H+ 2 Botrychium simplex E. Hitchc. Simple Grape-fern
Scott (1913) reported "found in one locality in open woods
near High Park, Toronto". Another record by T.J. Ivey in
1920's. It is not likely that this plant still exists in
the park.

OSMUNDACEAE

- H⁺ O Osmunda cinnamomea L. Cinnamon Fern

 This species was found locally in High Park along west bank of Spring Road ravine. However, in 1970 a dead tree fell over and destroyed the last patch. The area is now sodded.
- H⁺ Osmunda Claytoniana L. Interrupted Fern rare in High Park. Only 2 patches have been located, both on east facing steep slopes in areas G and J.
- H⁺ 1 Osmunda regalis L. Royal Fern Last record 1933. Found generally in swamps and acid wet soil, and probably disappeared when these "swamps" were destroyed.

POLYPODIACEAE

- H⁺ Pteridium aquilinum (L.) Kuhn.
 - var. latiusculum (Desv.) Underm Brachen Fern extremely common in dry sandy soil in Area A. Occurs with Vaccinium, Myrica asplenifolium, Gaylussaccia baecata and other interesting dry sandy ground species.
- H⁺ 2 <u>Matteuccia Struthiopteris</u> (L.) Todaro Ostrich Fern Only record is in 1906. No longer in High Park. Again a species characteristic of swamps and moist woods.
- H⁺ Onoclea sensibilis L. Sensitive Fern common in rich woodland on west side of Grenadier Pond, particularly along path.
- H⁺ Athyrium Filix-foeminea (L.) Roth Lady Fern present in rich thicketed slopes throughout the park.
- H⁺ Athyrium Filix-foeminea (L.) Roth Lady Fern var. michauxii Mett.
- H⁺ 1 Athyrium thelypteroides (Michx.) Desv. Silvery Spleenwort Reported as being quite rare near Toronto by Scott, only report is in 1927.
- H⁺ 2 <u>Cystopteris bulbifera</u> (L.) Bernh. Bulblet- Bladder Fern Last report in 1890. Unlikely still present in the park.
- H⁺ Thelypteris palustris Schott. Marsh Fern

var. pubescens (Lowson) Fern.

locally present along west bank of Grenadier Pond. Formerly found in northeast corner of the park but habitat has since been destroyed.

- H⁺ 2 <u>Dryopteris</u> x <u>triploidea</u> Wherry Shield Fern only report is a collection made in 1899
- H⁺ 1 <u>Dryopteris cristata</u> (L.) Gray Crested Wood Fern
 Only record was in 1927
- H⁺ 1 <u>Dryopteris spinulosa</u> (O.F.Muell.) Watt. Spinulose Shield Fern Only record was in 1927
- H⁺ Polystichum acrostichoides (Michx.) Schott. Christmas Fern

 Found 1976 associated with Bhus radicans, & Smilacina racemosa, growing on a north facing slope in Area E (southeast bay, near Grenadier Pond) New record for the park.

PINACEAE

- H⁺ Pinus resinosa Art. Red Pine, Norway Pine
 Only one tree is known to exist in the park, in the open
 oak woodland of Area A.
- Pinus strobus L. White Pine

 Scattered groups of trees occur throughout the park, but appear to be less common than they were ten years ago (E. Hamilton pers. comm.)
- H+ Tsuga canadensis (L.) Carr. Hemlock
 Scattered throughout the park, but more common towards the east side of the park, especially east of Spring Road.

CUPRESSACEAE

H⁺ Thuja occidentalis L. White Cedar, Arbor Vitae occurring in groups on the east side of Spring Road. Perhaps planted.

TYPHACEAE

H⁺ Typha latifolia L. Broad-leaved Cattail Dominant species in all marshy areas within Grenadier Pond

NAJADACEAE

- H⁺ 2 <u>Potamogeton amplifolius</u> Tuckerm. Long-leaved Pondweed
 Only collection of this species was in 1896 by Wm. Scott.
 It is unlikely that this species has been present in
 Grenadier Pond for many years. Only record for this species
 in York, Halton & Peel Counties.
- H⁺ Potamogeton crispus L. Crimped Pondweed A species commonly associated with waters near to man's activity. This species is extremely prolific and forms one of the dominants of the submerged vegetation of Grenadier Pond.

- H⁺ Potamogeton pectinatus L. "Sago"

 Like P. crispus, this species is extremely abundant on the bottom of Grenadier Pond. New record and collection for High Park. Only three other locations in York, Halton and Peel Counties.
- H⁺ 2 <u>Potamogeton illinoensis</u> Morong. Illinois Pondweed
 Only report was in 1896, a collection made by Wm. Scott.
 Only record for York, Halton and Peel Counties.
- H⁺ 2 <u>Potamogeton zosteriformis</u> Fern. Flat-stem Pondweed Only collection was made in 1896 by Wm. Scott.

ALISMATACEAE

Alisma plantago - aquatica L. Water-plantain
This species was recorded in the TFN checklist (1972) as
Alisma triviale. It was not seen this year but may still
be present in small numbers.

- H⁺ Sagittaria latifolia Willd. Broad-leaved Arrowhead

 This species has been reduced in abundance until only 2 plants were found on Grenadier Pond in the northwest edge next to the wildflower garden. (Area D). Approx. 20 robust plants were discovered this year in a tiny marsh at the bottom of a ravine in Area
- H⁺ 1 Sagittaria rigida Pursh. Sessile-fruited

 Last collection or record was made in 1949, giving the location as the southeast corner of Grenadier Pond. Since then this entire area has been destroyed. The only other record in York, Halton and Peel Counties is in the Humber River and it, too, is likely destroyed.
- H⁺ * Butomus umbellatus L. Flowering Rush

 Once very abundant around Grenadier Pond, this species has been reduced to 3 plants, 1 at the north end marsh and 2 at the south end. This represents the only location in York County and there is only one additional collection from the Credit River in the entire York, Halton and Peel Counties.
- Manacharis canadensis (Michx.) Rich. Elodea, Waterweed
 One of the three dominants of the submerged vegetation of Grenadier Pond, this plant was noted here as early as 1913.

POACEAE

- H⁺ * Bromus commutatus Schrad. Brome-grass

 A European species, this plant was abundant along paths, in the allotment garden area, and other waste places in the park.
- H⁺ * Bromus inermis Leyss. Awnless Brome-grass Common in disturbed sites throughout the park. A European introduction.
- H⁺ * Bromus tectorum L. Downy Chess

 Found in northeast corner of the park, extensively colonizing a dry sandy hill.

MAP B-1

Botanically Interesting Areas in High Park

The following numbers correspond to particularly good stands of a particular plant species but in many cases the plant occurs throughout the entire area.

Area A

- Aster azureus, Solidago juncea
 Areas of land fill almost total domination by Lolium perenne, with Medicago sativa, etc.
- 3. Trifolium arvense introduced clover found along paths
- 4. Gaylusaccia baccata, Vaccinium angustifolium, Vaccinium pallidum, Myrica asplenifolia
 - Andropogon gerardii, Sorghastrum nutans, Rosa carolina Ey.
 - 6. Myrica asplenifolia, Hieracium canadense, Liatris cylindracea, Sorghastrum nutans, Antennaria neglecta, Solidago nemoralis, Solidago hispida
- 7. (Lupinus perennis) Vaccinium angustifolium, Vaccinium pallidum, Convolvulus spithameus, Helianthemum canadense, Lechea intermedia, FCG
 - Lespedezea capitata, Pteridium aquilinum 8. Helianthus divaricatus, Helianthus decapetalus, Myrica asplenifolia, Pteridium aquilinum, Sassafras albidum
 - Solidago juncea, Aster azureus, Solidago nemoralis, Vaccinium pallidum, Amelanchier spicata, var. stolonifera

Area B

- Myosatis laxa, Glecoma hederacea
- 2. Impatiens capensis
 3. Solidago patula From

Area C

- Glyceria grandis
- Typha latifolia, Juneus effusus, Butonus 1869 27 umbellatus, Scirpus acutus, Juncus bufonius

H+ * Festuca ovina L.

Sheep Fescue

var. duriuscula (L.) Koch

An introduced species, now one of the dominant grasses on the dry open sandy hillsides of High Park.

- H+ Festuca rubra L. Red Fescue

 Native, occurring with Festuca ovina on dry sandy sites generally under Quercus
- H⁺ Glyceria grandis S. Wats. Reed-Meadow Grass
 Growing at east edge of marsh, north end of Grenadier Pond.
 Common in Toronto in wet marshy areas but no other locations in York, Halton and Peel Counties. Grows to 4 feet high.
- H⁺ Glyceria striata (Lam.) Hitchc. Fowl-Meadow Grass A much smaller species, common along wet shorelines, marshy edges, etc.
- H⁺ * Poa annua L. Annual Bluegrass, Speargrass Common in lawns, and in land fill sites, and edges of paths.
- H⁺ * Poa compressa L. Canada Bluegrass
 Widespread in areas of waste ground, and disturbed habitat.
- Poa pratensis L.
 Extremely common throughout the park.
- \underline{H}^+ * <u>Dactylis glomerata</u> L. Orchard-grass present in disturbed sites along paths throughout the park.
- \underline{H}^+ * Agropyron repens (L.) Beauv. Witch-grass, Quack-grass Common in waste places, especially old field at north end of Wendigo Rivine, just south of Bloor Street bridge.
 - 1 <u>Elymus canadensis</u> L. Wild Rice, Wild Rye
 A sight record in 1932 is only evidence for the existence of
 this species.

Hystrix patula Moench. Bottle-brush Grass
Cited by Scott (1913) as being common in High Park. Likely present in disturbed areas.

- H⁺ * Lolium cf. multiflorum Lam. Italian Rye-grass According to Britton and Brown, this is a separate species. However, Voss (1972) uses more characters, and suggests that there is considerable hybridization, and perhaps this and the following species are merely agricultural strays.
- H⁺ E Lolium perenne L. English Rye-grass
 This plant predominated in areas of calcareous clay soil
 dumped as erosion control in many paths leading down the
 hills in Area A. No native species occurred here, and the
 Lolium did not grow on the original sandy acid soil.
- <u>H</u>
 <u>Deschampsia flexuosa</u> (L.) Trm. Common Hair-grass
 Only one other record (Humber River 1903) in York, Halton and Peel Counties, Occurs in dry sandy soil under Oaks.
 (Area A).

- Calamagrostis canadensis (Michx.) Beauv. Bluejoint Reported as a sight record (1932).
- H⁺ Agrostis gigantea Roth.

Black Bent grass

- H⁺ * Agrostis stolonifera L. Bent grass Common throughout disturbed habitats, etc.
- H⁺ * Phleum pratense L. Timothy
 Common in disturbed areas, especially by the edge of paths, etc.
- H⁺ Sporobolus cryptandrus (Torr.) Gray Sand Dropseed
 Found in Area E on south facing hill with Equisetium hyemale
- H⁺ 2 Oryzopsis osperifolia Michx. Harsh-leaved Mountain Rice
 Only record is in 1891
- H⁺ Phalaris arundinacea L. Reed Canary grass
- H⁺ 2 <u>Phalaris canariensis</u> L. Canary Grass
 Only collection was in 1889
- H+ Leersia oryzoides (L.) Sw Cut Grass
 Extensive patches were found in Areas & In both cases these were low wet areas, with Polygonum natans a codominant.
- H⁺ 1 <u>Panicum xanthophysum</u> Gray Panic grass
 Last collection was made in 1953
- H⁺ * Echinochloa crusgalli (L.) Beauv. Barnyard Grass Found at edges of stairs, pathways, lawns, etc. throughout the park.
 - * Setarra glauca (L.) Beauv. Foxtail grass
- H⁺ * Setaria viridis (L.) Beauv. Green Foxtail
 Common in disturbed sites. Often with Phleum pratense
- Andropogon gerardi Vitm. Bluestem, Turkey foot.
 A tall (4 ft.) grass, this species flowers in the autumn and is associated with <u>Sorghastrum nutans</u>. Both these species have western affinities and are commonly found in tall grass.
- Andropogons coparius Michx. Little Bluestem

 Common species in Area A, occurs with Festuca ovina on dry sandy hillsides. Was mentioned as abundant by Scott (1913).
- H⁺ Sorghostrum nutans (L.) Nash Indian grass

 Only two other locations in York, Halton and Peel Counties are known for this species. Both it and Andropogan gerardii occur in the dry open sandy hillsides of Area A, east of Grenadier Pond and to a lesser extent, Area N.

CYPERACEAE

H⁺ Cyperus filiculmis Vahl. Galingale

Last record for this species was in 1965. A Cyperus was noted to be abundant in dry sandy meadows, but was not identified because it was immature. It is quite likely that this species is still present and further searching next year may find it.

H+ Scirpus acutus Muhl. Hard-stem Bulrush Found on mud flats south of marsh at north end of Grenadier Pond. Not very abundant. Widespread in Ontario, although not that common in the Toronto r gion. H+ Scirpus americanus Pers. Sword-grass, Chair-makers More common, found along mud flats, north end of Grenadier Pond. H+ Scirpus atrovirens Willd. var. georgianus (Harper) Fern. Found on mud flats with Juncus bufonius and Scirpus americanus. Other locations in the Toronto Area are Pottageville and North Toronto. H+ Scirpus rubrotinctus Fern. Bulrush Occasional specimen found in mud flats. The only location for this specimen in York, Halton & Peel Counties is Aurora. H+ 2 Eleocharis elliptica Kunth Spike-rush Last collection was made in 1900. Unlikely still present within the park. Eleocharis erythropoda Steud. Spike-rush H+ 1 Carex blanda Dewey Sedge Last collection 1939 H+ 1 Carex diandra Schrank Sedge Last collection 1939 H+ 1 Carex foenea Willd. Sedge Last collection 1933 H+ Sedge Carex hystericina Muhl Found in patches in wet seepy areas near Wendigo stream at bottom of ravine. H+ Carex laevivaginata (Kukenth) Mackenzie Smooth-sheathed Sedge Found on slightly dryer ground in Wendigo ravine. H⁺ 2 Carex lasiocarpa Ehrh. Last and only collection was made in 1896. Habitat (open swamps and marshes) has undoubtedly been destroyed. H+ 2 Sedge Carex leptonervia Fern Last and only collection made in 1896 by Wm. Scott. But not mentioned by him in 1913. Likely has disappeared from the H+ Carex pennsylvanica Lam. Common along edges of paths in dry open oakwoods (Area A) just east and north of Grenadier Pond. H+ Carex pseudo-cyperus L. Sedge Found in wet areas by the east shore of Grenadier Pond. н⁺ 2 Carex scabrata Schw. Last and only collection made in 1896 by Scott. Not mentioned by him in 1913.

H⁺

Carex stipata Willd.

Sedge

Carex umbellata Schk.

Sedge

Mentioned as growing on the streets east of High Park by Scott (1913).

ARACEAE

H⁺
Acorus calamus L. Sweet Flag
This species is rather uncommon, there being only three other locations known for it in York, Halton and Peel Counties. High Park location is a new location for York County. Abundant on west shore of Grenadier Pond.

- H⁺ Calla palustris L. Water Arum, Wild Callq.
 Reported by T.F.N. as still present in 1972. Could not locate speciment this year, however.
- H⁺ Arisaema triphyllum (L.) Schott. Jack-in-the-Pulpit Reported by T.F.N. in 1972, this plant was not seen this year. A search next spring will be necessary to locate this plant in deciduous rich woodlands.

LEMNACEAE

- H⁺ Spirodela polyrhiza (L.) Schlerden Water Flaxseed Abundant on surface of stagnant water in Grenadier Pond particularly on the east shore.
- H+ Lemna minor L. Common Duckweed
 Abundant on surface of water particularly near west shore of Grenadier Pond.
- H⁺ 1 <u>Lemna trisulca</u> L. Star Duckweed

 Only report is collection made in 1936 by H.H. Brown.

 May still be present in Grenadier Pond.
- H⁺ 1 Wolffia columbiana Karst Columbian Wolffia Last collection made in 1946. Likely still present in Grenadier Pond.
- H⁺ 1 Wolffia punctata Griseb. Dotted Wolffia Last collection made in 1946. May still be present in Grenadier Pond.

COMMELINACEAE

H⁺ * Commelina communis L. Dayflower

Common plant in disturbed and ruderal sites.

PONTEDERIACEAE

H⁺ 1 Pontederia cordata L. Pickerelweed

Last collection made in 1953, but is either very rare or absent from Grenadier Pond.

JUNCACEAE

H⁺ 1 Juncus bufonius L.

H+

Toad-rush

var. bufonius

Abundant on the mud flats south of marsh at north end of Grenadier Pond. New record for High Park.

- H+ Juncus dudleyi Wieg.
 - New record for High Park.

Soft-rush

Dudley's Rush

- Juncus effusus L. Only one clump of this plant was found on the mud flats at the north end of Grenadier Pond.
- H+ Juncus tenuis Willd. Path-Rush Common along disturbed sites especially pathways in rich deciduous areas, i.e. the path on the west bank of Grenadier Pond.
- H⁺ 1 Luzula acuminata Raf. var. acuminata Tapered Wood Rush Only collection was in 1936.

LILIACEAE

E Hemerocallis fulva L.

Tawny Day-Lily

A garden escape, this plant grows very well in colonies particularly at the top of hills on the east side of Grenadier Pond, south of the hillside gardens.

H+ 2 Lilium philadelphicum L.

> var. andinum (Nutt.) Ker Wood Lily

Only record for this species is in 1909. Listed by P.M. Cathing on his "List of Protected Plants in Ontario" (unpublished) as a species being seriously depleted by picking and/or transplanting. It is likely extinct in High Park now.

- H+ 1 E Ornithogallum umbellatum L. Star of Bethlehem A garden escape, only record is in 1954 by L.T. Owens
- H+ 2 E Muscari botryoides (L.) Mill. Grape-Hyacinth Another garden escape, only record was noted in 1907.
- H+ Asparagus officinalis L. Cultivated Asparagus A garden escape, found in slightly disturbed areas. Listed by the T.F.N. in 1972.
- Clintonia borealis (Ait.) Raf. Corn-lily, Bluebead Lily H+ A more northern species, frequent in cool deep ravines such as the Spring Road ravine where it associates with other more northern plants (Maiarthemum canadense, etc.).
- False Spikenard, False H+ Smilacina racemosa (L.) Desf. Common in all rich ravines and frequent Solomon's Seal in the dry open sandy meadows as well.
- Starry False Solomon's Seal H+ Smilacina stellata (L.) Desf. Less common than the above, found exclusively in the dry open sandy soil of Area A. Being seriously depleted due to picking of the leaves for salads.

H+ Maianthemum canadense Desf.

Wild Lily-of-the-Valley, Canada Mayflower

var. interius Fern.

Widespread in cooler deep ravines with <u>Clintonia borealis</u>, <u>Trillium grandiflorum</u>, etc. This variety is chiefly midwestern and flowers approximately two weeks later than the more common species.

H+ 0 Streptopus roscus Michx.

Twisted Stalk

var. longipes (Fern.) Fassett.

This variety is chiefly midwestern, extending as far as Manitoba. Unfortunately, a search this year failed to locate any specimens, and it may no longer be in the park.

H+ E Polygonatum commutatum (Schult. F.) A. Dietr. Great Solomon's

Thought to be a tetraploid hybrid between <u>P. pubescus</u> and <u>P. biflarum</u>, these plants, found on a north facing slope in Area E are the most robust (5 ft. tall) seen to date. Rare in Ontario.

- H⁺ Polygonatum pubescens (Willd.) Pursh. Small Solomon's Seal,
 Often found in rich wooded slopes
 with Smlacina racemosa and Trillium
 grandiflorum.
- E Convallaria majalis L. Cultivated Lily-of-the-Valley
 Locally abundant under thickets of Cornus rugosa and
 Viburnum accrifolium in Wendigo Ravine.
- \underline{H}^+ Medeola virginiana L. Indian Cucumber Root A more northern species, only 5 plants are known to exist in the park. These are found 2 feet from the path.

Trillium erectum L. Red Trillium

Reported by T.F.N. (1972). Flowers in spring. A search next year may verify this report.

- Trillium grandiflorum (Michx.) Salisb. Large White Trillium

 Abundant under Cornus and Viburnum in rich slopes, with
 thick cover.
- H⁺ Smilax herbacea L. var. herbacea Carrion Flower
 Found in moist soil of thickets in ravines throughout the park.
- H⁺ Smilax hispida Muhl. Hispid Greenbrier Found in rich thicketed ravines often in slightly disturbed ground throughout the park.

IRIDACEAE

H⁺ * <u>Iris pseudacorus</u> L. Water-Flag, Yellow Iris A European introduction, this robust iris grows abundantly along the west bank of Grenadier Pond. Blooms late May, early June with yellow flowers. Iris versicolor L.

Blue Flag Iris

Much less common, this species probably occurs with <u>Iris</u>
pseudacorus on west bank of Grenadier Pond.

H⁺
Sisyrinchium montanum Greene Blue-eyed Grass
Reported by the T.F.N. (1972). Found in dry open ground near Pedicularis canadensis in Area M.

ORCHIDACEAE

- H+ * Epipactis helleborine (L.) Crantz Helleborine Orchid Very abundant under Cornus, Viburnum and Corylus thickets in rich ravines, especially Wendigo Stream ravine.
- H⁺ 2 <u>Spiranthes romanzoffiana</u> Cham. Hooded Ladies' Tresses Only record was in 1896. This plant probably grew in wet seeping springs at the bottom of sandy slopes, such as probably existed along Spring Road.

SALICACEAE

A planted species, easily distinguished by the white furry underneath surfaces of its leaves, in many places it has escaped cultivation, and vigorous sucker growth threatens to crowd out native species.

Populus balsamifera L.

Balsam-Poplar

Populus deltoides Marsh.

Cottonwood

Scattered trees throughout the park. A fine specimen exists at the north end of the Wendigo Way Native trail.

- Populus grandidentata Michx. Large-toothed Aspen
 Large stand on west-facing slope of Wendigo Ravine north
 of Grenadier Pond.
- Populus tremuloides Michx. Quaking Aspen
 Recorded by P.M. Catling in 1971.
- Salix cf. humilis Marsh Small Pussywillow
 Scattered shrubs in dryer open fields throughout the park.
- \underline{H} E Salix pentandra L. Bay-leaved Willow One specimen only, noted, in Area G. at the base of an east facing slope.

MYRICACEAE

H⁺ Myrica asplenifolia L.

Sweet Fern

var. tomentosa (Chev.) Gl.

A species with somewhat western affinities in dry sandy soil, in Area A, and N, open oak woodlands. Associates include <u>Vaccinium</u> sp. <u>Gaylussacia baccata</u>, <u>Pteridium aquilinum</u>. Known only from the Humber region in the Toronto area.

H+ * Rumex acetosella L. Red Sorrel, Sheep Sorrel
Occasional weed in lawns, and waste places, particularly in
acid soil.

H+ * Rumex crispus L.

Curled Dock

Common weed of grossly disturbed ground, along landfill areas, in the toboggan run, etc.

Rumex mexicanus Meissn.

Mexican Dock

Reported by T.F.N. (1972). Widespread but not necessarily common weed of disturbed ground and ruderal sites.

H⁺ * Rumex obtusifolius L. Bitter Dock, Broad-leaved Dock Common in disturbed sites at the edge of the <u>Typha</u> marsh, along landfill sites, erosion areas, and the allotment gardens.

H+ 1 Rumex orbiculatus Gray

Great Water-Dock

Only collection was made in 1929. Since its habitat is swamps and shallow water, the cleanup of swamps and the marshy edges of Grenadier Pond may have eliminated this species.

Polygonum aviculare L. Prostrate Knotweed

Common in disturbed sites particularly in edtes of lawns.

H⁺ E Polygonum cuspidatum Sieb & Zucc. Japanese Knotweed

Another garden escape, this plant occurs often with Impaticas glandulifera and is found along the banks of streams in wet ravines (e.g. Wendigo ravine).

Polygonum erectum L.

Erect Knotweed

Reported by T.F.N. in 1972.

H+ 1 * Polygonum hydropiper L.

Common Smartweed, Waterpepper

Found in wet banks of stream, running along Spring Road, in Area L, south of its junction with Centre Road.

Polygonum lapathifolium L.

Pale Smartweed

Reported by P.M. Catling in 1972.

H+ Polygonum natans Eat.

Water Smartweed

Locally abundant in a wet meadow, dominating with <u>Leersia</u>
<u>oryzoides</u> in Area M. just north of the Junction of Spring Road
and Centre Road.

H+ 2 E Polygonum orientale L.

Prince's Feather

A garden escape, this plant was last reported from the park in 1895. Could possibly exist in waste places behind gardens on the west bank of Grenadier Pond.

H+ * Polygonum persicaria L.

Lady's Thumb

Abundant weed of disturbed and ruderal sites, usually in moist ground.

CHENOPODIACEAE

Chenopodium album. L.

Lamb's Quarters

Reported by T.F.N. in 1972. Found in waste places and disturbed sites throughout the park.

H⁺ * Chenopodium glaucum L. Oak-leaved Goosefoot

Present in grossly disturbed habitats such as the toboggan run.

Chenopodium hybridum L. Maple-leaved Goosefoot

Reported by T.F.N. in 1972.

H+ 1 * Cycloloma atriplicifolium Spreng.) Coult. Winged Pigweed Collection made in 1942 from railroad embankment at High Park. Probably did not occur within the park but on the railway tracks just south of the park.

_____Atriplex patula L. Spreading Orache, Spearscale Weed of disturbed calcareous soil, such as the landfill sites in erosion areas and the toboggan run on the east sie of Grenadier Pond.

* Axyris amaranthoides L. Russian Pigweed

An introduction from Siberia, this species is found in grossly disturbed sites such as landfill sites, etc.

H+ 1 * Salsola kali L. var. tenuifolia G.F.W. Meyer Russian Thistle Only collection was made in 1930 by H.H. Brown. Habitat - grossly disturbed areas, landfill sites, etc.

AMARANTHACEAE

* Amaranthus graecizans L. Prostrate Pigweed Reported by T.F.N. in 1972.

H⁺ 1 * Amaranthus hybridus L. Green Amaranth, Wild Beet,
An escape from cultivation, only
collection made of this plant was in 1940.

* Amaranthus retroflexus L. Red-root Pigweed

Reported by T.F.N. (1972).

PORTULACACEAE

Portulaca oleracea L. Purslane

Reported by T.F.N. (1972).

CARYOPHYLLACEAE

H⁺ Stellaria longifolia Muhl. Long-leaved Chickweed Weed of lawns, edges of paths and other semi-disturbed sites throughout the park.

* <u>Stellaria media</u> (L.) Cyrill. Common Chickweed Common weed of lawns throughout the park.

H⁺ * Cerastium vulgatum L. Mouse-ear Chickweed Weed of lawns, pathways and similar -rampled areas.

H⁺ * Arenaria serpyllifolia L. Thyme-leaved Sandwort Weed of lawns throughout the park.

H⁺ E Silene armeria L. Sweet William, Catchfly
A garden escape.

- H⁺ * <u>Silene cucubalus</u> Wibel. Bladder Campion Growing in wet ground at borders of north end <u>Typha</u> marsh, with Lychnis alba and Saponaria officinalis.
 - * <u>Silene noctiflora</u> L. Night-flowering Catchfly Reported by T.F.N. (1972).
- H⁺ * Lychnis alba Mill. White Campion
 Growing in a disturbed area between lawn and marsh at the north end of Grenadier Pond.
- H⁺ E <u>Dianthus armeria</u> L. Deptford Pink A popular rockery plant. Found growing on east bank of Wendigo Stream, as well as in the "Wildflower" garden on the northwest shore of Grenadier Pond.
- H+ E Saponaria officinalis L. Soapwort, Bouncing Bet Found in "Wildflower" garden, and at north side of Typha marsh at the north end of Grenadier Pond.

NYMPHAEA

- Nymphaea odorata Ait. White Water-Lily

 Although their numbers have been greatly reduced through the "clean-up" of the marsh, patches of this plant are beginning to reappear on the east side of Grenadier Pond, particularly in the bays.
- Nuphar variegatum Engelm. Yellow Pond-Lily
 Only one small patch is known to exist. This is located on the water near the marsh in the southwest corner of the pond.

CERATOPHYLLACEAE

 \underline{H}^+ Ceratophyllum demersum L. Coontail, Honewort Another very common aquatic species throughout Grenadier Pond.

RANUNCULACEAE

- H⁺ 1 <u>Caltha palustris</u> L. Marsh Marigold, Cowslip
 Occurring in wetwoods, swamps and shallow water, this plant
 was last collected in 1933. Likely the clearup of swamps
 and low wet areas in the park has eliminated this species.
- H⁺ Coptis groenlandica (Oeder.) Fern. Goldthread
 Only one clump of plants is to be found in the park along
 Spring Road ravine near to a path. Habitat is in a cool, deep ravine in keeping with the plant's northern affinities.
- H⁺ Actaea alba (L.) Mill White Boneberry, Doll's Eyes
 Locally abundant in Area G. ravine at southeast corner near
 Grenadier Pond. Occurs with Podophyllum peltatum and the
 following:
- H⁺ Actaea rubra (Ait.) Willd. Red Boneberry

 Common Area G. Both this and the above species flower in spring (late May) and fruit by late July.
- H⁺
 Aquilegia canadensis L. Wild Columbine

 First reported in 1939 and recorded by the T.F.N. (1972),
 this plant is likely present in dry sandy meadows in the open oak woodland.

7:

Anemone canadensis L.

Canada Anemone

T.F.N. (1972).

Anemone cylindrica Gray.

Long-headed Thimbleweed

T.F.N. (1972). Found in various locations throughout the the Toronto area in dry, often sandy soil.

- H⁺ Anemone <u>quinquefolia</u> L. Wood Anemone Found in rich moist woods in ravines in High Park. Flowers in spring.
- H⁺
 Anemone virginiana L. Thimbleweed
 T.F.N. (1972) is the latest record for this species. Likely present in dry opwn oak woodlands. Flowers in spring.

 Hepatica acutiloba D.C. Acute-lobed Hepatica
 Reported by T.F.N. 1972). Spring flowering. Probably found in rich calcareous soil.
- H+ Hepatica americana (D.C.) Ker. Round-lobed Hepatica
 This species prefers acid soil and is likely present in the open oak woodlands in the park.

 Ranunculus abortivus L. Kidneyleaf Buttercup
 Reported by the T.F.N. (1972), this buttercup flowers in
- H⁺ * Ranunculus acris L. Tall Meadow Buttercup

 The most common buttercup, flowering throughout spring and
 summer. Found in disturbed areas beside paths, near
 allotment gradens, etc.

Ranunculus fascicularis Muhl. Early Buttercup

Reported by T.F.N. in 1972, this spring-flowering buttercup
is found in prairie like vegetational areas and dry open
woods. It is likely present in Area A, the hillside northeast
of Grenadier Pond.

spring, in a variety of habitats, but often in moist ground.

- H⁺ 2 Ranunculus hispidus Michx. Early Woods Buttercup
 Only collection made was in 1890 by Jas. White. A buttercup
 of dry woods, it may have been found in the open oak woodlands
 throughout the park. Mainly confined to southern Ontario.
- H⁺ 1 Ranunculus pennsylvanicus L.F. Bristly Crowfoot
 Only record is a collection made from the edge of a marsh
 in 1953. This plant may still be present within the park,
 perhaps near the marshes of Grenadier Pond. Not common
 in the Toronto area, but more common further north.
- H⁺ 1 Ranunculus recurvatus Poir. Hooked Buttercup
 Only record is a collection in 1939. Probably was located in rich wooded areas of the park.
- * Ranunculus repens L. Creeping Buttercup

 Found in semi-disturbed areas with Ranunculus acris on east banks of Wendigo Stream.
- H⁺ 1 Ranunculus rhomboideus Goldie Prairie Buttercup

 Characteristic of dry open woods and prairies, this plant was
 last seen in High Park in 1933. It is unfortunate that it is
 not likely still present in the park. Rather rare in Ontario.
 Only other locations in Toronto area are at the Humber River
 and Holland Landing.

H⁺ Ranunculus sceleratus L. Cursed Crowfoot Found on banks of Wendigo stream near Ranunculus acris.

H⁺ Thalictrum dioicum L. Early Meadow Rue Frequent in rich deciduous wooded slopes, often under thickets, especially in Wendigo Ravine.

BERBERIDACEAE

H⁺ Podophyllum peltatum L. May-Apple, Mandrake

Frequent in Area G. on east facing slope, with Actaea alba,
Actaea rubra and Celastrus scandens. Flowers in spring,
fruit edible.

H+ E Berberis thunbergii D.C. Japanese Barberry
An escape from cultivation, this plant was found in open
sandy meadows on hillside east of Grenadier Pond, just north
of the hillside gardens.

E Berberis vulgaris L. European Barberry
Reported by T.F.N.(1972)

LAURACEAE

H⁺ Sassafras albidum (Nutt.) Nees. Sassafras

High Park and the Toronto area represents the northern limit of distribution for this species and it was used by Soper as one of eleven species to determine the limits of the Carolinean Zone in southern Ontario - found in open oak woodland in Area A.

PAPAVERACEAE

 \underline{H}^+ * Chelidonium majus L. Celandine Commonly found on disturbed grounds, especially along path at the southwest corner of Grenadier Pond (Area D).

BRASSICACEAE

- H⁺ * Lepidium campestre (L.) R. Br. Field Peppergrass
 Common in ruderal sites throughout the park.
- H⁺ <u>Lepidium densiflorum</u> Schrader. Peppergrass weed of lawns, fields and disturbed areas (paths, landfill sites, etc.).
- H⁺ Lepidium virginicum L. Virginian Peppergrass
- H⁺ * Thlaspi arvense L. Field Pennycress, Horseweed This species is only one of many noxious weeds which have completely covered the area of the toboggan run (in the middle of Area A) and are aggressively encroaching on native species.
 - * <u>Sisymbrium altissimum</u> L. Tumble-mustard Common weed of waste places.
 - * Sisymbrium officinale (L.) Scop. Hedge Mustard
- H+ 1 * Diplotaxis tenuifolia (L.) D.C. Wall-rocket
 Common in fields, waste places, etc. throughout the part.

Erucastrum gallicum (Willd.) O.E. Schultz. Dog Mustard Reported by T.F.N. (1972).

H+ 1 * Brassica campestris L.

Field Mustard

- H⁺ Brassica haber (D.C.) L. Wheeler Wild Mustard
 In disturbed sites, a common weedy species
- H+ * Barbarea vulgaris R.Br. Winter Cress
 var. arcuata (Opiz) Fries.
- H⁺ * Nasturtium officinale R.Br. True Watercress Once very common on the shores of Grenadier Pond, now only a few plants may be found on the mud flats at the north end of the Pond.
- H⁺ * Rorippa islandica (Oeder.) Borbas Yellow Winter Cress, Yellow Marsh Cress
- H⁺ 1 Cardamine pennsylvanica Mühl Pennsylvania Bittercress
 Only collection is one made in 1927, by R.F. Cain. May still
 be present in waste places throughout the park.

 Dentaria diphylla Michx. Two-leaved Toothwort
 Reported by the T.F.N. in 1972, this species is a plant of
 rich deciduous beech-maple forests in calcareous soil.
 Probably found in ravines in the park.
- * Capsella bursa-pastoris (L.) Medic. Shepherd's Purse
 A common weed of lawns (sodded) around park buildings and
 other heavy traffic areas.
- H⁺ 2 * Neslia paniculata (L.) Desv. Ball Mustard Only collection was made in 1914 by T.J. Ivey from an area of "dry sand".
 - * Descurainia Sophia (L.) Webb Flixweed Reported by T.F.N. (1972).
- Erysimum cheiranthoides L. Wormseed Mustard

 Present in open dry meadows and slightly distrubed habitats.
- H+ 1 * Erysimum inconspicuum (Wats.) MacMill. Wormseed Mustard Only collection was made in 1927. Similar to E. cheiranthoides, but much more uncommon. Found in dry soil of prairies, plains and upland woods. Only record in York Halton and Peel Counties at southern limit of its range.
- H⁺ E <u>Hesperis matronalis</u> L. Dome's Rocket An escape in slightly disturbed open areas, near paths.

CRASSULACEAE

1 E <u>Sedum acre</u> L. Mossy Stonecrop, Wallpepper Anonymous sight record from 1932.

SAXIFRAGACEAE

- H⁺ 2 <u>Saxifraga virginiensis</u> Michx. Early Rock-Saxifrage Only collection is that from "sandy hillsides" in 1905 by A. Cosens.
- H⁺ 1 <u>Tiarella cordifolia</u> L. False Mitrewort, Foam-flower A more northern species, occurring generally in rich woods. Only report is from 1939. May well have disappeared from deep ravines with their recent disturbance.
- H+ 1 Mitella diphylla L. Mitrewort

 Another more northern species. Last record of its occurrence in the parks from 1939. Might still be present in deep cool areas of Spring Road ravine.
- H⁺ Ribes americanum Mrll. Wild Black Currant An occasional shrub in rich woods.
- H⁺ E Ribes sativum Syme Currant

HAMAMELIDACEAE

- H⁺ 1 C Hamamelis mollis Oliv. Chinese witch-hazel Only collection was made by L. T. Owens in 1957. Likely a planted shrub near the hillside gardens.
- H+ Hamamelis virginiana L. Witch-hazel
 A more southern species, this shrub is found in rich deciduous thickets of Wendigo Ravine and Spring Road Ravine.
 Flowers in autumn.

PLANTANACEAE

Only a few trees seen, all of them in the rich woods west of the main nature path northeast of Grenadier Pond.

ROSACEAE

- H⁺ 2 Spiraea alba DuRoi Meadow Sweet

 Only report is a collection made in 1896. This plant may have disappeared as wet swampy areas and shorelines were filled in or "cleaned up".
- C Spiraea filaperdula = Filapendula hexapetala Gilib. Dropwort

 Scattered specimens exist in the Spring Road ravine, usually near clearings or other sites of frequent human activity.
- E Sorbaria sorbifolia (L) A.Br. False Spiraea
 An occasional shrub noted along pathweys in rich ravines east of Colbourne Lodge.
- H⁺ 1 E <u>Pyrus baccata</u> L. Siberian Crabapple <u>Sorbus decora</u> (Sarg.) C.K. Schnerd. Mountain Ash
- H⁺ C Sorbus hybrida L. Hybrid Mountain Ash Frequently planted among hillside gardens, east side of Grenadier Pond.

- H⁺
 Amelanchier sanguinea (Pursh.) D.C. Shadbush, Juneberry
 Abundant in open areas of oak woods with Amelanchier
 spicata var. stolonifers, Gaylussacia baccata and
 Vaccinium angustifolium.
- H⁺ Amelanchier spicata (Lam.) K. Koch. Shadbush, Juneberry var. stolonifera (Wieg.) Cing-Mars.

Locally abundant in open oak woodland Areas A & N with Vaccinium angustifolium, Myrica asplanifolium and Cearothus americarus. Some problems with the taxonomy of this genus exist.

- Crataegus sp.
 - Present in small numbers in rich ravines throughout the park. May be escaped from cultivation.
- <u>H</u>⁺ Rubus allegheniensis Porter Common Blackberry
 Widespread in thicketed ravines in rich soil.
- H⁺ Rubus cf. arundelanus Blanchard Dewberry
- H⁺ 1 Rubus hispidus L. Hispid Dewberry Only record is a collection made in 1931 by H. H. Brown.
- H⁺ Rubus odoratus L. Purple-flowering Raspberry
 Frequent in rich moist slopes with Cornus sp. Viburnum, Lonicera
 and other Rubus species.
- H⁺ 1 Rubus pubescens Raf. Dwarf Blackberry
 Latest record of this species is in 1941, when it was
 collected from Wendigo Ravine.
- H⁺ 2 <u>Rubus recurvicaulis</u> Blanch. Dewberry
 Only record is in 1898 by Wm. Scott
- H⁺

 Rubus strigosus Michx. Red Raspberry

 var. canadensis (Richards) House

 Probably the most common Rubus within the park.

 Fragaria vesca L. Woodland Strawberry

 Reported by T.F.N. in 1972.
- H⁺ Fragaria virginiana Duschesne Field Strawberry Widespread in open dry sandy sites, especially in the area northeast of Grenadier Pond.
- H⁺ 1 <u>Potentilla anserina</u> L. Silverweed

 Last collection was in 1950 and listed this plant from the lakeshore south of High Park. It is unlikely that it is present within the park.
- H⁺ * Potentilla argentea L. Silvery-Cinquefoil Frequent weed in disturbed soil along paths and above retaining walls on east side of Grenadier Pond. Frequently in dry sites.

H⁺ Potentilla canadensis L. Canada Cinquefoil
Frequent in dry open woods and fields within the park.

- H+ * Potentilla intermedia L. Intermediate Cinquefoil
 Plant of dry slightly disturbed habitats.
- H+ Potentilla norvegica L. Norwegian Cinquefoil
- H⁺ 2 Potentilla palustris (L.) Scop. Marsh Five-Finger Only report was in 1898. listed as being in swamps and peat bogs. It is possible that this plant occurred in the swamp in the southeast corner of the park which in 1961 was completely destroyed.
- H⁺ 2 Potentilla paradoxa Nutt. Paradoxical Cinquefoil Only report is by John Macoun in 1901. Unlikely still present in the park since its habitat (beach, bogs) has most likely been destroyed.
- H⁺ * Potentilla recta L. Rough-fruited Cinquefoil
 Common weed of disturbed habitats throughout the park
 Potentilla simplex Michx. Common Cinquefoil
 Reported by T.F.N. (1972)
- H⁺ Waldsteinia fragarioides (Michx.) Tratt. Barren Strawberry Located near a path in Spring Road ravine in a dry sandy soil
- \underline{H}^+ Geum aleppicum Jacq. Yellow Avens Present in dry sandy sites near stream leading into Grenadier Pond
- Geum canadense Jacq. Canada Avens

 Present in slightly disturbed ground i.e. near pathways, in lawns, etc.
- H⁺ 2 <u>Geum rivale</u> L. Water or Purple Avens
 Last collection was made by E.M. Walker in 1898, who listed
 its habitat as "swamps and low ground". Swamps in the park
 have been totally destroyed and with it this species.
- \underline{H}^+ Agrimonia gryposepala Wallr. Tall Agrimony Frequent along sandy banks of both Spring Rd. stream and Wendigo stream.
- H⁺ Agrimonia pubescens Wallr. Hairy Agrimony

 Found growing above retaining wall at southeast section of walkway around Grenadier Pond. Listed by Argus as rare in Ontario and Canada, this more southern species is known from only 3 other locations in Ontario, Kent Co. Simcoe Co. and the Humber River.
- H⁺ 1 Rosa blanda Ait. Smooth Rose

 Last collection was made in 1959 from dry woods. (likely the open oak woodland northeast of Grenadier Pond).

Rosa carolina L.

Dwarf Rose

An occasional plant in hollows between Festuca ovina hummocks in open dry sandy meadows. This plant is at its northern limit in Ontario at High Park. The only other record from York, Halton and Peel Counties is from the Humber River.

H+ 1 C Prunus c.f. avium L.

Sweet Cherry

H+ 1 E Prunus padus L.

European Bird Cherry

Daropean Dire energy

H⁺ Prunus pennsylvanica L.F. Pin cherry
An occasional tree in rich deciduous thickets, in Wendigo Ravine and Spring Road ravine.

H⁺ Prunus serotina Ehrh.

Black Cherry

Scattered mature trees occur throughout the park, most notably in Area A, the open oak woodland.

H⁺ Prunus virginiana L.

Choke Cherry

This species is very abundant along the west bank of the stream in Wendigo Ravine, and also in the steep slope between Deer Pen Road and Howard Road.

FABACEAE

H+ Lupinus perennis L.

Wild Lupine

At one time the hillside east of Grenadier Pond was "blue with lupines". However, these western plants have been severely depleted and only scattered plants are found here in dry sandy sites.

H⁺ Lupinus perennis L.

Wild Lupine

The validity of this variety and its abundance in High Park cannot be determined without close examination of many plants. Possibly this variety intergrades with the species.

O E Genista tinctorra L.

Dyer's Greenweed

Was formerly present in Spring Road ravine, but has disappeared since approximately 1972.

H⁺ * Medicago lupulina L.

Black Medich

Common weed in lawns throughout the park, especially in areas of heavy traffic.

H+ E Medicago sativa L.

Alfalfa, Lucerne

This species, commonly cultivated is found with Lolium perenne dominating a landfill site at an area of erosion of the slope in Area A. No native species are found within this area, the soil of which differs drastically in composition and pH.

Melilotus alba Desr.

White Sweet Clover

Plant of ruderal habitats and slightly disturbed ground. Common near allotment gardens.

* <u>Melilotus officinalis</u> (L.) Desr. Yellow Sweet Clover Abundant in disturbed areas near allotment gardens.

H+ 1 * Trifolium agrarium L.

Hop Clover

Last collection made in 1954. A weed of roadsides.

H+ * Trifolium arvense L.

Rabbit foot Clover

An unusual introduced species from south Africa, this plant is found along paths in the open oak woodland to the east of Grenadier Pond. The only other location for this plant in the Toronto area is the Humber River area where it has likely been destroyed.

H+ * Trifolium hybridum L.

Alsike Clover

H+ * Trifolium pratense L.

Red Clover

Common weed of lawns and along paths in heavily used areas.

H+ * Trifolium procumbens L.

Low Hop Clover

H+ * Trifolium repens L.

White Clover

Common weed of lawns, along pathways and other disturbed sites.

H+ E Robinia viscosa Vent.

Clammy Locust, Rose acacia

H+ 1 E Colutea arborescens L.

Bladder senna

Distinctive with its papery, inflated pods, this plant was last collected in 1952.

H⁺ Desmodium canadense (L.) D.C.

Bush Tick Trefoil

Widespread on hillsides east of Grenadier Pond in dry sandy soil.

H⁺ Desmodium glutinosum (Muhl.) Wood Wood Tick Trefoil Locally present in Area E, on north facing hill on east side of Grenadier Pond near an eastward embayment of the pond.

H⁺ Lespedezea capitata Michx.

Bush Clover

A species with western affinities, locally common in dry sandy soil of open oak woodlands northeast of Grenadier Pond.

H+ Lespedezea hirta (L.) Hornem

Rough Bush Clover

Much less common than L. capitata, this species is found near the toboggan run with Rosa carolina, Viola fimbriatula, Lechea intermedia and Helianthemum canadense. Also found in the Humber River area.

Vicia americana Muhl.

American Vetch

Reported by T.F.N. (1972) this species was not seen in 1976. Although it may still be present, it is much less common than <u>Vicia cracca</u>, the introduced species.

H+ * Vicia cracca L. Tufted Vetch

Common dry hillsides and open meadows east of Grenadier Pond.

H⁺ Lathyrus palustris L. var. palustris Marsh Vetchling
Reported by T.F.N. (1972). Also collected at the Humber
but not common in the Toronto region. More abundant further
north.

H+ Amphicarpa bracteata (L.) Fern

Hog Peanet

var. bracteata

Extremely abundant in rich thickets, particularly along paths and semi disturbed sites.

H⁺ * Euphorbia esula L. Leafy Spurge

Local patch on west bank of Grenadier Pond at south end
with Nepeta cataria and Chelidonium majus Celandine Poppy

Euphorbia maculata L. Spotted Spurge

Reported by T.F.N. (1972).

H⁺ 1 E <u>Euphorbia marginata</u> Pursh. Snow on the Mountain

Only collection was made in 1941 from "a dump at the north end of Grenadier Pond" This dump is no longer present in the park.

H⁺ * Euphorbia serpyllifolia Pers. Thyme leaved Spurge Weed in lawns at the north end of Grenadier Pond, just north of the Typha marsh

ANACARDIACEAE

 \underline{H}^+ Rhus radicans L. Poison Ivy

Very abundant in all rich deciduous Maple - Beech woodland slopes throughout the park.

Rhus typhina L. Staghorn Sumac Large colony present in dry sandy hillside east of Grenadier pond just north of the hillside gardens.

CELASTRACEAE

 \underline{H}^+ Celastrus scandens L. Climbing Bittersweet Common and widespread in rich wooded ravines throughout the park.

ACERACEAE

- H

 Acer Negundo L.

 Box Elder, Manitoba Maple
 Present at north end of the park. Probably planted at one
 time.
- C Acer platanoides L. Norway Maple
 Cultivated specimens occur here and there throughout the park.
- \underline{H}^+ Acer rubrum L. Red Maple Found in rich woods, on west bank of Grenadier Pond.
- Acer saccharum Marsh. Sugar Maple

 Found associating with Fagus grandiflora and Acer rubrum on west bank of Grenadier Pond.
- H Acer spicatum Lam. Mountain Maple
 Present in rich woods particularly in ravines to the north of Grenadier Pond.

HIPPOCASTANACEAE

C Aesculus hippocastanum L. Horse Chestnut
Many planted specimens found near Colbourne Lodge.

Hypericum prolificum L.

Shrubby St. John's-wort

Listed by Argus (1975) as rare in Ontario and Canada, this shrubby St. John's-wort was located in area I, in an isolated spot on the top of a hill, right beside a path. Psosibly planted. New record for York, Halton and Peel Counties and only 3rd record from Ontario.

H 2 Triadenum virginicum (L.) Raf. Marsh St. John's-wort
Only record is a collection in 1896, from a marshy area.
Since most wet places, (marshes, bogs, swamps)have been
destroyed, it is probably no longer in the park.

CISTACEAR

- H⁺ 2 Helianthemum bicknelli Fern. Frost weed

 Listed by Argus (1975) as rare in Ontario and Canada. Last record was in 1911. A southern species which may have disappeared from the park, close examination is needed to distinguish it from the following species.
- Http:// Helianthemum canadense (L.) Michx. Frostweed

 An infrequent plant of dry open sandy meadows, with Convolvulus spithameus, Leechea intermedia and Campanula rotundifolia
- H

 Lechea intermedia Leggett. Pinweed

 The more common species, it occurs with Helianthemum canadense
 (L.) Michx. as well as Lespedezea capitata. Known from only
 3 locations in York, Halton & Peel Counties.
- H l Lechea minor L.

Pinweed

var. maritima (Legge H.) Gray

Listed by Argus as rare in Ontario and Canada, last record was a collection made in 1949.

VIOLACEAE

H+ 2 Viola adunca Sm.

Hooked Spur Violet

.

var. Minor (Hook.) Fern.

Only record is in 1910 by T. J. Ivey.

- H⁺ 2 <u>Viola blanda</u> Willd. Sweet White Violet
 Last record made in 1894.
- H⁺ 1 <u>Viola cucullata</u> Ait. Blue Marsh Violet
 Only collection made in 1939.
- H⁺ 1 <u>Viola eriocarpa</u> Schw. var. leiocarpa Fern. Smooth yellow violet Only collection made in 1939.
- <u>Wiola fimbriatula</u> Ait. Northern Downy Violet Scattered throughout the park in depressions between hummocks of <u>Festuca ovina</u> often in mowed areas. Soil - dry, sandy.
- H⁺ 2 <u>Viola pallens</u> (Banks) Brainerd Wild Shite Violet
 Only collection made in 1907 by T. J. Ivey. Found along cold
 streams. Habitat has likely disappeared.

Viola papilionacea Pursh.

Common Blue Violet

Recorded by T. F. N. in 1972.

H+ Viola pubescens Ait.

Downy Yellow Violet

Recorded by T. F. N. in 1972.

H⁺ 2 <u>Viola selhirkii</u> Pursh.

Great Spurred Violet

Last collection made in 1898. Habitat shady ravines.

H+ 2 Viola striata Ait.

Pale Violet, Cream Violet

Only collection made was in 1894.

ELAEAGNACEAE

H Shepherdia canadensis (L.) Nutt. Buffaloberry, Soapberry
This shrub was known to be present on the dry open hillside east of Spring Road. However, an extensive search this year failed

to locate it, and it may no longer be present in the park.

LYTHRACEAE

H+ * Lythrum salicaria L.

Purple Loosestrife

Abundant along wet banks on west shore of Grenadier Pond.

H Decodon verticillatus (L.) Ell. Water Willow Swamp Loosestrife

Once much more abundant, due to dredging, now confined to 3 plants located just north of a large log on the west shore of Grenadier Pond in about 2 feet of water. Only other location in Metropolitan Toronto is in the Humber River.

ONAGRACEAE

H+ Epilobium angustifolium L.

Fireweed

ssp. circumvagum Mosq.

Epilobium coloratum Biehler

Purple leaved Willowherb

A few scattered plants were found on the edged of a wet Leersigoryzoides and Polygonum natans meadow.

H+ * Epilobium hirsutum L.

Hairy Willowherb

Occurring in patches in wet places in ravines, notably Wendigo Ravine and Spring Road Ravine.

Epilobium strictum Muhl.

Small Willowherb

Recorded as $\underline{\text{Epilobium}}$ $\underline{\text{densum}}$ Raf. by T.F.N. (1972) which is an older name.

H⁺ Oenothera biennis L.

Common Evening Primrose

Common weed of disturbed areas throughout the park.

H⁺ Oenothera parviflora L.

Small-flowered Evening Primrose

Recorded by T.F.N. in 1972.

Circaea quadrisulcata (Mcxim.) Franch. & Sav. Enchanger's Nightshade
Abundant along pathways, stairs, etc, and near allotment gardens.

HALORAGACEAE

Myrraphyllum sp.

Water Milfoil

Anonymous sight record in 1932 reports this species as present. Was not seen in 1976.

ARALIACEA	E
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- H Aralia nudicaulis L. Wild Sarsaparilla
 Frequent in rich moist woods leading to Wendigo Ravine.
- H Aralia racemosa L. Falso Spikenard Scattered plants throughout the park in moist rich woodlands and ravines.

APIACEAE

_______Sanicula marilandica L. Black Snakeroot
Osmorhiza claytoni *Michx.) Clarke Sweet Cicely
Reported by T.F.N. (1972)

Cicuta maculata L.

Water Hemlock

Reported by T.F.N. (1972)

- H <u>Cicuta bulbifera</u> L. Bulblet-bearing Water Hemlock
 Only location known in the park is in the marsh at the southwest corner of Grenadier Pond.
- H Crvptotaenia canadensis (L.) D.C. Honewort, Wild Chervil
- H 1 <u>Taenidia integerrima</u> (L.) Yellow Pimpernel
 Only record of this species is a collection by P.V. Krothov in 1933.
- H Heracleum lanatum Michx. Cow Parsnip, Masterwort
- H⁺ * <u>Daucus carota</u> L. Queen Anne's Lace Common weed of disturbed fields, particularly the south facing hillside at the extreme north end of Grenadier Pond.

CORNACEAE

- <u>H</u> <u>Cornus alternifolia</u> L.F. Pagoda Dogwood, Green Osier Found in rich woods and thickets. Not common.
- H Cornus canadensis L. Bunchberry, Dwarf Cornel
 A species with more northern affinities, this plant is locally abundant in cool deep ravines in rich soil under thickets.
- H Cornus rugosa Lam. Round leaved Dogwood

 Common shrub in rich ravines and slopes, occurring especially in Wendigo Ravine (Area B) and Spring Road Ravine (Area M).
- H Cornus stolonifera Michx. Red Osier Dogwood
 Common in moist sites in ravines, often beside streams.

EROCACEAE

- H 2 Chimaphila umbellata (L.) Bart. Prince's Pine, Pipsissewa

 The last collection was made in 1897. Likely no longer present
 in the park. While there is only 1 other location for this
 plant in York, Halton or Peel Counties, it is much more
 common further north.
- H 1 C Oxydendrum arboreum (L.) D.C. Sourwood, Sorrel tree

 Native as far north as Pennsylvania, this plant was probably cultivated here.

- Epigaea repens L. Trailing Arbutus, Mayflower Considered an endangered plant in Ontario due to picking of it and transplanting (P.M. Catling) this plant is found in only two isolated patches in Spring Road Ravine, in dry sandy soil, precariously near a main path.
- H⁺ 2 <u>Gaultheria hispidula</u> (L.) Muhl. Creeping Snowberry
 Only collection was made in 1907 from a swamp. Swamps were
 destroyed continually with the largest being filled in in 1960-61,
 and this plant has probably permanently disappeared.
- H⁺ Gaultheria procumbens L. Wintergreen, Checkerberry A more northern species, this plant is found in a couple of patches in dry sandy soil in open locations on the east side of the park.
- Gaylussacia baccata (Wang.) K. Koch. Black Huckelberry

 Locally present in open oak woodlands on east side of
 Grenadier Pond, and to a lesser extent the east side of
 the park. Associates include Vaccinium angustifolium,
 Amelanchier spicata var. stoloni Myrica asplenifolia and
 Pteridium aquilinum. Only 3 other locations in York, Halton
 E Peel Counties.
- H⁺ Vaccinium angustifolium Ait. Blueberry, Low Sweet Blueberry
 The most common blueberry in High Park. Occurs on dry sandy
 sites throughout the park, particularly on the hillside to the
 east of Grenadier Pond.

Vaccinium corymbosum L. Blueberry
Reported by P.M. Catling, 1971.

- H⁺ Vaccinium myrtilloides Michx. Velvet Leaf Blueberry
 This species occurs with Vaccinium angustifolium on the east side of High Park in open sandy locations.
- H

 Vaccinium pallidum Ait. Low Blueberry

 Often called Vaccinium vacillans, this genus has been recently revised. An unusual plant in Ontario, it is found on dry open sandy hillsides on the east shore of Grenadier Pond.

 This species is extremely located in Ontario to about 5 locations and is close to the northern limits of its distribution in High Park.

PRIMULACEAE

- H Lysimachia x producta (Gray) Fern. Hybrid Loosestrife

 A fertile hybrid of Lysimachia terrestris and Lysimachia quadrifolia, several plants were found growing with their parents in Area G at the bottom of a hill. This is the only location in York, Halton and Peel Counties for this plant.
- H Lysimachia ciliata L. Fringed Loosestrife Frequent along shores of stream leading into north end of Grenadier Pond.
- H Lysimachia quadrifolia L. Whorled Loosestrife Growing on dry sandy soil in open oak woodland, not very abundant.
- H Lysimachia terrestris (L.) BSP. Yellow Loosestrife,
 Swamp Candles
 On west side-of Grenadier Pond in low wet ground.

H Lysimachia thyrsiflora L.

Tufted Loosestrife

Found on west bank of Grenadier Pond, in wet soil.

H Trientalis borealis Raf.

Starflower

A less common species, this plant is found in deep cool ravines in rich soil, with <u>Trilliuma</u> sp. <u>Cornus canadensis</u>, Mitella diphylla, etc.

H+ * Anagallis arvensis L.

Pimpernel

Weedy species found along east bank of Grenadier Pond.

Dodecatheon meadia L.

Shooting Star

GENTIANACEAE

H+ 2 Gentianella crinita (Froel.) G. Don. Fringed Gentian

ssp. crinita

The last collection of this plant was reported from "sandy clay soil, west side of Grenadier Pond". Habitat is probably destroyed. Other locations in Toronto include the Humber River and Toronto Island.

H⁺ 2 Gentianella quinquefolia (L.) Small. Stiff Genian

ssp. quinquefolia

The last collection for this plant was made in 1907 from dry soil. It has not been seen since. Only two other locations in York, Halton & Peel Counties exist for this plant, the Humber Plains which are probably destroyed and the Don Valley.

H 2 Menyanthes trifoliata L. Buckbean

An undated but old specimen reports this specimen from marshes in Grenadier Pond. It is possible that this habitat has been largely destroyed.

APOCYNACEAE

H⁺ Apocynum androsaemifolium L.

Dogbane

Found in rich woodlands west side of Grenadier Pond and on east facing slopes in Area G.

H Apocynum cannabinum L.

Indian Hemp

First collected in 1932, but reported in the park as recently as 1972. Only 4 other locations are known in the Toronto area, Erindale, Humber Plains, Scarborough Bluffs and Toronto Island.

ASCLEPIADACEAE

H+ 0 Asclepias exaltata L.

Poke Milkweed

Listed by Argus (1975) as a rare plant in Ontario, this plant was present on the west bank of the stream, in Spring Road Ravine before its habitat was destroyed in 1972.

H⁺ Asclepias syriaca L.

Common Milkweed

7 :

Common in disturbed sites near T.T.C. loop on east side of park, near allotment gardens and in the toboggan run near Grenadier Pond.

- H⁺ 1 Asclepias tuberosa L. Butterflyweed Pleurisy Root
 A species with prairie western affinities. Was formerly (1941)
 present in the northwest section of the park in sandy soil.
 Only two other locations in the Toronto area (Erindale and Humber River).
- E Cynanchum nigrum (L.) Pers. Black Swallow-wort Common garden escape rapidly spreading in disturbed ravines throughout the Toronto area.

CONVOLVULACEAE

* Convolvulus arvensis L.

Field Bindweed

Reported by T.F.N. (1972)

H Convolvulus sepium L.

Hedge Bindweed

An unusual species, this plant is found in one of five locations in York, Halton and Peel Counties.

H Convolvulus spithameus L. Low Bindweed, Upright Bindweed
An unusual plant in the Toronto area, found in dry sandy ground,
on the Humber River and at Erindale, Peel Co. Scattered
plants occur throughout the dry open sandy woodland on the
east side of Grenadier Pond.

HYDROPHYLLACEAE

Hydrophyllum virginianum L.

Virginia Waterleaf

Reported by T.F.N. (1972).

BORAGINACEAE

- H⁺ 2 <u>Hackelia virginiana</u> (L.) Johnst. Beggar's Lice, Stickseed Only collection was made in 1896. No other records are known. May still be present as its habitat dry or moist upland woods have not been destroyed. Present in various sites in the Toronto area.
- E Borago officinalis L.

Borage

- $\underline{H^+}$ Myosotis laxa Lehm. Small flowered Forget-Me-Not One extensive patch in a low seepage springy area feeding into the stream in Wendigo Ravine.
- <u>H</u> * <u>Echium</u> <u>vulgare</u> L. Viper's Bugloss, Blueweed
 Common weed of disturbed and ruderal sites.

VERBENACEAE

Verbena hastata L.

Blue Vervain

Abundant in disturbed sites throughout the park.

Verbena urticifolia L.

Nettle leaved (White) Vervain

Reported by T.F.N. (1972).

LAMIACEAE

H 2 <u>Teucrium canadense</u> L. Germander, Wood sage
Only record is a collection made in 1896.

<u>H</u> <u>Scutellaria galericulata</u> L. Common Skullcap Listed by the T.F.N. (1972) as Scutellarra spilobifolia

* Nepeta cataria L.

Catnip

Common in disturbed sites. One large patch exists on the west side of Grenadier Pond at the southern end, just north of the marsh.

H * Glecoma hederacea L.

Gill-over-the-Ground

Ground Ivy

Local patches occur in wet areas near banks of stream in Wendigo Ravine.

....

Dracocephalum parviflorum Ntt.

Dragonhead

Found in disturbed areas along pathways.

H * Prunella vulgaris L.

Heal All, Self heal

Weed of disturbed ground, pathways, old fields, etc.

H 2 * Lamium aplexicaule L.

Henbit

Only record is a collection made in 1891 by J. White.

H * Leonurus cardiaca L.

Motherwort

Common weed of disturbed areas, particularly abundant in area of the toboggan run.

Stachys palustris L.

Woundwort

Reported by T.F.N. (1972).

H Monarda fistulosa L.

Wild Bergamot

Abundant in Area F in disturbed old open area with many paths. Occurs with <u>Desmodium canadense</u> and <u>Solidago juncea</u>

Lycopus americanus Muhl.

Water Horehound

Less abundant than the European species, this plant occurs along the west bank of Grenadier Pond in the same habitat as Lycopus europaeus L.

H+ * Lycopus europaeus L.

European Water Horehound

Very abundant along west bank of Grenadier Pond, and in edges of north Typha marsh.

Lycopus uniflorus Michx.

Common Bugleweed

Reported by T.F.N. (1972)

Mentha arvensis L.

Field Mint

Common weed of disturbed habitats. Reported by T.F.N. (1972).

H⁺ E Mentha gentilis L.

Mint

A garden escape, found in disturbed ground near allotment gardens. One other location known from York, Halton, Peel Counties, the Humber River. Only three locations known in Ontario.

SOLANACEAE

H+ E Lycium halimifolium Mill.

Matrimony Vine

13

An unusual garden escape, found near houses in a disturbed area beside the marsh in the soutwest corner of Grenadier Pond. Only one other location in York, Halton & Peel Co.

H⁺ Physalis heterophylla Nees.

Clammy Ground Cherry

var. heterophylla

Found in old field, much disturbed on a hillside just south of Bloor Street, at extreme north end of Wendigo Ravine.

E Physalis peruviana L.

Cape Gooseberry

Three or four isolated plants were found along a well used path near the hillside gardens, but in a wild area. Rhus typhina, Festuca ovina were associates.

H+ * Solanum dulcamara L.

Climbing Bittersweet

Abundant in rich deciduous woodlands and moist ravines throughout the park.

H Solanum nigrum L.

Black Nightshade

Reported by T.F.N. (1972)

SCROPHULARIACEAE

H+ * Verbascum blattaria L.

Moth Mullein

Three or four plants located at the top of a ravine just west of Howard Road. Associates included <u>Henerocallis fulva</u>. At southern species, only 2 other locations in York, Halton, Peel Counties are known.

H * Verbascum thapsus L.

Common Mullein

Much more common, found extensively in disturbed habitats.

H * Linaria vulgaris Hill.

Common Toadflax, Butter

Common weed of all disturbed slopes in the park. and Eggs

H Chelone glabra L.

Turt lehea

Reported by T.F.N. (1972) but the habitat for this plant (marshy shores along Spring Road stream) appear to have been disturbed. Further searches may yet find this plant.

Penstemon digitalis Nutt.

Foxglove, Beard tongue

Planted in wildflower garden on northwest bank of Grenadier Pond.

H 2 Mimulus glabratus HBR.

Monkey flower

var. fremontil (Benth.) Grant

Last record was a collection in 1922 by S. L. Thompson. Considered by Argus (1975) to be rare in Ontario.

Mimulus moschatus Dougl.

Mushflower

Anonymous sight record made in 1932.

H 1 <u>Veronica</u> <u>americana</u> (Raf.) Schw.

American Brooklime

Latest collection made in 1927. Habitat is brooks and ditches. Few of these wet places have remained undisturbed and this plant has likely disappeared.

H * Veronica arvensis L.

Corn Speedwell

A common weed of lawns

Veronica officinalis L.

Common Speedwell

Listed by T.F.N. in 1972 as present in the park. Widespread in disturbed open sites.

H <u>Veronica peregrina</u> L. Neckweed, Purslane, Speedwell Common in disturbed sites throughout the park.

H+ Gerardia purpurea L.

Small flowered Gerardia

var. parviflora Nutt.

Listed by T.F.N. in 1972, but not seen in 1976. May still be present in moist sandy soil along shores of streams.

H+ 2 Gerardia tenuifolia Vahl.

Slender Gerardia

var. parviflora Nutt.

Listed by Argus (1975) as rare in Ontario, this species was last collected from High Park in 1920's. Found on Toronto Island in sandy soil.

- H⁺ 0 Aureolaria pedicularia (L.) Raf. Fern leaved False Foxglove
 Listed by Argus 1975 as rare in Canada and Ontario, this plant
 is found in only the Humber & Toronto junction in the Toronto
 area. Formerly one plant was located just north of the
 present day toboggan run, but was killed either by weed spray
 or overgrowth.
- H

 Pedicularis canadensis L. Early Wood-betony

 An unusual species in the Toronto area.

 Other locations include the Humber River and the Rouge River.

 A colony of about 20 plants is found growing in a dry sandy meadow near Spring Road Ravine.
- H⁺ 2 <u>Pedicularis lanceolata</u> Michx. Swamp Lousewort
 Only one specimen was collected from the west side of Grenadier
 Pond in 1914. Its habitat (wet swamps) has largely been
 destroyed and the ground is much more disturbed now. It is
 unlikely that it is still in the park. Only other location
 in York, Halton and Peel Counties is the Humber.

LENTIBULARIACEAE

H l Utricularia vulgaris L.

Great Bladderwort

Only collection is from Grenadier Pond in 1936. Either very rare or absent from the pond now, since many areas of the pond were dredged.

PLANTAGINACEAE

- * Plantago lanceolata L. Lance-leaved Plantain Reported by T.F.N. (1972).
- \underline{H}^+ * Plantago major L. Broad leaved Plantain Common in disturbed areas in lawns, paths, etc.
- H 1 * Plantago psyllium L. Whorled Plantain Only one collection from the west shore of Grenadier Pond, in 1929. At that time only one plant.
- H⁺ Plantago <u>rugelli</u> Decne. Rugel's Plantain Common in disturbed sites along paths, in lawns, etc. throughout the park.

RUBIACEAE

Mitchella repens L.

Partridgeberry

One patch found growing in a cool shaded ravine on the west side of the stream in Spring Road Ravine. An unusual plant in Metropolitan Toronto.

Galium aparine L.

Cleavers

Reported by T.F.N. (1972).

H⁺ Galium boreale L.

Northern Bedstraw

Found in dry open sandy sites in open oak woodland.

CAPRIFOLIACEAE

H Sambucus canadensis L.

Common Elder, Black Elderberry

Scattered shrubs in rich ravines.

H⁺ Viburnum acerifolium L.

Maple leaved Viburnum

Found in Wendigo Stream ravine with <u>Cornus rugosa</u>, <u>Corylus cornuta</u>, and <u>Alnus rugosa</u>

H Viburnum lentago L.

Sheepberry, Nannyberry

Present in rich thicketed ravines with <u>Corylus</u> <u>cornuta</u>, <u>Cornus rugosa</u> and <u>Viburnum</u> acerifolium.

Viburnum trilobum

Highbush Cranberry

= Viburnum opulus L. var. americanum Ait.

Reported by the T.F.N. in 1972.

0 E Viburnum plicatum Thunb.

Japanese Hobblebush

Formerly known from west bank of stream in Spring Road ravine but a search was unable to locate these plants.

H Symphoricarpos albus (L.) Blake

Snowberry

Reported in 1972 by T.F.N.

H 1 E Symphoricarpos albus (L.) Blake Snowberry Cultivated

Var. Laevigatus Fern.

Only record is a collection made in 1954 by L. T. Owens

H+ 2 Linnaea borealis L.

Twinflower

Only collection was made in 1886. May have been found with other northern species in Spring Road ravine.

H⁺ E Lonicera x bella Zabel.

Honeysuckle

Although positive identification was not possible because no flowers were available, a tentative identification was made on the basis of orange berries and the pubescence on the leaves.

H 1 Lonicera canadensis Marsh.

Fly Honeysuckle

Found in Area I, hillside to the east of former swamp, in southeast corner of the park.

H⁺ Lonicera dioica L.

Wild Honeysuckle

Glaucous Honeysuckle

A semi-trailing species with bright red berries. Widespread in rich thickets and shrubby ravines throughout the park.

- H+ E Lonicera morrowi Gray Morrow's Honeysuckle An unusual garden escape. Found growing in Area I along with Lonicera dioica and Lonicera canadensis, two native species.
- H+ E Lonicera tatarica L. Tatarian Honeysuckle A cultivated specimen found in slightly disturbed ravines especially on hillside west of Grenadier Pond.
- H+ Diervilla lonicera Mill. Bush Honeysuckle A low shrub, found growing in dry open sandy meadows with Berberis thurbergii on hillside east of Grenadier Pond.

CUCURBITACEAE

- H+ Echinocystis lobata (Michx.) T & G. Wild Cucumber Trailing over Cornus and Viburnum sp. particularly in semidisturbed habitats, edges of paths etc. in rich deciduous ravines throughout the park.
- H+ Sicyos angulatus L. Bur Cucumber A much less common species than the one above, the Toronto area is the only locality known in York, Halton, and Peel Counties. High Park represents a new location within the Toronto area.

CAMPANULACEAE

- H 2 Campanula aporinoides Pursh. Marsh Bellflower
- н+ Campanula rapunculoides L. Creeping Bellflower Frequent in dry open sandy sites in Area A, especially along the paths. Associates include Andropogon scoparius, Festuca ovina, Campanula rotundifolia.
- н+ Campanula rotundifolia L. Harebell

LOBELIACEAE

H 2 Lobelia inflata L. Indian Tobacco Only report is in 1895 by W. H. McNairn, in open dry woods.

ASTERACEAE

- H+ Eupatorium maculatum L. Joe-Pye-Weed Common in north end marsh in paths trampled through it. Occurs with Lycopus europaeus and Lythrum salicaria.
- Eupatorium perfoliatum L. H Common in disturbed sites. Eupatorium rugosum Houtt. White Snakeroot Reported by T.F.N. in 1972 and P.M. Catling in 1973.
- H+ Liatris cylindracea Michx. Blazing Star High Park represents the easternmost location for this species in Ontario which is primarily western in its affinities. It's only other known locality in York, Halton & Peel Co. is in the Humber plains, where it is not protected, and where much of the habitat has been destroyed.

Boneset

H+ 1	Solidago	bicolor	L.
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Silver Rod

var. bicolor L.

Only collection is in 1954. There is some problems in distinguishing it from the following species.

- H

 Solidago bicolor L. var. concolor T.G. Hairy Goldenrod

 Called S. hispida by T.F.N. (1972) found in dry open sandy
 hillsides especially in Area A. Locally abundant only.
- Solidago caesia L. Blue stemmed Goldenrod

 Reported by T.F.N. in 1972, this Goldenrod is not abundant
 in High Park. Occurs in patches in open area near Spring Road
 Ravine.
- H⁺ Solidago canadensis L. Canada Goldenrod Widespread in open areas of the park, often in association with disturbed ground and weedy species.
- H Solidago flexicaulis L. Zigzag Goldenrod,
 Found in rich woods, often with Aster

 macrophyllus and Amphicarpa bracteata.
- H⁺ 2 <u>Solidago gigantea</u> Ait. Late Goldenrod Only collection was made in 1920 by S.L. Thompson.
- Solidago graminifolia (L.) Salisb. Grass-leaved Goldenrod Locally abundant along west bank of stream in Spring Road Ravine.
- <u>H</u> <u>Solidago juncea</u> Ait. Early Goldenrod
 Widespread in open dry areas throughout the park, this is the earliest flowering Goldenrod, blooming as early as July 15.
- H⁺ Solidago nemoralis Ait. Gray Goldenrod

 Scattered patches occur throughout the open dry areas of the park, often with Solidago hispidis and Aster lateriflorus.
- Solidago patula Muhl. Rough-leaved Goldenrod
 One plant only known in the park, this occurs in Wendigo
 Ravine, close to the creek. Other locations for this unusual
 Goldenrod include Humber River, York Co. and Pottageville.
- H⁺ Solidago squarrosa Muhl. Stout Goldenrod Locally abundant in Area M with Solidago caesia in a relatively dry sandy site.
- H Aster azureus Lindl. Shy blue Aster, Azure Aster
 One extensive patch exists in the park at the north end of
 the nature trail. This area is considerably disturbed,
 however, and steps should be taken to protect this unusual
 more southern species which Argus lists as rare in Ontario.
- Aster cordifolius L. Heart-leaved Aster
 A common species, often found in semi-disturbed sites in rich woods at the bottom of ravines.
- Heath Aster

 Found throughout the open oak woodland (A) with Andropogon scoparius, Festuca ovina and Solidago hispidus.

O Aster laevis L.

Smooth Aster

Formerly present on west bank of stream in Spring Road Ravine, at the north end near the sculpture area; a landslide occurred here in 1972 and the area was sodded over.

- Aster lateriflorus (L.) Britt. Calico Aster

 Occurs in open dry sandy meadows with Aster ericoides and Solidago juncea especially in Area A and N.
- H+ Aster macrophyllus L. Large-leaved Aster
 Locally abundant in open oak woodland and the top of a rich wooded slope. Can occur with Helianthus sp. and Amphicarpa bracteata.
- H+ Aster novae-angliae L. New England Aster Widespread in semi-disturbed habitats.
- H

 Aster puniceus L.

 Locally abundant in wet areas in
 Wendigo Ravine and along the creek in Spring Road Ravine.

 Aster sagittifolius Willd.

 Reported by P.M. Catling in 1971 as a sight record only, he feels this record may be invalid, since a detailed examination of the plant is necessary for an exact identification.
 - O <u>Aster schreberi</u> Nees. Schreber's Aster
 Listed by T.F.N. in 1972, there are now doubts that this
 species was correctly identified. Probably it has never
 existed in High Park.
- H⁺
 Aster simplex Willd.

 Panicled Aster

 Found in low moist shaded thickets on the slopes of
 Wendigo Ravine.

 Erigeron annuus (L.) Pers.

 Annual Daisy Fleabane
 Listed by T.F.N. (1972).
- H⁺ Erigeron philadelphicus L. Common Fleabane
 Found in dry open sandy meadows with
 Helianthemum canadense and Campanula rotundifolia.
- H 2 <u>Erigeron pulchellus</u> Michx. Robin's Plantain

 Listed by Argus (1975) as rare in Canada and Ontario, the only collection for this species was made in 1890 by J. White.
- <u>H</u>

 <u>Conyza canadensis</u> (L.) Crong. Horseweed, Canada Fleabane

 A common species of dry open disturbed ground, particularly
 on the east side of High Park.
- Antennaria neglecta Greene Pussy Toes
 Found in low depressions between hummocks of Fescue grass, in dry sandy hillsides, often along semi-disturbed sites such as paths.
- H⁺ Silphium perfoliatum L. Cup Plant

 Listed by Soper as one of the eleven species used to determine the Carolinean Zone of Ontario. High Park represents the northern limit of this species. Listed by Argus as rare in Ontario and Canada. About 10 plants found in Area E near a stairway.

- H⁺ Ambrosia artemisifolia L. Common Ragweed
 Common in all disturbed areas of the park.
- H⁺ Xanthium strumarium L. Cocklebur Common in disturbed sites in toboggan run, and allotment gardens.
- H 2 <u>Rudbeckia hirta</u> L. Black-eyed Susan Only collection was in 1910 by T. J. Ivey.
- H+ Helianthus decapetalus L. Thin-leaved Sunflower
 Abundant in patches in open oak
 woodland habitats. Flowers later than Helianthus divaricatus
 (August September).
- Helianthus divaricatus L. Woodland Sunflower
 Growing in patches throughout open oak woodland, often
 occurs with above species, but alowers earlier (i.e. late
 July) rather than August.
- ______ Helianthus tuberosus L. Jerusalem artichoke

 Patch of about 50 plants located on west side of toboggan
 run. Most plants were over 6 feet tall.
- H⁺ 1 Coreopsis lanceolata L. Lance-leaved Coreopsis
 Only collection was in 1941 at
 "Northwest end of Grenadier Pond, sandy soil of dump".
 This dump is no longer in existence and likely the plant has also disappeared.
- H⁺ Bidens cernua L. Nodding Bur-Marigold Reported by P.M. Catling (1971) in wet ground at the edge of Grenadier Pond.
- Bidens frondosa L. Beggar-ticks
 Found in disturbed sites along pathways, in rich ravines.
- H⁺ 2 <u>Bidens tripartita</u> L. Sticktight
 Only collection in 1895 by M. Wilkes in "swamp". Possibly occurred in the swampy area in the southeast corner of the park.
- * Galinsoga ciliata (Ref.) Blake Hairy Galinsoga
 Common weed along paths and near allotment gardens in High Park.
- H⁺ * Anthemis cotula L. Mayweed
 Weed of disturbed sites, lawns, pathways and ruderal sites in general.
- H⁺ Achillea millefolium L. Common Yarrow
 Weedy species of disturbed ground, old fields, allotment gardens, and as an occasional weed in lawns.
- H⁺ <u>Matricaria matricarioides</u> (Less.) Porter Pineapple-weed Common weed of lawns and other disturbed areas (e.g. along paths, etc.)
- \underline{H}^+ * Chrysanthemum leucanthemum L. Ox-eye Daisy Found in disturbed sites, old fields, and area around allotment gardens.

* Tanacetum vulgare L.

Common Tansy

Found in disturbed hillside near toboggan run on east shore of Grenadier Pond.

H 2 * Artemisia biennis Willd.

Biennial Wormwood

H Artemisia campestris L. ssp. borealis Wormwood

(Pall.) Hall & Clem.

Common plant of disturbed ground in Toronto.

H Artemisia campestris L. ssp. caudata Wormwood
(Michx.) Hall & Clem.

Common plant of disturbed ground.

* Artemisia vulgaris L.

Mugwort

A less common weed of roadside and waste places. Other locations in York, Halton & Peel Counties include Toronto Island, and Snelgrove, Peel Co.

H+ * Tussilago farfara L.

Coltsfoot

A European introduction. One extensive patch at the bottom of a disturbed hillside at northeast side of Grenadier Pond. Flowers are precocious.

H l Petasites frigidus (L.) Fries. Butterbur, Sweet Coltsfoot

var. palmatus (Ait.) Crong.

Only collection was made in 1933. Possibly occurred at edges of swampy area in southeast corner of the park which was destroyed in 1960-61.

- H 2 <u>Erechtites hieracifolia</u> (L) Raf. Pilewort Fireweed
 Only report was a collection made in the 1920's from
 "broken lowland". Only 6 locations for this plant in
 York, Halton and Peel Counties.
- H+ * Senecio vulgaris L. Common Groondsel
 Weed of disturbed habitats, lawns, old fields, by pathways, etc.
 - * Arctium lappa L. Great Burdock

Anonymous report 1932 listed it as present in the park. Rather rare in Ontario, the only locations for this plant in York, Halton & Peel are from Oakville, Snelgrove and the Humber River.

- * Arctium minus Schk. Common Burdock

 Common in disturbed sites particularly the toboggan run
 and landfill sites.
- <u>H</u>* * <u>Cirsium arvense</u> (L.) Scop. Canada Thistle

 Abundant in grossly disturbed habitat, especially the base of the toboggan run.

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- H⁺ 1 Cirsium muticum Michx. Swamp Thistle
 Only collection was made in 1953 by L. T. Owens. Probably
 grew in wet sites, in low lying ground. Only 3 other locations
 in York, Halton & Peel Counties.

- * Cirsium vulgare (Savi.) Tenore Ball Thistle

 Abundant and prolific in toboggan run area, east shore of Grenadier Pond.
- * Cichorium intybus L. Chicory

 Common and abundant in disturbed areas throughout the park.
 - * Lapsana communis L. Nipplewort

 Reported by T.F.N. (1972). An uncommon weed in the Toronto area, found in the Humber River area and in Snelgrove,

 Peel County.
- \underline{H}^+ * $\underline{Tragopogon}$ dubius Scop. Lemon-yellow Goatsbeard Present in disturbed sites at north end of Wendigo Ravine.
 - Tragopogon pratensis L. Common Yellow Goatsbeard
- H⁺ * Taraxacum officinale Weber. Common Dandelion Common weed of lawns, pathways and other disturbed sites throughout the park.
- H * Sonchus arvensis L. Field Sow Thistle

 var. glabrescens Guenth, Grab & Wimm.
- H⁺ * Sonchus asper (L.) Hill. Spiny-leaved Sow Thistle Weedy of disturbed habitats, often at the junction of mowed and natural areas. Particularly abundant in the toboggan run.
 - * Sonchus oleraceus L. Common Annual Sow Thistle
 Common weed of disturbed sites.
- H Lactuca biennis (Moench) Fern. Blue Lettuce

 Lactuca canadensis L. Canada Lettuce

 Reported by T.F.N. in 1972.
- * Lactuca serriola L. Prickly Lettuce Widespread in disturbed areas of the park.
 - * Lactuca serriola L. Prickly Lettuce
 var. integrata Gren & Godr.

A lobeless variety. Reported by T.F.N. (1972).

- H* * Crepis tectorum L. Hawk's beard

 A rather unusual plant of slightly disturbed ground in dry sandy soil. Found along pathways in Area A, the open oak woodland. New record for the park. Only second record for York County. First location is Cherry Street Beach in sandy soil.
- Prenanthes alba L. Rattlesnake Root, White lettuce west bank of Grenadier Pond.
- H Prenanthes altissima L. Tall White Lettuce

 Present in rich woodlands particularly along disturbed areas such as pathways.

<u>Prenanthes</u> <u>serpentaria</u> Pursh. Lion's Foot Present in rich deciduous woodlands, along pathways.

- * <u>Hieracium aurantiacum</u> L. King-devil
 An occasional weed along pathways in dry open oak woodlands.
- * <u>Hieracium pratense</u> Tausch. Yellow Hawkweed

 One plant noticed growing at south end of enclosed area around Catfish Pond in southeast corner of High Park.
- Hieracium canadense Michx. Canada Hawkweed var. fasciculatum (Pursh.) Fern.
 Occasionally seen along pathways in dry sandy meadows in open oak woodland.
- Hieracium c.f. canadense Michx. Canada Hawkweed

 This plant while most resembling this species is much south of its range. It is likely that it is a recent European introduction, but further collections and study will be needed to determine this.

BIRD INVENTORY

In some respects the summer bird life in High Park is not as interesting as during other times of the year when the more uncommonly seen migrants pass through - time when other bird-watchers are attracted to the Park. In spring the myriad of wood warblers and other migrants, stop off at the Park and it is a good location to receive the wing-weary travelers which have just flown across Lake Ontario. Spring also sees the nesting activities of a large number of resident birds; this continues on into even the later part of the summer for some species. Various birds which winter in the Park leave in spring for the north. There is of course considerable interest to be taken in breeding birds but the observer must be not only early up in the morning, but also early out in the spring, to catch them all.

During the course of the summer, nesting American Robins,
Northern Orioles, Red-winged Elackbirds, Mallards, Canada
Geese, Downy Woodpeckers, Common Flickers, and Eastern Kingbirds, are perhaps most in evidence; many other species also
nest in the Park. Their young start making their appearance
in early summer and the adults are often seen feeding them.

Later in the summer some species start flocking together and
this activity continues on into the fall. Winter resident birds
are often of quite different species from summer residents, though
there are some birds which stay all year round and others which can
be coaxed to do so with appropriate artificial feeders and houses

In the following section, research has resulted in a Composite Bird List which was compiled from various sources; the information is intended to provide more of a comprehensive picture of the avian life in the Park. The contributors were several and will be mentioned later. Some equally creditable information from the more distant past was also collected and is included in a special history section.

The actual field work done this summer has yielded some interesting information on the localities where various species were found, chiefly in the environs of Grenadier Pond. The methods used will

be discussed along with their limitations and problems incurred. An overview of the quality of the habitat for birds in the Park will then be outlined and some recommendations made with an eye to preserving the special areas of the Park which provide essential habitat. Other areas around Toronto offer similar wildlife possibilities to High Park; the findings of several studies elsewhere were reviewed so as to determine the possibilities for improvement of the study area and the special strengths and weaknesses the Park has for attracting various birds.

Mammals, reptiles and amphibians are discussed with respect to casual observations made concerning them this summer.

More detailed information from which the Composite List and History sections were derived is included in the Appendices.

METHODS AND MATERIALS

Bird walks were undertaken several times by Kingsley Jew before he became ill and was replaced by James Rowsell who subsequently undertook regular bird walks between June 17 and August 20, 1976. These walks followed no pre-set routes and were done at a leisurely pace including both slow walking and frequent intervals of five to fifteen minutes stationary observation. Hillside trails were available for access into areas of bushy and forested land on both east and west sides of Grenadier Pond and along Wendigo Ravine. Bird walks were undertaken irregularly in other sections of the park usually with Mr. Garry Fairfoul of the High Park School. In the Grenadier Pond area walks commenced from the Hillside Gardens and proceeded half the time in a clockwise direction and half the time in a counterclockwise direction so that all areas were covered at various hours of the morning or evening. Although most of the walks were done in the morning between 5:30 and 10:00 am., others were done in the evening and a few at midday.

For bird watching a pair of 7 % 35 binoculars was used. Field identification texts used included the Golden Field Guide to Birds of North America and the Peterson Field Guide to the Eastern Land and Water Birds. Field use was also made of Peterson's Field Guide to the Mammals and others listed in the Bibliography.

Bird names were recorded along with their locations except in the case of common birds such as Common Grackle, Starling, House Sparrow, Red-winged Blackbird, American Robin, Rock Dove and Mallard. Birds generally found in the air above the pond such as Common Nighthawk, Gulls, Swallows, Chimney Swift and Purple Martin, were also not recorded as to location. Birds observed in the marsh area to the north of the Pond were described as present at that location. Birds seen around Grenadier Pond were described as being on the "east side" (from the northern marsh southward and westward along the sound end to the pond outflow); the "west side" (from the outflow northward to the northern marsh); or, the "creek" (From the northern marsh to Eloor St. along Wendigo Ravine.

Nests, where observed, were recorded, as were broods and sightings of any mammals, reptiles or amphibians (or their various signs) as well as any unusual occurrences related thereto, except in the case of Gray Squirrels which were so numerous as to divert the attention from birds which remained as the main object of interest. Walks were engaged upon whenever practicable, weather and other obligations permitting.

On August 21 a transect survey was undertaken in the area south from Eloor Street from Wendigo Way to the west bank of the creek, southward to the boathouse, in the interest of counting Gray Squirrels and their nests. The observer walked on a 260° (magnetic) bearing and stopped after every fifty paces for about three minutes to observe tree tops in all directions. Parallel transects were also fifty paces apart; approximately 20 acres were covered.

Various landmarks and field maps were used to describe more exact locations and these were coordinated using a compass, aerial photographs and a 1:25,000 topographic map of the area.

Considerable time was also spent in collating the data for birds from other sources; the use of various libraries and the contacting of several notable bird watchers, some associated with the Toronto Field Naturalists Club, was effected to this end.

HISTORY OF BIRD OBSERVATIONS IN HIGH PARK

A pond with plenty of marsh, natural shoreline and diverse surrounding forestland provides an excellent milieu for a whole range of birds, mammals, reptiles and amphibians. High Park with its Grenadier Pond could adequately boast of displaying such an environment for most of its history. Although changes in this environment have been often radically deleterious in the recent past (as displayed in the map series for the past thirty years, pages 5-10), the Park still provides good habitat for many resident species and is well visited by a host of migrant birds.

It will become apparent in the following brief history that some species of birds and other animals mentioned, are much less common nowadays. We cannot entirely place the blame on the deleterious environmental changes in the Park; other adjacent sections of land have also been developed in a manner which has tended to isolate High Park. Some species which would have included High Park as part of their range thus found the Park too small or have moved to more desirable locations (such as the more continuous Humber River Valley corridor). Other species (one thinks of migrants in particular) may have been subject to influences in other parts of their range. Nevertheless, detrimental changes within the Park are important and should be considered.

John G. Howard, original owner of much of High Park, makes a number of references to his interest in birds and other animals. These included hunting and trapping and the collection of wild birds for his downtown residence "birdroom". His interest in collecting birds, shared also by Mrs. Howard, stemmed from 1844 when at the age of 41 he purchased a thrush and was given some small wrens by a friend. The following year he bought a catbird and in 1847 stated in his diary that he had trapped four catbirds on the farm and was given two others. He augmented his collection with English birds by trading for them, "four blue jays, two Canadian song sparrows and one catbird". In 1848 he bought a hen

goldfinch and a singing woodlark and traded something for a bobolink.

Over the years he made various improvements to his birdroom where birds could fly about to some degree and to which he sometimes took his friends. He added some young "respoles" (Redpolls perhaps) to his collection. Sometimes he gave birds to friends as presents.

Howard's hunting and trapping interests are also mentioned in his diary. One year (1882) he shot a bittern, a small duck and a lesser bittern and thirty robins. On another occasion he mentions catching "a very young marmot or groundhog" and shot 46 robins with three days' effort. Also in 1882 he caught a young fox in a trap. He also was in the habit of shooting hawks and squirrels.

One of his visitors to the farm mentions that there were squirrels, birds, chipmunks, groundhogs, turtles and skunks on the property. On one occasion a snapping turtle wandered up to Howard's house.

(The above is a summary of Howard's statements and other commentaries from The Journal of John G. Howard, pages 23, 25, 28, 32, 88, etc.)

History Related to Terrestrial Wildlife

Animals mentioned in the past which are no longer common or are absent -

aDS	absenc -		Probable			
A.	Joh	n G. Howard's Diary	Present Status			
	1.	American Bittern	Uncommon migrant			
	2.	Least Bittern	Rare migrant			
	3.	Groundhog	(rare or) absent			
	4.	Red Fox	(rare or) absent			

Other references to birds in Toronto and High Park are possibly present in the following references which either could not be located or for which insufficient reference was available or for whose perusal insufficient time was available.

- Fleming, J.H., <u>Birds of Toronto. Canada</u>, 1907. (Also a list of 322 Ontario species from 1893)
- 2. Hayes, L., 1923-24, Can. Field Nat., Vols. 37, 38
- McIlwaith, Thomas, <u>Birds of Ontario</u>, 1886
- 4. Nash, Charles W., Check List of the Birds of Ontario (?)
- 5. Ussher, Richard D., (records for birds of York region)
- 6. Hope, Clifford E., (records for birds of Southern Ontario)
- 7. Townson, John, Can. Field Nat., Vol. 44, P. 167, 1930
- Barratt, Fred, Notebook of birds observed mainly in Toronto and vicinity, 1937, 1939. (Rare books and special collections, Robarts Library, U of Toronto)
- Beaupre, Edwin, Newspaper Clippings, circa 1895. (Rare books and Special Collections, Robarts Library, U. of Toronto)
- 10. Nash, Charles William, Field Notes, circa 1890. (Rare books and Special Collections, Roberts Library, U. of Toronto).
- Goodwin, Clive, 1968-69, Journal of American Birds (Audubon Field Notes), V. 22, pp 695-7; V. 23 p 728
- 12. Audubon Field Notes (Various Notes)
- 13. Canadian Field Naturalist (Periodical with notes)
- 14. Speirs, J. Murray, 1939, Fluctuations in Numbers of Birds in the Toronto Region, Auk, 56: pp 411-419
- 15. Macoun, John, Catalogue of Canadian Birds, Part 2, 1903, 1909
- 16. Canadian Naturalist and Geologist
- 17. Journ. and Proc. Hamilton Assoc.
- Biol. Review of Ontario, 1894
- Orn. and Oologist (Vol. 15, 1890)
- 20. Trans. Royal Can. Inst.
- 21. Can. Sportsman and Naturalist
- 22. Auk
- 23. Ont. Nat. Sc. Bull. (1906)
- 24. Bird Lore
- 25. Bull. Nuttall Orn. Club (1879)
- 26. Longille, Rev. J. Hilbert, Our Birds in their Haunts, 1884
- 27. Oologist
- 28. Cardinal
- 29. Wilson Bull.

Although it is probable that bird watching picked up momentum after Howard's tenure of the Park expired, little information was easily at hand for some years thereafter.

One interesting development regarding birds was the release of "unknown numbers [of English Sparrows] at Toronto in 1875 and near Oshawa in 1876." (Ont. Fish and Wildl. Rev., 14:1, 1975)

J.L. Baillie was one of the earlier ornithologists who played an active role in the scientific documentation of breeding birds in Ontario and he centred much of his activity in the Toronto area. He has stated in his and P. Harrington's survey of Ontario breeding birds (1936) that at the time of writing, "fully ninety per cent of the ornithological work in Ontario has been done in the southern 10% of the province."

Baillie comments in the <u>Canadian Field Naturalist</u> that field sparrows were abundant in Toronto in 1922 and 1923 but there weren't many in 1924, none was observed in 1927 and only three were seen by him in 1929. He supplies no concrete reasons for the change, which he says, "seems to be an example of the pronounced periodic fluctuation in numbers which occurs with many species of birds at the limits of their range." (Can. Field Nat., 44, p. 23).

Baillie and Harrington's work (1936) was extended with the incorporation of new records for many years thereafter and this same publication is useful in supplying the older nesting records in the High Park area. A list of specific nesting birds for High Park which exists in the publication will be found in Table 4.

A FEW NESTING SPECIES IN HIGH PARK

(J.L. Baillie)

Grenadier Pond /5/35 Grenadier Pond /25 High Park /6/36 High Park
/5/35 Grenadier Pond /25 High Park /6/36 High Park
/25 High Park /6/36 High Park
/6/36 High Park
/35 Grenadier Pond
5/29 High Park
Grenadier Pond
High Park
oird High Park 1898

During the early part of the century, the annual Christmas bird count was initiated and has continued to present. J.L. Baillie stated in The Ontario Field Biologist,

- "Although the Christmas 'census' of birds has been a popular feature of the naturalists' year ever since it was begun by Dr. Frank M. Chapman, then editor of <u>Bird Lore</u> magazine in 1900, the Toronto count prior to 1925 was made in a desultory fashion by a few individuals."
- "In 1925, the Brodie Club undertook the responsibility for the local count and each year (excepting 1952 and 1960) the results have been published in the <u>Canadian Field Naturalist</u>. The undertaking was turned over to the Toronto Ornithological Club in 1958.
- "A day in the latter half of December is selected for the count and the region is broken up into areas, each of which is assigned to an experienced party. The Toronto region includes all the area within thirty miles of the Royal Ontario Museum."

A complete listing of the results of the Christmas bird counts between 1925 and 1945 exists in Richard M. Saunders' book <u>Flashing Wings</u> and it is obvious that interest in the undertaking increased during that period. From the data it is difficult to tell whether any particular species has increased or decreased in relative occurrence. Some species may even be more common now than in past winters because of residents' increasing use of bird feeders. For the Toronto Region, the number of species observed went from 26 in 1925 to 58 in 1945 and the number of observers involved showed a twelve-fold increase.

For the High Park area, data from the Christmas bird census is not available for the area as such, until 1970 when 33 species were recorded. Only 23 were recorded in 1975. This data will be listed more fully in the Results Section.

The reliability of cross-comparison of data for wintering mallard and black ducks was questioned in the Ontario Field Biologist (no. 10, p 10), where it states:

"General observations during the early winter seem to suggest that there are considerable local shifts in the wintering populations due to progressive freeze-up and consequently the birds are more wide-spread and harder to count in December. For example, the numbers on Toronto Island build up sharply after the bodies of water in High Park freeze over."

During the period 1931 - 1943, "tame black and mallard stock was liberated in the Toronto area which (sic) established itself as permanently resident under rather artificial conditions, and which crossbred, making the identification of individuals difficult. By 1944 this situation had somewhat clarified "so that the re-counting of birds of these species was re commenced at that time during the Christmas censuses. It is interesting to note that whereas the number of mallards seen in the High Park area between 1970 and 1975, has increased, the number of Black Ducks has decreased. (However, the aforementioned limitation overrules any valid conclusions at the present time.)

Dozens of interesting observations regarding birds in High Park appear in Saunders' book Flashing Wings covering the years 1938 - 1946. Some of the more interesting quotations will be found in Appendix 4. However, a list of the more peculiar sightings will be included here. An excellent table of information is presented in the book regarding the dates of arrival and departure of birds in the Toronto area. It was compiled from several sources (including Saunders' and J.L. Baillie's observations over a period of up to 27 years).

TABLE 5 BIRD SPECIES NOTED IN THE TEXT OF FLASHING WINGS

Species	Date	Location	Remarks					
1. Red-breasted Merganser	1/1/45	Sunnyside						
2. Great Black-backed Gull	1/1/45	"						
Red-tailed hawk	1/1/45	Grenadier P.						
4. Mourning Dove	1/1/45	N. end Grenadier P.						
5.* Marsh Hawk	1/1/45	Windego Ravine	of yr.					
6.* Common Snipe	1,2/42	North Marsh						
7. Common Gallinule	1939 or 40	North Marsh	Spent the winter					
8. Swamp Sparrow	-	North Marsh	Winter resident					
9.*1Hoary Redpoll	1,2/42	Windego Ravine)	assoc. together					
10.* Common Redpoll	1,2/42)	Hoary rare or					
ll.* Glaucous Gull	11/2/45	Sunnyside	absent					
12. Redwinged Blackbird	11/2/45	North Marsh	Uncommon winter bird					
13. Common Crow	20/2/44	Grenadier Outlet	Wintering					
14.*1Horned Lark	20/2/44	Grenadier Outlet						
15.*lIceland Gull	20/2/43	Sunnyside						
16. Northern Shoveler	15/3/42	Sunnyside	Wintering					
17. White-breasted Nuthatch	3/40	North Marsh						
18. Tree Sparrow	3/40	North Marsh						
19. Dark-eyed Junco	3/40	North Marsh						
20. Cardinal	3/40	North Marsh						
* Rare or uncommon 1. Unlisted by J.A. Kelley (1970-76)								

TABLE 5 Cont'd BIRD SPECIES NOTED IN THE TEXT OF FLASHING WINGS

_	Species	Date	Location	Remarks		
21.*	Purple Finch	16/3/41	Windego Ravine			
22.	Brown Creeper	16/3/41	" "	[
23.	Gadwall	16/3/41	West Bank, G.P.	Wintering on pond		
24.	American Woodcock	17/4/40	Windego Ravine			
25.	Eastern Phoebe	17/4/40	" "			
26.*1	Henslow's Sparrow	4/40	North Marsh	Rare Sighting		
27.	Caspian Tern	23/4/44	Sunnyside			
28.*1	Water Pipit	5/5/38	Windego Ravine			
29.	Scarlet Tanager	7/5/41	Howard's House			
30.*	Red-headed Woodpecker	7/5/41	" "	Saw 16 species of		
31.*	Golden-winged Warbler	7/5/41	" "	warblers this day		
32.*	Yellow-breasted Chat	5/43	Near Zoo	4 seen this Spring		
33•	Nashville Warbler	25/4/42	Windego Ravine	(Also on 13/5/43, saw at least 100 in High Park)		
34.	Black-and-white Warbler	25/4/42	Windego Ravine			
35•*	Cerulean Warbler	25/4/42	Windego Ravine	Rare at the time and place		
36.*1	Hudsonian Curlew	20/4/43	Sunnyside	Extended migration time span.		
37.*1	Brunnick's Murre	27/4/43	Sunnyside	Very rare on the Great Lakes		
38.*1	Clay-coloured Sparrow	14/4/43	High Park	Rare in Toronto		
39.*1	Red Knot	26/4/46	Sunnyside			
40.*1	Western Sandpiper	16/7/44	Sunnyside			
41.	Black-crowned Night Heron	23/7/44	Sunnyside			
42.*1	Sanderling	1/8/44	Sunnyside			
43.*1	Northern Palarope	8/9/42	Sunnyside			
44.*1	Golden Plover	8/9/42	Sunnyside			
45 .* 1	Little Gull	2/10/40	Sunnyside	2nd Toronto recording		
46.*1	Snowy Owl	10/11/45	Sunnyside			
47.*	Red-necked Grebe	8/11/42	Sunnyside			
48.*1	Red-throated Loon	16/11/41	Grenadier Pond			
49•	American Widgeon	11/38	Sunnyside			

The activity of birdwatchers in the Park has increased in recent times, especially in the past thirty years. J.L. Baillie's records of nesting birds formed a backbone for the excellent records now available. Baillie kept track of new nesters and published additions in The Ontario Field Riologist until the late 1960's. In 1949 he mentions the appearance of a newcomer - the Vermilion Flycatcher, "evidently the first occurrence north of the New Mexico, Utah, Arizona, Nevada line. Tom Swift discovered it in High Park, Toronto, October 9, 1949, following two days of moderately steady and warm winds from New Mexico. It was associating with a flock of Eluebirds and was collected (an immature male) by Mr. Hope, November 1. It has not been reported since in Canada." (Ont. Field Riol., No. 11, p 1)

The High Park School for Outdoor Education has been in existence for some years now. It was established by the Toronto Board of Education and the Department of Parks for the City of Toronto. Its aim is to provide instruction for pupils at the grade five level in the areas of natural science, crafts, and recreational sports. Students study the outdoors in the beautiful surroundings of High Park and are given instruction in such subjects as weather forecasting, geology, plant life, birds, camp crafts, pond and stream studies, orienteering, tennis, badminton, photography, swimming and leather craft.

This programme is operated for eight weeks and is provided for 120 different students each week. Pupils are brought from collector schools by park trainers each morning and returned there each afternoon. There is no charge whatever for this programme.

One of the latest developments is bird study in Toronto started in 1970 and has included Kigh Park among its observation sites. This is the "Toronto Spring Warbler Migration Study" whose findings are published in the Contario Field-Biologist. "The purpose of this study is to show the patterns of the spring warbler migration at Toronto, to compare the relative abundance of each species studied and to document the fluctuations in the number of warblers from year to year."

TABLE 6

SPECIES AND FREQUENCIES - BIRDS OBSERVED
DURING 1976 SUMMER SURVEY OF HIGH PARK

Species	Common Name	East Side Grenadier Pond	West Side Grenadier Pond	General Pond Sightings	Other Areas in High Park	Total	Rank From Total
				-		_	27
C-4	Great Elue Heron			5 2		5 2	21 24
C-5	Green Heron			17		17	13
D-4 D-10	Canada Goose Mallard			22		22	8 8
				8		8	19
D-15	Blue-winged Teal			1		1	25
D-36	Ruddy Duck			1		1	25
E-19	American Kestrel			4		4	22
G-3	Sora Killdeer			19		19	11
H-5				15		15	14
H-15 H-18	Spotted Sandpiper			10		10	17
H-26	Lesser Yellowlegs			5		5	21
I-8	Least Sandpiper Herring Gull			20	1	21	9
I-10	Ring-billed Gull			25	-	25	7
I-21	Common Tern			10		10	17
I-25	Caspian Tern			1		1	25
K-2	Rock Dove	8	10	-		18	12
K-4	Mourning Dove	1	6		1	8	19
K-8	Black-billed Cuckoo	_	2		2	4	22
M-3	Common Nighthawk		~	7	~	7	20
M-4	Chimney Swift			9	1	10	17
M-7	Belted Kingfisher			5		5	21
N-1	Common Flicker	13	14		5	32	6
N-8	Downy Woodpecker	2	4		2	8	19
0-1	Eastern Kingbird	19	19		3	41	4
0-5	Great Crested Flycatcher	1			2	3	23
0-6	Eastern Phoebe		1		1	2	24
0-12	Least Flycatcher				1	1	25
0-13	Eastern Wood Peewee				1	1	25

Species	Common Name	East Side Grenadier Pond	West Side Grenadier Pond	General Pond Sightings	Other Areas in High Park	Total	Rank From Total
P-2	Tree Swallow	<u> </u>	₹ G Œ	8	2 2	10	17
P-5	Barn Swallow			17	1	18	12
P-7	Purple Martin			24	1	25	7
Q-2	Elue Jay		2		1	3	23
Q-5	Common Crow		~	9	1	10	17
R-1	Elack-capped Chickadee	2	6	'	3	11	16
R-4	White-breasted Nuthatch	~			2	2	24
S-2	Gray Catbird		20		~	20	10
S-3	Brown Thrasher	3	13		1	17	13
S-5	American Robin	23	21	1	4	48	2
S-12	Eastern Eluebird				1	1	25
S-16	Elue-gray Chatcatcher	5	7		_	12	15
т-3	Cedar Waxwing	3	4			7	20
т-6	Starling	19	14		3	36	5
บ–5	Red-eyed Vireo	1			1	2	24
υ - 7	Warbling Vireo	3	4			7	20
V-1	Black-and White Warbler				ı	1	25
V-11	Yellow Warbler	3	11		1	12	15
V-15	Yellow-rumped Warbler				1	1	25
V-23	Chestnut-sided Warbler))			1	1	25
V-31	Northern Waterthrush)	1	2		1	25
V-41	Canada Warbler				1	1	25
V-42	American Redstart				1	1	25
W-1	House Sparrow	8	7		19	15	14
X- 5	Red-winged Hlackbird	25	22		4	51	1
X-7	Northern Oriole	7	20		5	32	6
X-10	Common Grackle	23	21		2	46	3
X-11	Brown-headed Cowbird	3	4		2	9	18
X-13	Scarlet Tanager				1	1	25
Y-1	Cardinal	Ú	5			5	21
Y-2	Rose-breasted Grosbeak				2	2	24
Y-5	Indigo Bunting				3	3	23
Y-14	American Goldfinch				2	2.	24
Y-31	Chipping Sparrow				2	2	24
Y-40	Song Sparrow	10	20		2	32	6
z	Budgerigar (exotic)	e e			1	1	25
Total Number of Species Observed:							

NOTES: 1. 90.5 hours of observing was done around Grenadier Pond and 11.0 hours in other areas of the park.

2. Species number refers to Composite List (P. 106)

During 1970 and 1972 observations were made in High Park; results shown in the literature averages all data for Toronto and at the time of writing, separate data for High Park is not in hand.

Twenty-one species of warblers are represented in the tabulated data for 1970. The co-ordinator of the programme at that time was George M. Fairfield and the field works for 1970 and 1971 in High Park were C. Goodwin, G. Bellerby and J. Latterly.

The latest allusion to High Park in the literature seems to have been the recording by C. Goodwin of a Mallard unsuccessfully attempting to nest in an oak tree in spring 1972. Mr. Goodwin's comment on the occurrence holds an ominous ring for the future nesting of not only this species, should not more effective conservation methods be effected: "it is interesting to speculate whether this futile attempt may not have been a response to the difficulty this population must face in nesting successfully in more conventional locations."

Since 1972 there have been fewer detrimental changes in the Park's natural habitat compared to the previous thirty years, (though one sometimes wonders what could be further done). In any case, interest in birds there has not flagged and the various bird-watchers contacted during 1976 continued with those others sure to be found in the Park at other times of the year, make up a small but concerned and active group.