia cordata		
Dense Cottongrass	Eriophorum vaginatum	Red maple	Acer rubrus		
Fragrant White Water Lily	Nymphaea odorata	Nymphaea odorata Red Oak			
Goldenrod sp.	Solidago sp. Speckeled Alder		Alnus incana		
Jewelweed	Impatiens capensis	Sphagnum sp.	Sphagnum sp.		
Labrador Tea	Ledum groenlandicum	Tamarack	Larix laricana		
Leatherleaf	Chamaedaphne calyculata	White birch	Betula papyrifera		
Marsh Fern	Thelypteris palustris	White Spruce	Picea glauca		
Marsh St. Johns Wort	Triadenum fraseri	Winterberry holly	Ilex verticillata		
Meadow sweet	Spirea alba/latifolia	Yellow Pond Lily	Nuphar variegatum		
Northern bugleweed	Lycopus uniflorus				

### 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	<b>✓</b>		White pine, along forest edge
Cavity Trees			
- nesting/roosting		✓	
- feeding		<b>√</b>	
- escape		<b>✓</b>	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water			
- year round creek/pond	✓		
- seasonal runoff		✓	
- seasonal pond		✓	
Dens or Dug Holes		✓	
Others			

# **Wildlife Species Noted**

Species	Season	Habitat	Comments	

## 7.6 Specific Compartment Objectives

## Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place.

## **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

## 7.7 Other Compartment Features

Compartment No.: Wt1E Area: 3.9 acres (1.6 ha)

#### 7.1 General Description

This wetland compartment lies between W4 and R2C. The edges of the compartment are ringed by wetland vegetation, but it does not contain any component of living or dead trees. Therefore, this area is not considered to be eligible for the program.

#### 7.2 Compartment Site Characteristics

Soil Type: Peat and muck

Drainage: Poor

Topography: A basinal area with gently sloping edges

Water Features: Standing water

Physical Features: None

Access: Year round by foot or snowmobile.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

### 7.4 Compartment Inventory

Tree Species	% Comp.	Age (Years)	Average Height (m)	Average Diameter Breast Height	# stems/ha	Basal Area (m²/ha)	Comments
				(cm)			
				By class		By class	
				for the		for the	
White Pine (Pw)				Comp.		Comp.	
White Spruce (Sw)				10 - 25	No prism		
White Birch (Bw)				26 - 41	Sweep was		
Tamarack (T)				42 - 49	Conducted		
				50+			
Total							

#### **Summary of Tree Inventory:**

Species Composition: N/A Age: N/A

Height: N/A Basal Area: N/A

#### **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt1E								
Common Name Scientific Name Common Name Scientific Name								
Common Cattail	Typha latifolia	Northern wild raisin	Viburnum cassinoides					
Dense Cottongrass	Eriophorum vaginatum	Pickerel Plant	Pontederia cordata					
Eastern White Pine	Pinus strobus	Red maple	Acer rubrus					

Fragrant White Water Lily	Nymphaea odorata	Red Oak	Quercus rubra
Goldenrod sp.	Solidago sp.	Speckeled Alder	Alnus incana
Jewelweed	Impatiens capensis	Sphagnum sp.	Sphagnum sp.
Labrador Tea	Ledum groenlandicum	Tamarack	Larix laricana
Leatherleaf	Chamaedaphne calyculata	White birch	Betula papyrifera
Marsh Fern	Thelypteris palustris	White Spruce	Picea glauca
Marsh St. Johns Wort	Triadenum fraseri	Winterberry holly	Ilex verticillata
Meadow sweet	Spirea alba/latifolia	Yellow Pond Lily	Nuphar variegatum
Northern bugleweed	Lycopus uniflorus		

### 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White pine, along edge
Cavity Trees			
- nesting/roosting		✓	
- feeding		<b>√</b>	
- escape		<b>✓</b>	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water			
<ul> <li>year round creek/pond</li> </ul>	✓		
- seasonal runoff		✓	
- seasonal pond		✓	
Dens or Dug Holes		✓	
Others			

### **Wildlife Species Noted**

Species	Season	Habitat	Comments	

## 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities needed.

### **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

#### 7.7 Other Compartment Features

**Compartment No.:** Wt1F **Area:** 6.2 acres (2.48 ha)

### 7.1 General Description

This wetland compartment is a fen that is completely filled in with vegetative matter, and lies between compartment W6 and R2C. It is comprised of areas open water and dense vegetation with a tree density of approximately 10 stems/m². The trees found within the compartment include mountain holly, tamarack, white birch, white spruce, speckled alder, and winterberry holly. Northern wild raisin, Labrador tea, marsh ferns and sphagnum mosses grow along the edge. There are some snags along the shoreline at the edge of the forest, most of which are white pine.

This compartment represents an excellent breeding area for duck and herpetofaunal species.

### 7.2 Compartment Site Characteristics

Soil Type: Peat and muck

Drainage: Poor

Topography: A basinal area with gently sloping edges

Water Features: Standing water

Physical Features: None

Access: Year round by foot or snowmobile.

Other Features:

### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

#### **Tree Regeneration Assessment Table**

Stage of Development	Species	Quantity	Pattern of Distribution		
	Mountain Holly (Hm)	Ample	Uniform		
Early	Tamarack (T)	Little	Scattered		
(>0.5 m tall)	White birch (Bw)	Ample	Uniform		
	Winterberry Holly (Hw)	Ample	Uniform		
	Mountain Holly (Hm)	Ample	Uniform		
	Tamarack	Little	Scattered		
Advanced	Speckled alder (As)	Little	Scattered		
(>0.5 m tall)	White birch	Little	Scattered		
	White pine (Pw)	Some	Scattered		
	Winterberry holly (Hw)	Ample	Uniform		
Note Quantity: little < 10%	some 11 – 30%	Pattern of Distribution: scattered	ed uniform patchy		

Note Quantity: little < 10% some 11 - 30%Ample 31-60% heavy > 60%

# **Summary of Tree Inventory:**

Species Composition: Hw5Pw2Ps1Bw1Sw1 Age: 76 years

Height: Variable (Hw 5 m; Pw 14 m)

Densitities\*: Hw: 694 stems/ha

Hm: 602 stems/ha As: 197 stems/ha

\* densities were determined by counting the number of stems in a 10  $\mathrm{m}^2$  quadrat randomly placed

4 times throughout the compartment

### **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt1F							
Common Name	Scientific Name	Common Name	Scientific Name				
Eastern White Pine	Pinus strobus	Pickerel Plant	Pontederia cordata				
Fragrant White Water Lily	Nymphaea odorata	Red maple	Acer rubrus				
Goldenrod sp.	Solidago sp.	Red Oak	Quercus rubra				
Jewelweed	Impatiens capensis	Speckeled Alder	Alnus incana				
Labrador Tea	Ledum groenlandicum	Sphagnum sp.	Sphagnum sp.				
Leatherleaf	Chamaedaphne calyculata	Tamarack	Larix laricana				
Marsh Fern	Thelypteris palustris	Virginia Chain Fern	Woodwardia virginica				
Marsh St. Johns Wort	Triadenum fraseri	White birch	Betula papyrifera				
Meadow sweet	Spirea alba/latifolia	White Spruce	Picea glauca				
Northern bugleweed	Lycopus uniflorus	Winterberry holly	Ilex verticillata				
Northern wild raisin	Viburnum cassinoides	Yellow Pond Lily	Nuphar variegatum				

## 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White pine, white birch
Cavity Trees			
- nesting/roosting	✓		-White pine snags
- feeding	✓		-White pine snags
- escape		✓	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets	✓		White pine, white spruce
Other Food Sources		✓	
Surface Water			
- year round creek/pond	✓		
- seasonal runoff		✓	
- seasonal pond		✓	
Dens or Dug Holes		✓	
Others			

### **Wildlife Species Noted**

Species	Season	Habitat	Comments	

### 7.6 Specific Compartment Objectives

### Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place.

### **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

#### 7.7 Other Compartment Features

Compartment No.: Wt1 Area: G 31.5 acres (12.6 ha)

H 11.7 acres (4.68 ha) I 5.06 acres (2.02 ha)

#### 7.1 General Description

These compartments are marshy areas with open water, and are not eligible under the MFTIP guidelines. They are beaver flooded bogs with that contain very few dead trees. Sphagnum mosses, alders, Labrador tea, and cranberries are among the vegetation species found along the shorelines. The wooded compartments extend to the edge of these wetlands, and there are snags right at the shore of the wooded compartments surrounding these areas, and these may act as perches for bird species such as osprey. These snags also contain woodpecker cavities.

A newly cleared and marked hiking trail passes across the northern end of Wt1G, connecting with the surrounding wooded and rocky compartments. Wt1H is accessible by canoe from the Inner Bay, and meets Rabbit Lake at its southern end. Wt1I lies between W9 and R3B and is accessible by boat from the Inner Bay.

While these compartments are not eligible under the MFTIP guidelines, they should be assessed as significant wetlands and considered for conservation land status.

#### 7.2 Compartment Site Characteristics

Soil Type: Peat and muck.

Drainage: Poor

Topography: A basinal area with gently sloping areas

Water Features: Open surface water with dense vegetation at edges

Physical Features: Wt1H narrows to 2m at its northern end and then opens up into the

Inner Bay

Access: Year round by foot, canoe, or snowmobile.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp	Age (Years)	Average Height (m) for comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
				By class		By class	
				for the		for the	
White Pine				Comp.		Comp.	
Red Maple				10 - 25	No prism		
Red Oak				26 – 41	Sweep was		
White Birch				42 – 49	Performed		
Winterberry Holly				50+			

Eastern hemlock				
Total				

**Summary of Tree Inventory**: Species Composition: N/A Height: N/A Age: N/A Basal Area: N/A

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt1 G,H,I				
Common Name	Scientific Name	Common Name	Scientific Name	
Eastern White PIne	Pinus strobus	Pickerel Plant	Pontederia cordata	
Fragrant White Water Lily	Nymphaea odorata	Red maple	Acer rubrus	
Goldenrod sp.	Solidago sp.	Red Oak	Quercus rubra	
Jewelweed	Impatiens capensis	Royal Fern	Osmunda regalis	
Labrador Tea	Ledum groenlandicum	Speckeled Alder	Alnus incana	
Leatherleaf	Chamaedaphne calyculata	Sphagnum sp.	Sphagnum sp.	
Marsh Cinquefoil	Potentilla palustris	Tamarack	Larix laricana	
Marsh Fern	Thelypteris palustris	Virginia Chain Fern	Woodwardia virginica	
Marsh St. Johns Wort	Triadenum fraseri	White birch	Betula papyrifera	
Meadow sweet	Spirea alba/latifolia	White Spruce	Picea glauca	
Northern bugleweed	Lycopus uniflorus	Winterberry holly	Ilex verticillata	
Northern wild raisin	Viburnum cassinoides	Yellow Pond Lily	Nuphar variegatum	

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		Mostly on edge of comp.
Cavity Trees - nesting/roosting - feeding - escape		<i>y y y</i>	
Stick Nests		✓	
Fallen Dead Trees (woody debris)		1	
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources	<b>✓</b>		Berry bushes along edge of comp. – see compartment vegetation list
Surface Water - year round creek/pond - seasonal runoff - seasonal pond	✓	<i>,</i>	Water level of Wt1H fluctuates with the level of Georgian Bay
Dens or Dug Holes		✓	
Others		_	

158

### **Wildlife Species Noted**

Species	Season	Habitat	Comments

### 7.6 Specific Compartment Objectives

### Long Term (20 years)

Maintain as natural wetland areas for all types of wildlife. No management activities need to take place.

## **Short Term (5 Years)**

The Club will examine the potential for having these areas classified as conservation land areas, and/or as significant wetlands. The Club has no desire to alter these wetland areas, and would benefit from the tax advantages of either classification.

### 7.7 Other Compartment Features

Compartment No.: Wt2A Area: 2.5 acres (1 ha)

#### 7.1 General Description

This wetland compartment lies at the north end of Big Island, adjacent to Sand Run. It is attached to Galbraith Lake by a narrow, seasonally flooded channel at its southern end, and forms a sandy beach along its northern edge. The sandy beach is a significant shoreline habitat as it provides breeding habitat for birds such as killdeer, and supports some Atlantic Coastal Plain Species. The beach is seasonally and diurnally (due to wind direction) flooded by changes in the water level of Georgian Bay.

The inland edges of the compartment are ringed by wetland vegetation, but the compartment does not contain a significant component of living or dead trees. The sandy beachfront is also devoid of trees, and therefore this area is not considered to be eligible for the program.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally a clay to silty base with up to 0.5 m of recent sand

overlain by peat and muck. Deep (>0.5 m) sand along northern

edge, adjacent to sand run.

Drainage: Poor to well drained

Topography: A basinal area with gently sloping edges and shallow beachfront

shoreline

Water Features: Standing water

Physical Features: Long sandy beach along southern edge of Sand Run

Access: Year round by foot, boat, or snowmobile.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp.	Age (Years)	Average Height (m)	Average Diameter Breast Height (cm)	# stems/ha	Basal Area (m²/ha)	Comments
No live trees present				By class for the Comp.		By class for the Comp.	
				10 – 25 26 – 41 42 – 49	No prism Sweep was Conducted		
Total				50+			

**Summary of Tree Inventory**: Species Composition: N/A Height: N/A Age: N/A

Basal Area: N/A

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt2A					
Common Name	Scientific Name	Common Name	Scientific Name		
Eastern white pine	Pinus stobus	Red maple	Acer rubrum		
Fragrant white water lily	Nymphaea odorata	Royal fern	Osmunda regalis		
Large-fruited burreed	Sparganium eurycarpum	Sphagnum moss	Sphagnum sp.		
Marginal wood fern	Dryopteris marginalis	Sweetgale	Myrica gale		
Marsh cinquefoil	Potentilla palustris	Three-way sedge	Dulicichium arundinaceam		
Marsh St. Johnswort	Triadenum fraseri	White birch	Betula papyrifera		
Meadow sweet	Spirea alba/latifolia	White cedar	Thuja occidentalis		
Northern bugleweed	Lycopus uniflorus	Winterberry holly	Ilex verticillata		
Northern wild raisin	Viburnum cassinoides	Yellow pond lily	Nuphar variegatum		

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	<b>√</b>		White pine, along forest edge
Cavity Trees			
<ul> <li>nesting/roosting</li> </ul>		$\checkmark$	
- feeding		<b>√</b>	
- escape		<b>√</b>	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water			
<ul> <li>year round creek/pond</li> </ul>	✓		
<ul> <li>seasonal runoff</li> </ul>		✓	
- seasonal pond		✓	
Dens or Dug Holes		✓	
Others	<b>√</b>	·	Shoreline of Sand Run
			provides habitat for ACPS

# **Wildlife Species Noted**

Species	Season	Habitat	Comments

### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place, although the Club may consider reducing or closing this area to local boating traffic, which would reduce the impact that use may have on the fragile environment here. This may be carried out by educating the Club members about the significance of the area, and explaining the impacts that boat traffic may have on it.

#### **Short Term (5 Years)**

The beachfront along the Sand Run is not typical of the Go Home or Georgian Bay coastline area, and provides unique habitat for species such as killdeer, and supports some Atlantic Coastal Plain Species. This is a significant wetland that should be protected, and the Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland.

By having this area classified as a significant wetland or conservation area, the Club will also benefit from the tax advantages of either classification.

#### 7.7 Other Compartment Features

Compartment No.: Wt2B **Area:** 41.95 acres (16.78 ha)

#### 7.1 General Description

This is a large wetland compartment that extends down the east side of Big Island, between compartments W11A and W12. It is comprised of beaver flooded bogs that have an accumulation of floating mosses, Labrador tea, alders, cranberries and other small plants along the shoreline. The majority of the compartment is characterized by areas of dense vegetation with a tree density of approximately 7 stems/10 m<sup>2</sup>. The majority of the trees in the wetland are tamarack, white spruce, white pine, and winterberry holly. White pine, Meadow sweet, marsh ferns and sphagnum mosses grow along the edge. There are some snags along the shoreline at the edge of the forest, most of which are white pine.

This compartment represents an excellent breeding area for duck and herpetofaunal species.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally a clay to silty clay base with recent sand overlain by peat

and muck

Drainage: **Poor** 

Topography: A basinal area with gently sloping edges

Water Features: Standing water

Physical Features: None

Access: Year round by foot or snowmobile.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

#### **Tree Regeneration Assessment Table**

Stage of Development	Species	Quantity	Pattern of Distribution
	Mountain Holly (Hm)	Ample	Uniform
Early	Tamarack (T)	Little	Scattered
(>0.5 m tall)	White birch (Bw)	Ample	Uniform
	Winterberry Holly (Hw)	Ample	Uniform
	Mountain Holly (Hm)	Ample	Uniform
	Tamarack	Little	Scattered
Advanced	Speckled alder (As)	Little	Scattered
(>0.5 m tall)	White birch	Little	Scattered
	White pine (Pw)	Some	Scattered
	Winterberry holly (Hw)	Ample	Uniform
Note Quantity: little < 10%	some 11 – 30%	Pattern of Distribution: scatter	ed uniform patchy

Note Quantity: little < 10% some 11 – 30%

Ample 31-60% heavy >60%

### **Summary of Tree Inventory:**

Species Composition: Hw5Hm4Bw1 Age: 76 years

Height: Variable (Hw 5 m; Pw 14 m) Densitities\*: Hw: 531 stems/ha

Hm: 756 stems/ha As: 86 stems/ha

### **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt2B				
Common Name	Scientific Name	Common Name	Scientific Name	
Black huckleberry	Gaylussucia baccata	Mountain holly	Nemopanthus mucronatus	
Bracken fern	Pteridium aquilinum	Northern wild raisin	Viburnum cassinoides	
Dense Cottongrass	Eriophorum vaginatum	Speckled alder	Alnus incana spp.	
Eastern white pine	Pinus stobus	Sphagnum moss	Sphagnum sp.	
Leatherleaf	Chamaedaphne calyculata	Tamarack	Larix laricina	
Marsh fern	Thelypteris palustris	White spruce	Picea glauca	
Meadow sweet	Spiraea alba/latifolia	Winterberry holly	Ilex verticillata	

### 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White pine, white spruce
Cavity Trees			
- nesting/roosting	<b>√</b>		
- feeding	✓		
- escape		✓	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water			
<ul> <li>year round creek/pond</li> </ul>	✓		
- seasonal runoff		✓.	
- seasonal pond		✓	
Dens or Dug Holes		✓	
Others			

### **Wildlife Species Noted**

Species	Season	Habitat	Comments

<sup>\*</sup> densities were determined by counting the number of stems in a 10 m² quadrat randomly placed 4 times throughout the compartment

### 7.6 Specific Compartment Objectives

### Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place.

### **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

### 7.7 Other Compartment Features

Compartment No.: Wt2C Area: 4.9 acres (1.96 ha)

### 7.1 General Description

Wt2C is located on Big Island at the north end of Lake Loudon, and is surrounded by forest compartment W14B. It is comprised of dense vegetation with a tree density of approximately 14 stems/10m², some of which are as large as 40 cm DBH, although most are < 20 cm DBH. The majority of the trees in the wetland are tamarack, white birch, white spruce, and winterberry holly. White pine, marsh ferns, leatherleaf, Meadow sweet, marsh ferns, and sphagnum mosses grow along the edge. The forest comes directly to the edge of the wetland, and there are some snags along the shoreline at the edge of the forest, most of which are white pine.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally a clay to silty clay base with recent sand overlain by peat

and muck

Drainage: Poor

Topography: A basinal area with gently sloping edges

Water Features: Standing water

Physical Features: None

Access: Year round by foot or snowmobile.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

#### **Tree Regeneration Assessment Table**

Stage of Development	Species	Quantity	Pattern of Distribution
	Mountain Holly (Hm)	Ample	Uniform
Early	Tamarack (T)	Little	Scattered
(>0.5 m tall)	White birch (Bw)	Ample	Uniform
	Winterberry Holly (Hw)	Ample	Uniform
	Mountain Holly (Hm)	Ample	Uniform
	Tamarack	Little	Scattered
Advanced	Speckled alder (As)	Little	Scattered
(>0.5 m tall)	White birch	Little	Scattered
	White pine (Pw)	Some	Scattered
	Winterberry holly (Hw)	Ample	Uniform

Note Quantity: little < 10% some 11 – 30% Pattern of Distribution: scattered uniform patchy
Ample 31-60% heavy > 60%

#### **Summary of Tree Inventory:**

Species Composition: Hw5Hm41As1 Age: 83 years

Height: Variable (Hw 5 m; Pw 14 m)

Densitities\*: Hw: 854stems/ha

Hm: 605 stems/ha

As: 64 stems/ha

## **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt2C				
Common Name	Scientific Name	Common Name	Scientific Name	
Aster sp.	Aster sp.	Northern bugleweed	Lycopus uniflorus	
Club moss sp	Lycopodium sp.	Northern white violet	Viola macloskeyi	
Dense Cottongrass	Eriophorum vaginatum	Red maple	Acer rubrum	
Eastern white pine	Pinus stobus	Sphagnum moss	Sphagnum sp.	
Fragrant white water lily	Nymphaea odorata	Sweetgale	Myrica gale	
Leatherleaf	Chamaedaphne calyculata	Tamarack	Larix laricina	
Marsh cinquefoil	Potentilla palustris	White birch	Betula papyrifera	
Marsh fern	Thelypteris palustris	White spruce	Picea glauca	
Marsh St. Johnswort	Triadenum fraseri	Winterberry holly	Ilex verticillata	
Meadow sweet	Spiraea alba/latifolia			

# 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		White pine
Cavity Trees			
- nesting/roosting		✓	
- feeding	✓		-White pine snags
- escape		<i>y</i>	
Stick Nests		1	
Fallen Dead Trees	✓		In water
(woody debris)			
Mast Trees		1	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water			
<ul> <li>year round creek/pond</li> </ul>	✓		
- seasonal runoff			
- seasonal pond			
Dens or Dug Holes		✓	
Others			

# **Wildlife Species Noted**

Species	Season	Habitat	Comments

# 7.6 Specific Compartment Objectives

Long Term (20 years)

 $<sup>^*</sup>$  densities were determined by counting the number of stems in a 10 m $^2$  quadrat randomly placed 4 times throughout the compartment

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place.

## **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

## 7.7 Other Compartment Features

Compartment No.: Wt2D Area: 13.0 acres (5.2 ha)

### 7.1 General Description

This wetland compartment lies at the west side of the north bay of Burwash Lake. It is an area of open shallow water that extends to the forest edge. The edge of the compartment contains wetland vegetation, but it does not contain any component of live or dead trees. Therefore, this area is not considered to be eligible for the program.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally a clay to silty base with up to 0.15 m of sand overlain by

peat and muck

Drainage: Poor

Topography: A basinal area with gently sloping edges

Water Features: Standing water

Physical Features: None

Access: Year round by foot, boat, or snowmobile.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp.	Age (Years)	Average Height (m)	Average Diameter Breast Height (cm)	# stems/ha	Basal Area (m²/ha)	Comments
No live trees present				By class for the Comp.		By class for the Comp.	
				10 - 25	No prism		
				26 - 41	Sweep was		
				42 - 49	Conducted		
				50+			
Total							

#### **Summary of Tree Inventory:**

Species Composition: N/A Age: N/A

Height: N/A Basal Area: N/A

### **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt2D				
Common Name	Scientific Name	Common Name	Scientific Name	
Dense Cottongrass	Eriophorum vaginatum	Northern white violet	Viola macloskeyi	
Eastern white pine	Pinus stobus	Pickerelweed	Pontderia cordata	
Fragrant white water lily	Nymphaea odorata	Red maple	Acer rubrum	
Leatherleaf	Chamaedaphne calyculata	Sphagnum moss	Sphagnum sp.	
Marsh cinquefoil	Potentilla palustris	Sweetgale	Myrica gale	
Marsh fern	Thelypteris palustris	Tamarack	Larix laricina	
Marsh St. Johnswort	Triadenum fraseri	Winterberry holly	Ilex verticillata	
Meadow sweet	Spiraea alba/latifolia	Yellow pond lily	Nuphar variegatum	
Northern bugleweed	Lycopus uniflorus			

## 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	<b>√</b>		White pine, along forest edge
Cavity Trees			
- nesting/roosting		<b>✓</b>	
- feeding		<b>/</b>	
- escape		<b>/</b>	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees		<b>✓</b>	
Supercanopy Trees		✓	
Conifer Thickets		<b>✓</b>	
Other Food Sources		<b>✓</b>	
Surface Water			
<ul> <li>year round creek/pond</li> </ul>	✓		
- seasonal runoff		✓	
- seasonal pond		✓	
Dens or Dug Holes		✓	
Others			

### **Wildlife Species Noted**

Species	Season	Habitat	Comments

### 7.6 Specific Compartment Objectives

### Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place.

### **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area,

and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

**7.7 Other Compartment Features**No other compartment features are noted.

Compartment No.: Wt2E Area: 3.4 acres (1.36 ha)

### 7.1 General Description

Wt2E is located on Big Island and is surrounded by forest compartment W11C and rock compartment R5J. It was probably created several years ago by a beaver dam. Located along the shorelines of a small isolated, unnamed pond between Burwash Lake and Galbraith Lake, the majority of the marsh is a winterberry/mountain holly thicket. There is also some scattered white pine, white birch, and white spruce along the shoreline areas. The forest compartments surrounding the wetland and small pond extend to the shoreline where they meet bedrock and water. There are also several snags scattered throughout the wetland, they may act as perches for various bird species, and there are numerous woodpecker holes evident. Wt2E has a sufficient number of trees per hectare to be included in the management plan. The majority of the ground vegetation in these wetlands consists of labrador tea, leatherleaf, cranberries and sphagnum. There are also some Atlantic Coastal Plain species supported along the shoreline.

### **7.2 Compartment Site Characteristics**

Soil Type: Generally a clay to silty base with recent sand overlain by peat and

muck.

Drainage: Poor

Topography: A basinal area with gently sloping edges

Water Features: Gradually slopes into a beaver flooded pond to the north.

Physical Features: None

Access: Year round by foot or boat.

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp	Age (Years)	Average Height (m) for comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
				By class		By class	
				for the		for the	
White Pine (Pw)	20	108	16	Comp.		Comp.	
White Spruce (Sw)	20				576.92	15.00	
White Birch (Bw)	10			10-25	105.88	9.00	
Red Maple (Ms)	10			26-40	0	0	
Tamarack (T)	10			41-50	0	0	
Winterberry Holly	10			50+			
Total					682.81	24.00	

#### **Summary of Tree Inventory:**

Species Composition: Pw2Sw2Bw1Ms1T1Hw1 Age: 108

Height: 16 Basal Area: 24 m<sup>2</sup>/ha

## **Tree Regeneration Assessment Table**

Stage of Development	Species	Quantity	Pattern of Distribution
	Mountain Holly (Hm)	Ample	Uniform
Early	Tamarack (T)	Little	Scattered
(>0.5 m tall)	White birch (Bw)	Ample	Uniform
	Winterberry Holly (Hw)	Ample	Uniform
	Mountain Holly (Hm)	Ample	Uniform
	Tamarack	Little	Scattered
Advanced	Speckled alder (As)	Little	Scattered
(>0.5 m tall)	White birch	Little	Scattered
	White pine (Pw)	Some	Scattered
	Winterberry holly (Hw)	Ample	Uniform

Note Quantity: little < 10%

some 11 – 30% Ample 31-60% heavy >60%

Pattern of Distribution: scattered

uniform

patchy

### **Summary of Tree Inventory:**

Species Composition: Hw5Hm41As1

Height: Variable (Hw 5 m; Pw 14 m)

Age: 83 years

Densitities\*: Hw: 769 stems/ha Hm: 743 stems/ha

As: 78 stems/ha

### **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt2E					
Common Name	Scientific Name	Common Name	Scientific Name		
Dense Cottongrass	Eriophorum vaginatum	Northern white violet	Viola macloskeyi		
Eastern white pine	Pinus stobus	Pickerelweed	Pontderia cordata		
Fragrant white water lily	Nymphaea odorata	Red maple	Acer rubrum		
Leatherleaf	Chamaedaphne calyculata	Sphagnum moss	Sphagnum sp.		
Marsh cinquefoil	Potentilla palustris	Sweetgale	Myrica gale		
Marsh fern	Thelypteris palustris	Tamarack	Larix laricina		
Marsh St. Johnswort	Triadenum fraseri	White spruce	Picea glauca		
Meadow sweet	Spiraea alba/latifolia	Winterberry holly	Ilex verticillata		
Northern bugleweed	Lycopus uniflorus	Yellow pond lily	Nuphar variegatum		

### 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		
Cavity Trees - nesting/roosting - feeding - escape	<i>y</i>		
Stick Nests		✓	
Fallen Dead Trees (woody debris)	1		In water

<sup>\*</sup> densities were determined by counting the number of stems in a 10 m<sup>2</sup> quadrat randomly placed 4 times throughout the compartment

Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water - year round creek/pond - seasonal runoff - seasonal pond	<b>√</b>		
Dens or Dug Holes		✓	
Others			

### **Wildlife Species Noted**

Species	Season	Habitat	Comments	

### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place.

#### **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

#### 7.7 Other Compartment Features

Compartment No.: Wt2 Area: F 3.1 acres (1.24 ha)

G 2.5 acres (1.00 ha)

#### 7.1 General Description

Wt2F & G are located on the shoreline of Burwash Lake on Big Island and are separated by rock unit R5G. Wt2F is located on the northern lobe of the lake and is separated from wetland compartment Wt2E by rock unit R5J. Wt2G is located on the southwestern shore of the lake and is surrounded by rock unit R5G to the west and private land to the south. These two wetland areas differ from Wt2E in that they contain a significant number of tamarack and white spruce in them. Along with tamarack and spruce, there are also white pine, red oak and red maple, although these are mainly found on the shoreline interface with the forest or rock compartments.

The forest compartments surrounding the wetland and small pond extend to the shoreline where they meet bedrock and water. There are also several snags scattered throughout the wetland, they may act as perches for various bird species, and there are numerous woodpecker holes evident. The majority of the plant life in these wetlands consists of labrador tea, leatherleaf, cranberries and sphagnum. There are also some Atlantic Coastal Plain species supported along the shoreline.

### 7.2 Compartment Site Characteristics

Soil Type: Generally a clay to silty base with recent sand overlain by peat and

muck.

Drainage: Poor

Topography: A basinal area with gently sloping edges

Water Features: Gradually slopes into a beaver flooded pond to the north.

Physical Features: None

Access: Year-round by foot or boat.

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp	Age (Years)	Average Height (m) for comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
				By class		By class	
				for the		for the	
White Pine (Pw)	20	97	14	Comp.		Comp.	
White Spruce (Sw)	20			10-25	500	13.3	
White Birch (Bw)	10			26-40	94.12	8.5	
Red Maple (Ms)	10			41-50	0	0	
Tamarck (T)	10			50+	0	0	
Total					594.12	21.8	

**Summary of Tree Inventory**: Species Composition: Pw2Sw2Bw1Ms1T1

Age: 97 years Basal Area: 21.8 m<sup>2</sup>/ha Height: 14 m

## **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt2 F & G							
Common Name	Scientific Name	Common Name	Scientific Name				
Dense Cottongrass	Eriophorum vaginatum	Northern white violet	Viola macloskeyi				
Eastern white pine	Pinus stobus	Pickerelweed	Pontderia cordata				
Fragrant white water lily	Nymphaea odorata	Red maple	Acer rubrum				
Leatherleaf	Chamaedaphne calyculata	Sphagnum moss	Sphagnum sp.				
Marsh cinquefoil	Potentilla palustris	Sweetgale	Myrica gale				
Marsh fern	Thelypteris palustris	Tamarack	Larix laricina				
Marsh St. Johnswort	Triadenum fraseri	White spruce	Picea Glauca				
Meadow sweet	Spiraea alba/latifolia	Winterberry holly	Ilex verticillata				
Northern bugleweed	Lycopus uniflorus	Yellow pond lily	Nuphar variegatum				

## 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags	✓		
Cavity Trees			
- nesting/roosting	✓		
- feeding	✓		
- escape			
Stick Nests		✓	
Fallen Dead Trees	✓		In water
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water			
<ul> <li>year round creek/pond</li> </ul>	✓		
- seasonal runoff		✓.	
- seasonal pond		✓	
Dens or Dug Holes		✓	
Others			

## **Wildlife Species Noted**

Species	Season	Habitat	Comments	

## 7.6 Specific Compartment Objectives

## Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place.

## **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

## 7.7 Other Compartment Features

Compartment No.: Wt2H Area: 0.6 acres (0.24 ha)

### 7.1 General Description

Wt2H is a tamarack swamp located on the west side of Lake Loudon on Big Island, and is surrounded by forest compartment W14B and rock compartment R5E. It is comprised of dense winterberry/mountain holly. The majority of the trees in the wetland are tamarack, white spruce, and winterberry holly. White pine, marsh ferns, leatherleaf, Meadow sweet, dense cottongrass, marsh ferns, and sphagnum mosses grow along the edge. The forest comes directly to the edge of the wetland, and there are some snags along the shoreline at the edge of the forest, most of which are white pine. The wetland is almost entirely filled in with vegetation.

#### 7.2 Compartment Site Characteristics

Soil Type: Generally a clay to silty base with recent sand overlain by peat and

muck.

Drainage: Poor

Topography: A basinal area with gently sloping edges

Water Features: Gradually slopes into a beaver flooded pond to the north.

Physical Features: None

Access: Year round by foot or boat.

Other Features

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp	Age (Years)	Average Height (m) for comp.	Average DBH (cm)	# stems/ha	Basal Area (m²/ha)	Comments
				By class		By class	
				for the		for the	
Tamarack (T)	40	65	12	Comp.		Comp.	
White Spruce (Sw)	30			10-25	463.87	12.32	
Winterberry Holly	20			26-40	103.8	7.67	
				41-50	0	0	
				50+	0	0	
Total					567.67	19.99	

### **Summary of Tree Inventory:**

Species Composition: T4Sw3Hw2 Age: 65 years

Height: 12 m Basal Area: 19.99 m<sup>2</sup>/ha

## **Tree Regeneration Assessment Table**

Stage of Development	Species	Quantity	Pattern of Distribution	
	Mountain Holly (Hm)	Ample	Uniform	
Early	Tamarack (T)	Little	Scattered	
(>0.5 m tall)	White birch (Bw)	Ample	Uniform	
	Winterberry Holly (Hw)	Ample	Uniform	
	Mountain Holly (Hm)	Ample	Uniform	
	Tamarack	Little	Scattered	
Advanced	Speckled alder (As)	Little	Scattered	
(>0.5 m tall)	White birch	Little	Scattered	
	White pine (Pw)	Some	Scattered	
	Winterberry holly (Hw)	Ample	Uniform	
Note Quantity: little < 10%	some 11 – 30%	Pattern of Distribution: scattered	ed uniform patchy	

Note Quantity: little < 10% some 11 – 30% Ample 31-60% heavy >60%

**Summary of Tree Inventory:** 

Species Composition: Hw5Hm41As1 Age: 83 years

Height: Variable (Hw 5 m; Pw 14 m) Densitities\*: Hw: 692 stems/ha

Hm: 825 stems/ha As: 103 stems/ha

### **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt2H						
Common Name	Scientific Name	Common Name	Scientific Name			
Eastern white pine	Pinus stobus	Meadow sweet	Spiraea alba			
Labrador Tea	Ledum groenlandicum	Sphagnum moss	Sphagnum sp.			
Leatherleaf	Chamaedaphne calyculata	Tamarack	Larix laricina			
Mountain holly	Nemopanthus mucronatus	White birch	Betula papyrifera			
Marsh fern	Thelypteris palustris	White spruce	Picea glauca			

### 7.5 Wildlife Habitat Inventory

Habitat Features	t Features Present Absent		
Snags	✓		
Cavity Trees - nesting/roosting - feeding - escape	<i>'</i> ,		
Stick Nests		✓	
Fallen Dead Trees (woody debris)	✓		In water
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources		✓	
Surface Water			

<sup>\*</sup> densities were determined by counting the number of stems in a 10 m<sup>2</sup> quadrat randomly placed 4 times throughout the compartment

- year round creek/pond	✓		
- seasonal runoff			
- seasonal pond			
Dens or Dug Holes		✓	
Others			

### **Wildlife Species Noted**

Species	Season	Habitat	Comments

## 7.6 Specific Compartment Objectives

### Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place.

## **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

### 7.7 Other Compartment Features

Compartment No.: Wt3A Area: 3.7 acres (1.48 ha)

#### 7.1 General Description

This wetland compartment contains a dense cover of common winterberry, along with white birch, white spruce, white pine, tamarack, red maple, and speckled alder. The density of trees is sufficient that it is eligible for consideration under the MFTIP guidelines.

It is predominantly filled in with vegetation such as the trees listed above, along with ferns, sphagnum mosses, and leatherleaf. The west side of the compartment is adjacent to compartment R6, and is therefore fully exposed to weather blowing in off Georgian Bay. There is an abrupt change from the sphagnum moss on the compartment edge to open rock of compartment R6.

Property owners on the island have reported observing spotted turtles in the marshy areas of the island during the spring, in several different years. This suggests that there may be one or more spotted turtle hibernacula on the island. These hibernacula are vital to the survival of this species, as they return to it each year. Destruction of this important habitat feature would be detrimental to the spotted turtle, and the Club will ensure that it is protected.

#### 7.2 Compartment Site Characteristics

Soil Type: Peat and muck

Drainage: Poor

Topography: A basinal area with gently sloping edges

Water Features: Standing water

Physical Features: None

Access: Year-round by foot, boat, or snowmobile.

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp.	Age (Years)	Average Height (m)	Average Diameter Breast Height (cm)	# stems/ha	Basal Area (m²/ha)	Comments
				By class		By class	
				for the		for the	
White Pine	30	87	14	Comp.		Comp.	
Red Maple (Ms)	20						
				10 - 25	473.67	13.69	
White Birch	10			26 – 41	135.87	8.32	
Tamarack	10			42 – 49	0		
White Spruce	10			50+	0		
Speckled Alder	10						
Total					609.54	22.01	

## **Summary of Tree Inventory:**

Species Composition: Pw3Ms2Bw1T1As1 Age: 87 years

Height: 14 m Basal Area: 22.01 m<sup>2</sup>/ha

### **Tree Regeneration Assessment Table**

Stage of Development	Species	Quantity	Pattern of Distribution
	Mountain Holly (Hm)	Ample	Uniform
Early	Tamarack (T)	Little	Scattered
(>0.5 m tall)	White birch (Bw)	Ample	Uniform
	Winterberry Holly (Hw)	Ample	Uniform
Advanced (>0.5 m tall)	Mountain Holly (Hm)	Ample	Uniform
	Tamarack	Little	Scattered
	Speckled alder (As)	Little	Scattered
	White birch	Little	Scattered
	White pine (Pw)	Some	Scattered
	Winterberry holly (Hw)	Ample	Uniform
Note Quantity: little < 10%	some 11 – 30%	Pattern of Distribution: scatter	ed uniform patchy

Note Quantity: little < 10% some 11 – 30% Ample 31-60% heavy > 60%

**Summary of Tree Inventory:** 

Species Composition: Hw5Hm41As1 Age: 83 years

Height: Variable (Hw 5 m; Pw 14 m)

Densitities\*: Hw: 735 stems/ha

Hm: 528 stems/ha As: 87 stems/ha

4 times throughout the compartment

### **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt3A				
Common Name	Scientific Name	Common Name	Scientific Name	
Black Huckleberry	Gaylussucia baccata	Red maple	Acer rubrum	
Common Blackberry	Rubus allegheniensis	Red Oak	Quercus rubra	
Dwarf Raspberry	Rubus pubescens	Smooth serviceberry	Amalanchier laevis	
Eastern white pine	Pinus strobus	Speckeled Alder	Alnus incana spp.	
Fragrant White Water Lily	Nymphaea odorata	Sphagnum moss	Spagnum sp.	
Goldenrod sp.	Solidago sp.	Tamarack	Larix laricina	
Horned Bladderwort	Utricularia cornuta	Trembling aspen	Populus tremuloides	
Leatherleaf	Chamaedaphne calyculata	White birch	Betula papyrifera	
Low sweet blueberry	Vaccinium angustifolium	White cedar	Thuga occidentalis	
Marsh Fern	Thelypteris palustris	White Spruce	Picea glauca	
Meadow sweet	Spirea alba	Wild Lettuce	Latuca spp.	
Mountain holly	Nemopanthus mucronatus	Wild red raspberry	Rubus idaeus melanolasius	
Pickerelweed	Pontderia cordata	Winterberry holly	Ilex verticillata	
Pitcher Plant	Sarracenia purpurea			

<sup>\*</sup> densities were determined by counting the number of stems in a 10 m² quadrat randomly placed

#### 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags		✓	
Cavity Trees			
- nesting/roosting		$\checkmark$	
- feeding		✓.	
- escape		✓	
Stick Nests		✓	
Fallen Dead Trees		✓	
(woody debris)			
Mast Trees		✓	
Supercanopy Trees		✓	
Conifer Thickets		✓	
Other Food Sources	✓		Berry bushes along edge of
			comp.
Surface Water			
<ul> <li>year round creek/pond</li> </ul>	✓		
- seasonal runoff		✓	
- seasonal pond		<b>√</b>	
Dens or Dug Holes		<u> </u>	
Others		_	

#### **Wildlife Species Noted**

Species	Season	Habitat	Comments

### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Maintain as a natural wetland area for all types of wildlife. No management activities need to take place.

Spotted turtles rely on a hibernaculum for their survival, returning to it annually. Since spotted turtles have been observed during several years, it is probable that one is located within this area. The Club will strive to maintain this important habitat feature, and will not develop the area in any manner that will be detrimental to the turtle's survival.

#### **Short Term (5 Years)**

The Club will examine the potential for having this area classified as a conservation land area, and/or as a significant wetland. The Club has no desire to alter this wetland area, and would benefit from the tax advantages of either classification.

Through consultation with the NHIC and a professional herpetologist, one of whom is a member of the Madawaska Club, the Club will work to determine what habitat the spotted turtle requires, and how to best protect it. The Club will also notify the NHIC and inform them of the whereabouts of the hibernacula, so that it may be added to their database. This may also help to qualify the wetland habitat as a Significant Wetland, further reducing the tax burden of the common lands.

**7.7 Other Compartment Features**No other compartment features are noted.

Compartment No.: Wt3B Area: 0.8 acres (0.32 ha)

### 7.1 General Description

This compartment is an open wetland, with no living or dead trees. The surrounding wooded compartments extend to the edge of the wetland, and some snags provide perches for birds such as osprey. Mosses, ferns, alders, dwarf birch and some small pine characterize the edges of the swamp. It is not eligible under the MFTIP guidelines and is not being considered for approval.

Property owners on the island have reported observing spotted turtles in the marshy areas of the island during the spring, in several different years. This suggests that there may be one or more spotted turtle hibernacula on the island. These hibernacula are vital to the survival of this species, as they return to it each year. Destruction of this important habitat feature would be detrimental to the spotted turtle, and special care will be taken by the Club to ensure that it is protected.

### **7.2 Compartment Site Characteristics**

Soil Type: Peat and muck.

Drainage: Poor

Topography: A basinal area with gently sloping areas

Water Features: Open water with dense vegetation along edges

Physical Features: None

Access: Year-round by foot, boat, or snowmobile.

Other Features:

#### 7.3 Compartment History

Refer to Section 3.2 Logging History.

#### 7.4 Compartment Inventory

Tree Species	% Comp.	Age (Years)	Average Height (m)	Average Diameter Breast Height (cm)	# stems/ha	Basal Area (m²/ha)	Comments
				By class		By class	
				for the		for the	
White Pine (Pw)				Comp.		Comp.	
Red Oak (Or)				10 - 25	No prism		
Red Maple (Ms)				26 - 41	sweep		
Trembling Aspen				42 – 49	performed:		
White Spruce				50+	ineleigible		
Speckled Alder					area		
Winterberry Holly							
White Cedar							
White Birch							
Total							

**Summary of Tree Inventory**: Species Composition: N/A Height: N/A Age: N/A

Basal Area: N/A

# **Other Vegetation Assessment Table**

Plant Species Inventory: Compartment Wt3A				
Common Name	Scientific Name	Common Name	Scientific Name	
Black Huckleberry	Gaylussucia baccata	Red maple	Acer rubrum	
Common Blackberry	Rubus allegheniensis	Red Oak	Quercus rubra	
Dwarf Raspberry	Rubus pubescens	Smooth serviceberry	Amalanchier laevis	
Eastern white pine	Pinus strobus	Speckeled Alder	Alnus incana spp.	
Fragrant White Water Lily	Nymphaea odorata	Sphagnum moss	Spagnum sp.	
Goldenrod sp.	Solidago sp.	Tamarack	Larix laricina	
Horned Bladderwort	Utricularia cornuta	Trembling aspen	Populus tremuloides	
Leatherleaf	Chamaedaphne calyculata	White birch	Betula papyrifera	
Low sweet blueberry	Vaccinium angustifolium	White cedar	Thuga occidentalis	
Marsh Fern	Thelypteris palustris	White Spruce	Picea glauca	
Meadow sweet	Spirea alba	Wild Lettuce	Latuca spp.	
Pickerelweed	Pontderia cordata	Wild red raspberry	Rubus idaeus melanolasius	
Pitcher Plant	Sarracenia purpurea	Winterberry holly	Ilex verticillata	

## 7.5 Wildlife Habitat Inventory

Habitat Features	Present	Absent	Comments
Snags		✓	
Cavity Trees - nesting/roosting - feeding - escape		<i>y y y</i>	
Stick Nests		✓	
Fallen Dead Trees (woody debris)		✓ ·	
Mast Trees		<b>√</b>	
Supercanopy Trees		<b>√</b>	
Conifer Thickets		<b>√</b>	
Other Food Sources	<b>√</b>		Berry bushes along edge of comp. – see compartment vegetation list
Surface Water - year round creek/pond - seasonal runoff - seasonal pond	✓	<i>y</i>	
Dens or Dug Holes		✓	
Others	·		

# **Wildlife Species Noted**

Species	Season	Habitat	Comments
Water snake	Summer	Compartment edge	
White-throated sparrow	Summer	Trees on comp. edge	

### 7.6 Specific Compartment Objectives

#### Long Term (20 years)

Spotted turtles rely on a hibernaculum for their survival, returning to it annually. Since spotted turtles have been observed during several years, it is probable that one is located within this area. The Club will strive to maintain this important habitat feature, and will not develop the area in any manner that will be detrimental to the turtle's survival.

#### **Short Term (5 Years)**

Through consultation with the NHIC and a professional herpetologist, one of whom is a member of the Madawaska Club, the Club will work to determine what habitat the spotted turtle requires, and how to best protect it. The Club will also notify the NHIC and inform them of the whereabouts of the hibernacula, so that it may be added to their database. This may also help to qualify the wetland habitat as a Significant Wetland, further reducing the tax burden of the common lands

### 7.7 Other Compartment Features