Living Resources Assessment
Part of an Environmental Assessment of
Five Parcels of Tribal Lands
Near Peshawbestown, Leelanau County, Michigan

William C. Scharf, Ph.D.
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Introduction  

A field identification of the living resources of the five land parcels described below was taken between May 28 and June 27, 1987. The scope of this work considered wildlife, vegetation, ecosystems, agricultural, and wilderness resources and values. The actual field work involved parts of six days varying from 2.5 to 4.5 hours per visit. Most plants were usually identified, and some specimens of unfamiliar ones were taken in order to key later. The twenty plus years of experience, research and publication of the expert were drawn on to evaluate these areas for possible development as tribal housing. This report documents the reasons for classifying the living and natural resources of each parcel according to its environmental sensitivity in relation to their suitability for the construction of housing.  

Methods  

Both the boundaries and several portions of the interior of each tract were covered by foot. Many of the field-work days had temperatures in the 90’s, and rain was encountered during two
visitations. Timing for floristic assessment and identification was less than ideal. That is, several early flowering species, particularly orchids, were done blooming for the year and leafy portions were all that was left for identification. Therefore the short time frame and the phenology should be borne in mind in the case of possible omissions or errors.

A DBH tape was used to record the diameter breast height of many species of trees as a standard measure of size and dominance. Standard field guides were used in identifying plants: *Ferns of Michigan* - Billington; *Michigan Trees* - Otis; *Michigan Wildflowers* - Smith; *Spring Flora of Wisconsin* - Fassett; and occasionally Gray's *Manual of Botany* 8th ed. - Fernald. For this reason a critical read of this report may note a discrepancy in the nomenclature depending on the manual used at the time. Again, it was the best effort for the time available.

The animal, ecosystem, agricultural and wilderness assessments are made by my authoritative evaluations.*

Based upon the above described inspection and methodology, a Species List has been prepared, which is found beginning at page 13 of this Report.

*The expert's credentials for this are his many acknowledgements in: *Michigan Mammals* - Baker; *Distributional Checklist of Michigan Birds* - Payne; the two books he has published on Great Lakes bird nesting and migration; the extensive fauna surveys he has published; and other pertinent publications (see curriculum vitae of Dr. William Scharf attached hereto).
Results

PARCELS A1 AND A2
(S. 1/2 G.L. 2 - BOUNDED BY MCKEESE AND BOTH SIDES PESHAWBESTOWN RD, 23 ACRES)

Old Field and Graded Area (Parcels A1 and A2)

This area has been partially graded for proposed housing with 6 inch wells placed at what are proposed home sites. The area is well drained with porous mineral soils. The vegetation, where present, is mainly what could be classified as old field annuals and perennials. All species present (page 1 of species lists) can be said to be common, and in this early stage of succession could be said to consist of coarse and rank alien species usually classified as weeds.

The housing proposal would virtually eliminate this habitat, except for some trees left for shade. Along with the loss of vegetation the associated wildlife would be displaced, including ground and low nesting birds such as Chipping Sparrows, Vesper Sparrows, and Kildeer. Small mammals displaced by the housing would be the Woodchuck, Marmota monax, Meadow Vole, Microtus pensylvanicus, Prairie Deer Mouse, Peromyscus maniculatus bairdi, and the Short-tailed Shrew, Blarina brevicauda. These creatures are the most common mammals of old fields in this region and are in no danger of losing habitat. The American Toad, Bufo terrestris, an open land amphibian would also lose habitat from the housing development, but its habitat was produced by the human action of
clearing the original forests anyway. This property is well isolated from agricultural orchard lands by the border woodland described below. Not pursuing the housing construction would have little positive influence on the environment. Being bounded by the intersection of two county blacktop roads, this parcel appears to have nil wilderness value.

West Boundary Woods (Parcels A1 and A2)

This wooded land is dominated by Sugar Maple and Basswood mostly pole sized or at least under 12 inches DBH. It appears to have been recently logged and possibly grazed because the understory is less rich than that of similar woods at this stage. Since this wooded land is proposed as a buffer zone between the adjacent orchard land and proposed housing, no change in its living resources is anticipated.
PARCEL A₃

(SEC. 3 G.L. 4 WEST BOTH SIDES OF PESHAWBESTOWN RD, 85 ACRES)

Old Field - Open Land (Parcel A₃)

The open land bordering the road which is proposed for housing development is very similar to the preceding open land (parcels A₁ and A₂). It has been vacant slightly longer and is therefore in a more advanced stage of ecological succession; it has no grading or clearing, and conifer plantings over a decade ago are more conspicuously developed. The major difference is that there are some moderate slopes which would need to be considered when planning drainage for the proposed housing. The same impact on living resources as for parcels A₁ and A₂ could be postulated.

Mature Woods Near W. Boundary and Top of E. Hill (Parcel A₃)

There is wooded land to the top of the east hill and in the westerly one-third of this parcel. Both of these are mature woodlands with the easterly portion having a gradation of aspen trees, populus sp., along the borders with clonal patches developing in the old field (See Species List, p. 17).
The proposed housing development might indirectly degrade these woodlands by further human intrusion, but since no direct development in these woodlands is planned, little impact is expected. The edges of these woods are valuable as White-Tailed Deer and Ruffed Grouse, *Bonasa umbellus* and American Woodcock, *Philolepa minor*, habitat. Not developing the housing in this portion of the parcel would better preserve the present ecosystem which is moving toward a rich climax forest.

**Stream Area at N.W. Corner of Boundary (Parcel A3)**

This is an unusual and nearly unique area containing several fern and herbaceous species along with an oligotrophic stream containing Brook Trout and other aquatic species uncommon in this part of Leelanau County (See Species List, p. 18). Many of the plants listed are protected and have very narrow tolerance limits. The plant community and the area surrounding the stream is on an organic soil with many springs, seeps, and generally water saturated. Any change of drainage patterns by development would be harmful to the living resources of this area. The orchard adjacent to this property relies on this stream for irrigation water. Therefore, a wide berth should be given to this environmentally sensitive area when planning any future developments. The housing development requiring this land in trust status will not be built in or near this area, and therefore not adversely impact it.
PARCEL B - WOODED

(SEC. 3 - BOUNDED BY PUTNAM RD. AND W. BOUNDARY OF PESHAWBESTOWN, 52 ACRES)

This large tract of land is dominated by steep slopes, rocky terrain, and seeping springs forming intermittent streams. It is easy to see why this land was not used for agriculture in the past. The living resources include a wide diversity of habitats characterized by large tracts of merchantable hardwoods, old logging roads, and the aforementioned drainage areas populated by many protected and uncommon species of herbs and ferns (Species List, p. 19). Eleven species of ferns were found along with many protected orchid and lily species. This is one of the finest examples of near climax hardwood forests ever seen by the writer. Development for housing would be difficult because of steep slopes and springs. The rocky substrata would present serious sewage disposal problems. The valuable hardwoods would need to be harvested, many prematurely, thus losing optimal value. Not developing this site would allow for periodic cash-flow through selective cutting of mature hardwoods. Many wildlife species such as Deer mouse, *Peromyscus maniculatus gracilis*, shrews, both *Sorex* and *Blarina*, Wood Frogs, Tree Frogs, White-Tailed Deer, and possible Wild Turkey recently re-introduced into the area could be found here. These species could be present in this tract, and would be lost if development took place. In addition this area has been a popular mushrooming area. This area has the greatest potential for wilderness value of any of the
parcels considered in this report or of any of the land surrounding the Grand Traverse Band area because of its size, remote character, and lack of vehicular trails or roads. Care should be taken to maintain the character of this living resource. It could easily be damaged by motorized vehicles. The adjacent agricultural and residential land use co-exists reasonably well at present. Housing development for this area would have significant adverse impact on the environment, and should be strongly opposed.
PARCELS $C_1$ AND $C_2$

(EAST OF LOTS 1-9 TO RR TRACK AND E. OF RR TRACK TO LAKE, UNKNOWN ACRES)

Both of these parcels are shore swamp consisting of a spongy organic layer developed over lacustrian deposits. There is standing water in many stump holes, and running water from many springs and seeps as well as the ditch-stream which runs parallel to the railroad track and empties into Lake Michigan to the east of Lot #9. The wetness and organic substrata determine the vegetation here. The virtual carpet of Crested Shield Fern, Oak Fern (2 species), and Cinnamon Fern is an alerting signal that this is floristically a very special habitat (Species List, p. 21). Two species of protected orchids were identified, and two others which the expert was hesitant to positively identify apart from the remaining green parts were also present. One of these appears to be Cyprepedium candidum white lady-slipper a Michigan Threatened Species (Michigan’s Special Plants - Mich. DNR - 1986). Developing this area for housing would be nearly impossible, and certainly the unique living resources would be destroyed in the process.

One example of what happens if the Swamp trees are removed is seen to the east of Lots 7 and 8. Here the Stumps of Cedars, Hemlocks and Ash trees are found amid six foot high Cattails and Red Osier Dogwood. The organic soil is now so soft that one sinks to the knees with every other step. This area was probably similar to the rest of the parcel before the trees were cut. It will take many
decades before the trees grow back to the original form, and it
would make a very interesting study. Not constructing housing here
will allow the environmentally sensitive area to continue, and the
uncommon vegetative association to persist. From a wildlife
standpoint this area could have been a White-Tailed Deer Yard
historically (before the road and houses). Snowshoe Hares, Lepus
americanus; Red-backed Voles, Clethrionomys gapperi and possibly
certain uncommon species of shrews, Sorex and Weasels Mustella
probably are found in this woods. Yellow Warblers, Pileated
Woodpeckers and other swamp land birds (see species list) not common
in other habitats are also abundant in the present environment.
Reptiles and amphibians are found here as well, but only
Gartersnakes, Thamnophis sirtalis, and Green Frogs, Rana Clamatans
were seen. Housing construction here would be a mistake, and
significantly impact this living resource.
PARCEL F
(WOODED BORDER OF ADMINISTRATIVE PROPERTY, _____ ACRES)

This is a mature woodland from which parking lots and building sites have already been carved. There is a remnant of the woodland left as a border. This border land is somewhat degraded by former construction activities, but the reasonable diversity of species of plants that persist are listed in the Species List (p. 23). This would be an area where further impact on the living resources is unlikely. If this was of adequate size and was available, housing could be built here without further degradation of the environment, provided that the present wooded border is maintained.
SUMMARY

After surveying the living resources of the five parcels considered for housing, it is determined that the old field areas of parcels A1, A2, A3 and vacant areas of parcel F are suitable because of the nature of their common living resources which are abundant in this region. The flora and fauna found in these three parcels are relatively common, mostly introduced weeds and are also indicators of well drained, stable substrata usually a factor in choosing housing sites. Certain portions of these parcels should be reserved because of streams and steep slopes, but these portions have not been included in the present proposal to construct housing. The proposed housing use of these parcels will not significantly affect the living resources or the parcel.

The flora and fauna of parcels B, C, and C2 are less common, or scarce, and many species living there are protected. These are indicators of the fragile, often wet, and often organic substrata, and are native vegetation relatively untouched in a wild, pristine state. They indicate standing or running water which usually requires filling and land changes before building. Steep slopes and rocky areas which harbor large trees and specially developed understory herbs, shrubs, and animals have not been cleared for agriculture or housing in the past because of the difficulties encountered. There seems to be no compelling reason to develop these parcels given the more suitable alternatives. Moreover, development of these parcels for such uses as housing would significantly effect this living resource.
SPECIES LISTS

PARCELS A₁ and A₂
S. 1/2 G.L. 2 - BOUNDED BY MCKEESE AND BOTH SIDES PESHAWBESTOWN ROADS

Old Field and Graded Area:

Trees:

- Red Pine
- Black Locust
- Quaking Aspen
- Pin Cherry
- White Spruce
- Ash
- Basswood
- Sugar Maple
- Pinus resinosa
- Robinia pseudo-acacia
- Populus tremuloides
- Prunus pensylvanica
- Picea canadensis
- Fraxinus americanus
- Tilia americana
- Acer Saccahanum

Shrubs:

- Lilac
- Autumn Olive
- Wild Raspberry
- June Berry
- Sumac
- Syringa vulgaris
- Eleagnus sp.
- Rubus sp.
- Amelanchier humilis
- Rhus typhina

Herbs:

- Alfalfa
- Alyssum, Hoary
- Asparagus
- Blue Grass
- Blue Grass, Canada
- Bracken Fern
- Brome Grass
- Campion, Bladder
- Campion, White
- Carrot, Wild
- Chickweed
- Clover, Red
- Curled Dock
- Oxeye Daisy
- Goat’s Beard
- Goldenrod
- Grape, Wild
- King Devil
- Leafy Spurge
- Mallow
- Milkweed
- Orange Hank Weed
- Orchard Grass
- Plantain, Long Leaf
- Medicago sativa
- Alyssum alyssoides
- Asparagus officinalis
- Poa praetensis
- P. canadensis
- Pteridium aquilinum
- Bromus inermus
- Silene vulgaris
- S. alba
- Daucus carota
- Stellaria media
- Trifolium praetense
- Rumex crispis
- Chrysanthemum leucanthemum
- Trogopogon dubius
- Solidago sp.
- Vitis sp.
- Hieracium piloselloides
- Euphorbia esula
- Malva neglecta
- Aselepias syriaca
- Hieracium aurantiacum
- Dactylis glomerata
- Plantago lancelata
Herbs continued

Potentilla  
Quack Grass  
Ragweed  
Sheep Sorrel  
St. John’s Wort  
Star Thistle  
Strawberry  
Timothy  
Vetch  
Yarrow

Birds:

Vesper Sparrow - nest  
Bluebirds - many  
Kingbirds  
Robin  
Kildeer  
Field Sparrow

Mammals:

Woodchuck

West Boundary Woods:

Trees:

*Basswood  
*Sugar Maple  
Sumac  
Ash  
Slippery Elm

*Co-dominants

Shrubs:

Iron Wood  
Choke Cherry

Herbs:

Leeks  
Trillium  
Sweet Ciciley  
Blue Cohosh  
Downy Yellow Violet  
Solomon’s Seal  
Wild Licorice  
Herb Robert  
Squirrel Corn

*Co-dominants

Wildflowers:

Potentilla recta  
Agropyron repens  
Ambrosia artemesiafolia  
Rumex acetosella  
Hypericum perforatum  
Centaurea maculosa  
Fragaria virginiana  
Phleum pratense  
Vicia sativa  
Achillea millefolium

Trees:

Tilia americana - 8-12-DBH  
Acer Saccharum - 6-8-DBH  
Rhus typhina  
Fraxinus americanus  
Ulmus fulva

Shrubs:

Ostrya virginiana  
Prunus virginiana

Herbs:

Allium tricoccum  
Rilium grandiflorum  
Osmorhiza claytoni  
Caulophyllum thalictroides  
Viola pubescens  
Polygonatum pubescens  
Galium lanceolatum  
Geranium robertianum  
Dicentra canadensis

*Co-dominants
PARCEL A3
SEC. 3 GL 4 WEST BOTH SIDES PESHAWBESTOWN ROAD

Old Field - Open Land: Includes old field and scattered small trees

Trees: (scattered clumps)

Scotch Pine
Sugar Maple
Red Maple
Pin Cherry
June Berry

Pinus sylvestris
Acer saccharum
Acer rubrum
Prumus pensylvanica
Amelanchier humilis

Shrubs:

Sumac
Autumn Olive

Rhus typhina
Eleagnus sp.

Herbs:

Affalfa
Alyssum, Hoary
Asparagus
Blue Grass
Blue Grass, Canada
Brome Grass
Campion, Bladder
Campion, White
Carrot, Wild
Chickweed
Clover, Red
Daisy
Fleabane
Goat's Beard
Goldenrod
Grape, Wild
King Devil
Mallow
Milkweed
Pearly Everlasting
Orchard Grass
Potentilla
Quack Grass
Ragweed
Sheep Sorrel
St. John's Wort
Star Thistle
Strawberry
Timothy
Vetch

Medicago sativa
Alyssum alysoides
Asparagus officinalis
Poa praetensis
P. canadensis
Bromus inermus
Silene vulgaris
S. alba
Daucus carota
Stellaria media
Trifolium praetense
Chrysanthemum leucanthemum
Erigeron philadelphicus
Trogopogon dubius
Solidago sp.
Vitis sp.
Hieracium piloselloides
Malva neglecta
Ascelepias syriaca
Anaphalis magoritacea
Dactylis glomerata
Potentilla recta
Agropyron repens
Ambrosia artemesiifolia
Rumex acetosella
Hypericum perforatum
Centaurea maculosa
Fragaria virginiana
Phleum prateuse
Vicia sativa
Birds:

Chipping Sparrow
Vespen Sparrow
Kingbird
Brown Thrasher
Tree Swallow
PARCEL B
SEC. 3 GL 4 WEST - BOTH SIDES OF PESHAWBESTOWN RD.

Mature Woods Near W. Boundary and Top of E. Hill

Trees:

* Beech  
* Sugar Maple  
American Elm  
Ash  
Large Tooth Aspen  
Quaking Aspen  
White Pine  

Fagus grandifolia  
Acer saccharum  
Ulmus americana  
Fraxinus americana  
Populus grandidentata  
Populus tremuloides  
Pinus strobus

Herbs:

Rattlesnake Fern  
Leek  
Jack-in-the-Pulpit  
Trillium  
Canada Mayflowers  
Wood Nettle  
Downy Yellow Violet  
Violet sp.  
Herb Robert  

Botrychium virginianum  
Allium tricoccum  
Arisaema atrorubens  
Trillium grandiflorum  
Mianthemum canadense  
Laportea canadensis  
Viola pubescens  
Probably Viola canadensis  
Geranium robertianum

Birds:

Wood Pewee  
Crested Flycatcher

Stream Area at NW Corner of Boundary

Clear Oligotrophic Stream - Silt - Sand - Gravel

Trees:

Basswood  
White Birch  
Yellow Birch  
Ash  
Quaking Aspen  
Red Maple  
American Elm  
Slippery Elm  
White Cedar  
Hemlock  

Tilia americana  
Betula papyrifera  
Betula lutea  
Fraxinus americanus  
Populus tremuloides  
Acer rubra  
Ulmus americanus  
Ulmus fulva  
Arbor vitae  
Tsuga canadensis

*Co-dominants
### Shrubs:
- Dogwood
- Red Elder
- Wild Grape

### Aquatic Life:
- Brook Trout
- Liver Worts
- Selaginella
- Cow Slip
- Water Cress

### Herbs

#### Ferns:
- Horsetail
- Sensitive Fern
- Interrupted Fern
- Bracken Fern
- Maidenhair Fern

#### Flowering Plants:
- Iris
- Jack-in-the-Pulpit
- Jewel Weed
- Bone Set
- Joe Pye Weed
- No. Lopseed
- Swamps Buttercup
- Goldenrod
- Sweet Cicely
- Purple Water Avens

### Plant Names:
- **Cornus rugosa**
- **Sambucus canadensis**
- **Vitis riparia**
- **Salvelinus fontanelsis**
- **Marchantia sp.**
- **Selaginella sp.**
- **Caltha palustris**
- **Nasturtium officinals**
- **Equisetum fluviatile**
- **Onoclea sensibilis**
- **Osmunda claytonia**
- **Pteridium aquilinum**
- **Adiantum pedatum**
- **Iris versicolor**
- **Arisaema actrorubens**
- **Impatiens capensis**
- **Eupatorium pexfoliatum**
- **Eupatorium purpureum**
- **Phryma leptostachya**
- **Ranunculus septentrinalis**
- **Solidago sp.**
- **Osmorhiza claytoni**
- **Geum rivale**
PARCEL B
(SEC. 3 - BOUNDED BY PUTNAM RD. AND W. BOUNDARY PESHAWBESTOWN)

Trees:
* Beech
* Sugar Maple
* Basswood
  - Large Tooth Aspen
  - Quaking Aspen
  - Iron wood
  - American Ash
  - Red Oak
  - Red Maple
  - American Elm

- Fagus grandifolia
- Acer saccharum
- Tilia americana
- Populus grandidentata
- Populus tremuloides
- Ostrya virginiana
- Fraxinus americanus
- Quercus rubra
- Acer rubrum
- Ulmus americanus

Shrubs:
- Bush Honeysuckle
- Ribes
- Canada Yew
- June Berry

- Diervilla lonicera
- Ribes cynosbati
- Taxus canadensis
- Amelanchier humilis

Herbs

Ferns and Aquatics:
- Water Horsetail
- Cinnamon Fern
- Rattlesnake Fern
- Oakfern
- Spinulose Shield Fern
- Crested Shield Fern
- Narrow Leaved Speenwart
- Silvery Spleenwort
- Maidenhair Fern
- Bracken Fern
- Sensitive Fern
* Ebony Spleenwort

- Equisetum fluviatile
- Osmunda cinnamonea
- Botrychium virginianum
- Dryopteris disjunctus
- Dryopteris spinulosa
- Dryopteris cristata
- Athyrium pychocarpum
- Athyrium theleptroides
- Adiantum pedantum
- Pteridium aquilinum
- Onoclea sensibilis
- Asplenium platyneuron - far from known range

Flowering Plants:
- Longbracted Rein Orchid
- Trillium
- Indian Cucumber Root
- Canada Mayflower
- Solomon’s Seal
- False Solomon’s Seal

- Habenaria viridis
- Trillium grandiflorum
- Medeola virginiana
- Mianthemum canadense
- Polygonatum pubescens
- Smilacina zacemosa

*Co-dominant, small amounts of White Cedar, Red Pine, White Pine
Flowering Plants continued

Ladies Tresses                Spiranthes sp prob. cernua
Leek                          Allium tricoccum
Sessile Bellwort              Uvularia sessilifolia
Bead Lily                     Clintonia borealis
Jack-in-the-Pulpit            Arisaema atrorubens
Adder’s Tongue                Erythronium americanum
Blue Cohosh                   Caulophyllum thalictroides
Downy Yellow Violet           Viola pubescens
Violet Sp.                     probably V. canadensis and V. compensa

Round Leaf Pyrola             Pyrola rotundifoilia
Partridge Berry               Mitchella repens
Black Snake Root              Sanicula canadensis
Foam Flower                   Mitella diphylla
Liver Leaf                    Hepatica acutiloba
No. Lopseed                   Phryma leptostachya
Barreberry                    Actea rubra
Doll’s Eyes                   Actea pachypoda
Sweet Cicely                  Osmorrhiza claytoni
Herb Robert                   Geranium robertianum
Wild Licorice                 Galium lanceolatum
Sweet Scented Bedstraw        Galium triflorum
Wild Sasparilla               Aralia nudicaulis
Star Flower                   Trientalis borealis

Amphibians:

Wood Frog                    Rana sylvatica

Birds Seen or Heard

Downy Woodpecker
Hairy Woodpecker
Pileated Woodpecker
Ovenbird
White Breasted Nuthatch
Blue Jay
Least Fly Catcher
Wood Peewee
Crested Flycatcher
Red-Eyed Vireo

Mammals:

White Tailed Deer             Odocoileus virginianus - tracks
Porcupine                     Erithizon dorsatum - den tree
Red Fox                       Vulpes vulpes - possible den
PARCELS C1 and C2
EAST OF LOTS 1 - 9 TO LAKESHORE
(EXCLUDES OLD FIELD SPECIES ON RAILROAD TRACKS)

Trees:

*Hemlock
*White Cedar
*American Ash
*Yellow Birch
Red Maple
Basswood
Quaking Aspen
Balsam Poplar
Paper Birch
Sugar Maple
American Elm

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<td>Tsuga canadensis</td>
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<td>Populus tachamahacka</td>
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<td>Betula papyrifera</td>
<td>Acer saccharum</td>
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<td>Ulmus americanus</td>
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Shrubs:

Rose
Wild Grape
Wild Currant
Ribes
Red Elder
Raspberry
Blackberry
Mountain Maple
Canada Yew
Choke Cherry
June Berry
Poison Ivy
Bush Honeysuckle
Red Osier Dogwood
Round Leaved Dogwood
Willows

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<td>Rhus radicans</td>
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<td>Diervilla lonicera</td>
<td>Cornus stolonifera</td>
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<td>Cornus rugosa</td>
<td>Salix sp.</td>
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Herbs

Ferns and Aquatics:

Selaginella sp.
Livenworts
Foxtail
Water Horsetail
Evergreen Woodfern
Spinulose Shield Fern
Oak Fern
No. Oak Fern
Crested Shield Fern
Bracken Fern
Cinnamon Fern
Rattlesnake Fern
Water Cress

<table>
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<td>Marchantia sp.</td>
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<td>Dryopteris putall</td>
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</tr>
<tr>
<td>Botrychium virginianum</td>
<td>Nasturtium officinalis</td>
</tr>
</tbody>
</table>

*Co-dominant Species

20
Flowering Plants:

Rush
Trillium
Canada Mayflower
Jack-in-the-Pulpit
Bead Lily
False Solomon’s Seal
Long Bracted Rein Orchid
Showy Lady’s Slipper
Cattail
Swamp Buttercup
Tall Yellow Buttercup
Herb Robert
Wild Sasparilla
Twin Flower
Yarrow
Joe-Pye Weed
Boneset
Jewel Weed
Agrimony
Purple Water Avens
No. Lopseed
Red Baneberry
Doll’s Eyes
Sweet Cicely
Star Flower
Bitter Night Shade
Golden Rod
Orange Hankweed

Amphibians:

Green Frog

Birds:

Blue Jay
Pileated Woodpecker
Yellow Warbler
Chickadee
Common Flicker
White Throated Sparrow
Red-Winged Black Bird
Northern Oriole

Scirpus atricapilis
Trillium grandiflorum
Mianthemum canadensis
Arisaema atrorubens
Clintonia borealis
Smilacina racemosa
Habeneria viridis
Cypripedium reginae
Typha latifolia
Ranunculus septantrionalis
Ranunculus acris
Geranium robertianum
Aralia nudicaulis
Linnea borealis
Achillea millefolium
Eupatorium purpureum
Eupatorium perfoliatum
Impatiens capensis
Agrimonia gryposepala
Geum rivale
Phryma leptostachya
Actea rubra
Actea pachypoda
Osmorhiza claytoni
Trientalis borealis
Solarum dulcamara
Solidago sp.
Hieracium aurantiacum

Rana clamitans

21
PARCEL F
WOODED BORDER OF ADMINISTRATIVE PROPERTY

Trees:
- Red Oak  Quercus rubra
- Basswood  Tilia americana
- Large Tooth Aspen  Populus grandidentata
- Sugar Maple  Acer saccharum
- Beech  Fagus grandifolia
- Hemlock  Tsuga canadensis

Shrubs:
- Maple Leaf Viburnum  Viburnum acerifolium
- Ribes  Ribes cynosbati
- June Berry  Amelanchier humilis

Herbs

Ferns:
- Rattlesnake Fern  Botrychium virginianum
- Evergreen Wood Fern  Dropteris marginalis

Flowering Plants:
- Trillium  Trillium grandiflorium
- Solomon’s Seal  Polygonatum pubens
- Canada May Flower  Mianthemum canadense
- Herb Robert  Geranium robertianum
- Sweet Cicely  Osmorhiza claytoni
- Wild Sasparilla  Aralia nudicaulis
- Red Baneberry  Actea rubra