

Toronto Field Naturalists' Ravine Survey

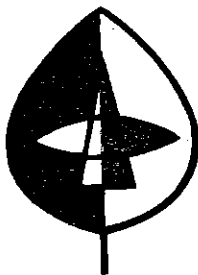
Study Number Seven

Taylor Creek-Woodbine Bridge Ravines 1976

Prepared by

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Helen Juhola



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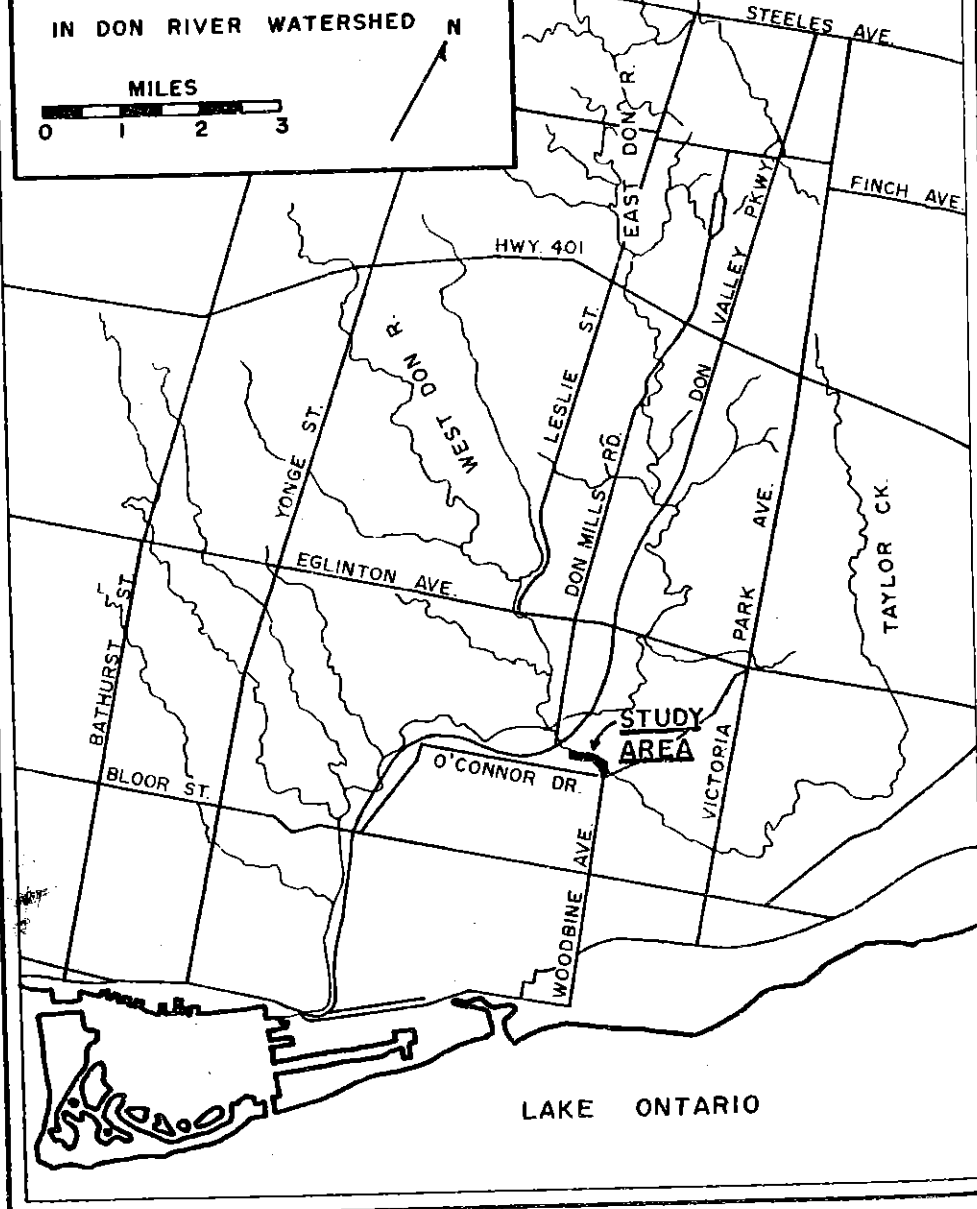
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STUDY AREA LOCATION

IN DON RIVER WATERSHED

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MILES



Taylor Creek -- Woodbine Bridge Ravines

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FOREWORD

Urban natural history is becoming an important study. Any natural areas remaining within urban areas desperately need protection and often restoration. This is a task in which the informed amateur field naturalist can play an important role.

In 1973 the Toronto Field Naturalists' Club published its first ravine survey. A small semi-natural ravine known as Chatsworth Park Ravine was examined by three members of the club who prepared a report in which they described the history, the current human uses, and the natural habitats of the area; they listed the plants and animals present; and they made recommendations about the restoration of the valuable natural features of the area. The report was well received by the nearby residents and the City of Toronto Department of Parks and Recreation which was responsible for the management of part of the area.

By 1976 four more ravine surveys had been published and several mini-reports existed; and in June of that year the Toronto Field Naturalists' Club published "Toronto the Green". Although this report describes Toronto's natural features, the values of natural areas in the urban environment, and makes recommendations about their conservation and management, individual surveys of specific areas continue to be needed in order to provide a record of the plants and animals present, and the condition of the natural features of these areas at a specific time. By

comparing these records we can learn how plants and animals adapt (or do not adapt) to the various pressures of urbanization. Also, once a survey for a particular ravine has been compiled, the information in it can be updated from time to time, and thus the condition of that ravine can be monitored on a continuing basis.

Members involved in the preparation of surveys become better naturalists as they observe nature in the city, and better citizens as they explore ways to protect and conserve Metropolitan Toronto's valuable natural heritage.

Helen Juhola
Editor

ACKNOWLEDGEMENTS

As well as the authors, other members of the Toronto Field Naturalists' Club who contributed to this report were Mary Smith, a landscape architect who measured trees and slopes and interpreted the data; Paul McConnell, a biology student at the University of Toronto's Erindale Campus, who prepared the maps and interpreted the geological history; Warren Russell, a resident of East York who supplied a list of the animals he had observed in a nearby ravine; and David Morin who provided information on the subdivision approval process.

We are grateful to Mr. A. McWilliam, East York Planning Commissioner, for background information on the various development proposals; to Charles Sauriol (22 Hillside Drive, Toronto, tel. 425-8729), an East York resident, conservationist, and author of an unpublished history of the Don Valley, for information about the history of the area; and to Dr. Richard Fisher and Dr. James Bendell of the Faculty of Forestry of the University of Toronto, for reviewing the manuscript. The suggestion for studying the area came from Jack Cranmer-Byng, Chairman of the club's Ravine Group.

LC & HJ

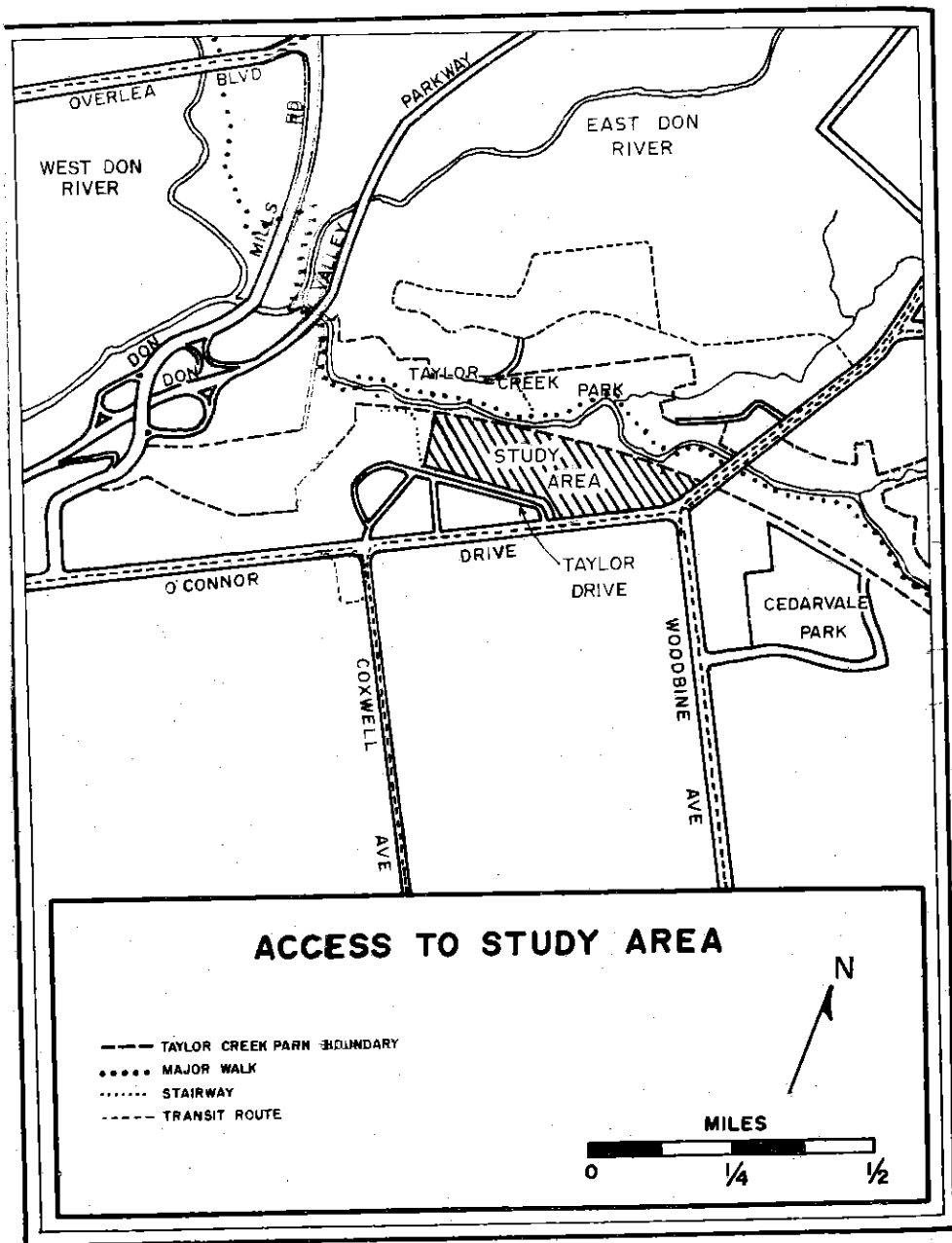
TAYLOR CREEK -- WOODBINE BRIDGE RAVINES

INTRODUCTION

Along the north side of Taylor Drive in East York are homes whose backyards are graced by a dense canopy of trees; along the same side of O'Connor Drive between Taylor Drive and the Woodbine Bridge, the homes are set in a tall oak forest and separated from each other by a series of deep, wooded ravines. Looking west from the Woodbine Bridge spanning Taylor Creek Valley, the view is of forested slopes and a creek winding through a deep valley as far as the eye can see. East of the bridge the valley sides are less steep and have been largely stripped of vegetation. Thus the area west of the bridge is a scarce commodity -- it appears to be a flourishing oasis of forest greenery surrounded by a paved, concrete environment. In spite of this, redevelopment proposals for the area are finally gaining official approval. The unique character of the area and the intense pressures on it for change led to our selection of this particular area for study.

This study provides a close look at a rich, diverse, and complex natural area as it was until the fall of 1976. Part of the area was destroyed then, and another part of the area is threatened with a similar fate.

Some of the information presented here must serve as an historical record. We also hope that readers will be motivated to take action to prevent similar destruction from occurring elsewhere, and try to protect what remains of this important natural area.



Location and Access

The study area is located on the south side of Taylor Creek near the intersection of Woodbine Avenue and O'Connor Drive. Taylor Creek is the largest tributary of the East Don River. It flows from the northeast in Scarborough through East York to join the East Don River close to the junction of the East and West Don Rivers.

The area is best observed by walking west along O'Connor Drive from Woodbine Avenue to Taylor Drive, west along Taylor Drive to Cullen Bryant Park, down a stairway to a well-worn trail under hydro lines, and then east along the embankment of an abandoned railroad to Cedarvale Park. Hikers should be warned that the trail is wet and slippery throughout the year. Clay soils and severe erosion as well as constant moisture make walking difficult.

On-street parking is permitted on Taylor Drive, and Cedarvale Park has its own public parking lot. Bus service to the corner of Woodbine and O'Connor is frequent.

The area can also be observed at a distance from the path in Taylor's Bush Park.

Ownership

The tableland and the slopes north of O'Connor Drive and Taylor Drive are privately owned except for Cullen Bryant Park which is the property of the Borough of East York; the embankment below the slopes is owned by Ontario Hydro; and the land between the embankment and Taylor Creek is owned by the Metropolitan Toronto and Region Conservation Authority and managed by the Metropolitan Toronto Parks Department.

The tableland belonging to the properties on O'Connor Drive and the tableland behind the houses on Taylor Drive as well as the slopes were found to be in an unusually undisturbed state when compared to most other areas in and alongside Taylor Creek Valley. An aerial photograph shows the study area to be the only densely wooded area remaining in that section of Taylor Creek Valley. The fact that these woodlands are privately owned makes them an even rarer feature in a large urban centre.

HISTORY

The major source of the water in Taylor Creek is springs emanating from the Oak Ridges Moraine north of Toronto. The stream has cut a deep, steep-sided valley with a broad floor through sediments (mainly sand with silt and clay) deposited in Lake Iroquois, forerunner of Lake Ontario, some 12,000 years ago.

Although a mill had been established at the "forks" of the Don by 1800, little history has been published about Taylor Creek. Various historical maps show that the creek has had a number of name changes over the years. For example, on early maps of Toronto, it was called the East Don River, while the present East Don was called the Middle Don. Later the creek became known as Massey Creek after the well-known Massey family whose country estate, Dentonia Farms (which shows on a 1908 map of Toronto), included land along both sides of the creek from Dawes Road east to Pharmacy Avenue. According to Charles Sauriol of East York, people living near the valley in the early part of the 20th century referred to the creek as Silver Creek. Today, the part of the valley from the junction of Taylor Creek and the East Don River east to Woodbine Avenue is known as Taylor's Bush Park. An 1860 map of Toronto shows the land on both sides of the creek as belonging to John Taylor and Brothers. Our study covers part of this area.

Around 1913 a railroad was constructed along the south slope of the valley. (It is not shown on a 1912 map of Toronto, but does show as the Canadian Northern Ontario

Railway on a 1913 map of Toronto.) On a 1925 Toronto map, it is shown as a Canadian National Railway line. Local residents remember the trains running on this railroad until sometime in the 1920's.

Although the tablelands surrounding the creek valley were farmed during the 19th century and the land now occupied by Taylor Drive was market gardens until the 1930's, it was not until 1914 that Hawthorne Taylor, from Four Oaks Gates in East York and a descendant of the Taylors who settled the area in the 19th century, had the white pines cleared from his property in Taylor Creek Valley.

Between 1930 and 1939 the 18 houses on the north side of Taylor Drive were built on cleared lots at the edge of the valley. At the same time, the 9 houses on the north side of O'Connor Drive were built on large wooded lots separated by deep, spring-fed ravines. Probably because of the difficult terrain, the houses on O'Connor Drive still have septic tank sewage disposal. These "country estates" on O'Connor Drive were owned by prominent East York families: Hollinger, owner of the Hollinger Bus Line which operated in East York for many years; Edwin Guillet, author of many books about Canadian history; Martin, a judge; and McGregor, the local member of the provincial legislature for many years.

The land farther west, now known as Cullen Bryant Park, has been maintained as an East York municipal playground since the 1940's. Originally it was called "Coxwell Ravine Park" but it was later renamed in honour of a local doctor.

Between 1929 and 1945 (exact date not certain), the Woodbine Bridge was built across the valley at the intersection of Woodbine Avenue and O'Connor Drive. During the 1940's Ontario Hydro obtained the railroad properties for use as a right-of-way. The embankment on the south side of the valley, which previously carried the railroad, is now occupied by a set of metal pylons and a set of wooden poles bearing electric transmission lines.

After Hurricane Hazel in 1954 the Metropolitan Toronto and Region Conservation Authority began purchasing valley lands for flood control. To control building and filling in valley lands the Authority also established a flood control line and a regulation fill line (at the top of valley slopes). In 1964 the Metropolitan Toronto Parks Department and the Authority cooperated to channel Taylor Creek from the Don River to O'Connor Drive. In addition to straightening the creek and lining it with gabions they constructed a pedestrian path along the floor of the valley. (A sanitary trunk sewer is located beneath the valley floor.) Today a continuous hiking path exists along the entire valley from the "forks" of the Don to the corner of Warden Avenue and St. Clair Avenue, except for the part of the valley between Victoria Park and Pharmacy Avenues. (This is used as a golf course managed by the Metropolitan Toronto Parks Department.) In the part of the valley adjoining the study area, the Parks Department maintains the path, a bench, a fire-pit, and an access stairway to Alder Road on the north and one to Cullen Bryant Park on the south.

Some history of the zoning and redevelopment proposals for the properties on O'Connor Drive appear in Appendix B.

In August 1976 the house at 730 O'Connor Drive was demolished; in November trees were cut down and 20 feet of soil removed from an area of about 200 feet by 500 feet in preparation for the road for the scheme to subdivide the properties at 728 and 730 O'Connor Drive -- even though the scheme had not received final approval from the authorities in charge; in December tree-cutting and excavation of the slopes at the north end of these properties was begun in preparation for the subdivision's sewers. (A sanitary sewer from the site must be connected with the sanitary trunk sewer under the valley floor. Storm sewers from the site will discharge directly into the creek.)

As of May 1976 approval of a similar scheme to redevelop the properties at 726 O'Connor Drive and 36 and 40 Taylor Drive had not been acted upon by the Council of Metropolitan Toronto although East York Council had approved it in September.

HABITATS

The first noticeable feature of the study area is the dense tree cover reaching far above the roof tops of the houses. The red oak forest on the tablelands is at least 100 years old (oaks can live for 700 or 800 years) and now a rare feature in Toronto though once typical of the region.

Next is the topography. The area isn't simply a ravine or tableland; rather, it has these features and more. The map on pages 18 and 19 showing contours gives an idea of the irregular and varied terrain.

Water seeping from the slopes flows through the ravines into Taylor Creek providing water throughout the year to this relatively narrow (10 to 15 feet wide) and shallow (6 to 12 inches deep) creek. Although no vegetation except algae and no fish were seen in the creek, possibly indicating pollution or fluctuating water levels, the water is usually clear enough to see the creek bottom, and ducks are often seen swimming in it. In summer the gabions are well-covered with wild grape, giant ragweed, nettles, and nightshade.

The valley is part of a continuous wildlife corridor between the eastern part of Metropolitan Toronto and Lake Ontario via the Don Valley. Here, many native birds, mammals, reptiles, amphibians, insects, and plants may be observed.

Five main habitats were found in the study area, each with its own soil type, light and moisture conditions, and its associated plant and animal populations.

Oak Forest

Any forested area is now a rare habitat in Toronto. The forest in the study area, located on the tableland north of O'Connor Drive and north of the houses on Taylor Drive, is reminiscent of much of Toronto's natural forest cover in the 1700's. The most abundant species is red oak. Most of these are about 70 feet tall and tower above the homes in the area. As one moves north on the tableland, maples become more abundant. Other species occurring are beech, white ash, and white oak. Measurements of some of the trees follow. These and several hundred others were cut down and all parts removed from the property of 730 O'Connor Drive in preparation for the subdivision road.

Species	dbh*	Circumference
Beech	29"	7'6"
Sugar Maple (twin trunk)	30"	8'
White Ash	28"	7'4"
White Oak	29"	7'6"
Red Oak	22"	6'

* Diameter at breast height

Understory in this type of forest is sparse. North of the houses on Taylor Drive, grasses of the type found in High Park, bracken, hazelnut, and the very unusual (for Southern Ontario) sweetfern grow. In the forest north of O'Connor Drive, the understory consisted of elderberry, cherries, purple-flowering raspberry, touch-me-not, and several species of ferns. One homeowner maintains mown grass among the trees; others have planted alien shrubs along the

street to maintain their privacy. Generally owners of these "estates" seem to appreciate the forest setting in which their houses are located and allow the native trees, shrubs, and herbs to grow without restraint.

Animals observed in this area include chipmunks, gray squirrels, flickers, kinglets, and bluejays.

Shady, Moist Slopes

The slopes of the narrow, steep-sided ravines receive little light and much moisture. A relatively dense growth of beech, yellow birch, sugar maple, red and white oak at the top of the slopes allows little light penetration. Yellow birch, an indicator of wet, rich soils, grows in the ravines. Hemlocks and a few white cedars are the only conifers growing there.

Maples, poplars and birches grow on the slopes; understory shrubs are dogwoods, cranberry vibernum, and purple-flowering raspberry; herbs include touch-me-not, jack-in-the-pulpit, trilliums, clintonia, mosses and liverworts, and several species of ferns.

Although the slopes are quite steep (45 to 90%), they are in a stable state due to the great amount of vegetation growing on them and the lack of activity by humans (compared to similar areas in Metropolitan Toronto). Where pedestrian use has worn away the vegetation muddy cuts carry silt-laden waters to the foot of the slopes.

Slopes vary in species composition. The prevalence of poplar and white birch saplings may be the result of logging or burning in recent times, but the historical information does not document this.

Water seeps out of the hillsides from high on the slopes. Cattails and touch-me-not are well established in these areas, their unusual presence even half-way up the slopes being an indication of the consistently wet soils.

Animals observed are not often seen in cities where appropriate habitats are scarce. Chipmunks, hermit and wood thrushes, vireos and the Eastern Wood Pewee were observed.

Sunny, Dry Meadow

One section of the railroad embankment, created by landfill, supports a meadow habitat. Soils in the area are well-drained and unlike the generally north-facing, shaded slopes of the ravines, the area receives plenty of sunlight. The tallest plants in the area are sumac and numerous fruit-bearing shrubs including raspberries, blackberries, and cherries. Vines include wild clematis and wild grape. Grasses grow to about 5 feet tall in summer with wild flowers including bastard toadflax (*Commandra*), sunflowers, thistles, goldenrods, and asters.

The fruit-bearing shrubs provide food for birds and small mammals. Goldfinches, Indigo Buntings, Song Sparrows, and Cedar Waxwings were observed feeding, and probably nest nearby. Hawks were observed soaring overhead, possibly hunting for small mammals such as deer mice. The hawks were more prevalent during the fall migration when the valley is an important migration route.

One garter snake was observed in a dry area just south of the embankment.

Butterflies (skippers, sulphurs, and mourning cloaks) were abundant on the wild-

flowers in the open sunny meadow and were seen resting beside nearby springfed ponds.

Springfed Ponds

Several marshy areas and springfed ponds exist on the embankment and between the embankment and the foot of the slopes. These owe their existence to a continuous supply of water from the slopes and provide habitat for many species of aquatic plants and animals.

Two of the ponds are sufficiently permanent to sustain aquatic snails, water beetles, and damselfly larvae, at least one species of frog, watercress, arrowhead, water plantain, Chara, cattails, and touch-me-not. The water is clear although the ponds do contain some litter. Red-winged Blackbirds were often seen among the cattails.

The presence of a simple marsh community with visibly clear water and frogs, indicators of a relatively healthy and undisturbed environment, is unusual now in the Toronto region.

Urban Residential

On the tableland on the north side of Taylor Drive few native plants and animals can be seen. Home owners have planted alien and ornamental trees such as weeping willow, Austrian Pine, Rowan, flowering crab; shrubs such as barberry, lilac, forsythia; and maintain extensive lawns. The result is that except for the trees towering over the backs of the houses, this street could be located in almost any urban community in the northern hemisphere. The only birds observed on the street were starlings, rock doves (pigeons), and house sparrows. All this

contrasts sharply with the rural appearance of the properties on the north side of O'Connor Drive where the trees surround the houses and where native plants and animals can be observed even from the street.

Cullen Bryant Park which is maintained as a playground for local children consists of mown grass, a stand of poplars that provides some shade for children playing in the area during the summer, and a few recently planted maples and Austrian pines.

VEGETATION

Algae in the form of slime were observed in the river; and Chara, in the ponds.

Fungi were in evidence where many elms had been killed, presumably by the Dutch elm disease.

Lichens were observed growing on the red oaks on the tableland north of O'Connor Drive. One would not expect to find lichens growing so close to the centre of a large city.

Mosses were found on the wet slopes where springs emerge and on the tableland where the ground is well-shaded.

Liverworts were found on the wet slopes growing on decaying fallen trees.

Ferns and horsetails are fairly abundant, probably due to the extensive amount of damp, shady ground. Seven species of ferns were found; this seems unusual when compared with Park Drive Ravine (none were found) and Wilket Creek Park (a total of ten species was found).

Rushes, sedges, and grasses are present but species were not identified. Grasses growing among the oaks appeared to be similar to those growing under oaks in High Park; and many rushes and sedges were observed in the damp, sunny habitats along the embankment.

Conifers are restricted to three native species: white pine, hemlock, and white cedar; however, several species both native and alien had been planted along Taylor Drive and seem to be thriving.

Trees are unusually large and healthy for a city. Measurements of several of the large

trees on the tableland north of O'Connor Drive are given on page 10. One black maple was found growing close to the creek at the west end of the site. This tree is a Carolinian or southern species and unusual for the Toronto region.

Trees, shrubs, and vines of native origin were in the majority except near the houses on Taylor Drive where alien species rather than native vegetation had been planted.

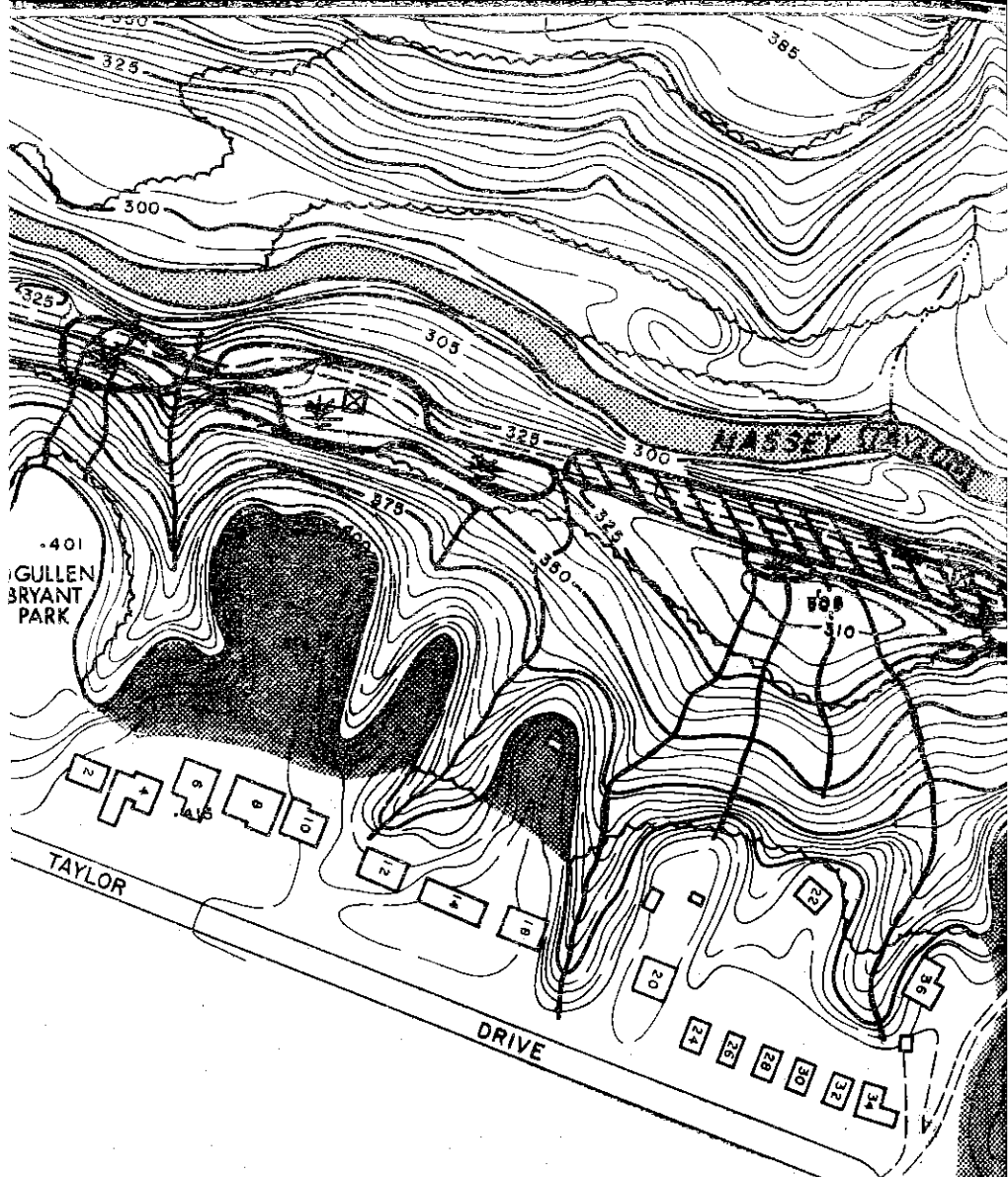
Herbs were what one would expect to find in the habitats described except that sweetfern, Clintonia, and Comandra are to be found in very few locations in Metropolitan Toronto. Other plants now rare are arrowhead, water plantain, and Chara in the ponds. A few alien species (ground ivy and lily-of-the valley) have become established on the slopes.

WILDLIFE

As noted, the Taylor Creek Valley is part of a wildlife corridor providing food and shelter for animals moving through the valleys. It also acts as a reservoir for wildlife in the midst of a large urban area.

The diversity of species reported for the study area is directly related to the lack of disturbance and the number of habitats as well as the absence of paved surfaces and buildings. The ravines, woodlands, creek, and marshy areas provide food and shelter for a great variety of birds, mammals, reptiles, amphibians, and insects. While urban species are in evidence along the streets, a variety of species more often associated with rural habitats was observed behind the houses and in the ravines.

Small mammals (raccoons and chipmunks) reside in the area. Among birds sighted during the summer and, therefore, presumed to nest locally were Gray Catbirds, Cardinals, Indigo Buntings, and the Eastern Wood Pewee. Many other kinds of birds pass through the area during the migration times as can be seen by the impressive list in Appendix D. The presence of animals such as red fox, Eastern Wood Pewee, and green frog are indicators of a relatively wild environment.



HABITATS



STREAMS



OAK FOREST



SPRINGFED PONDS



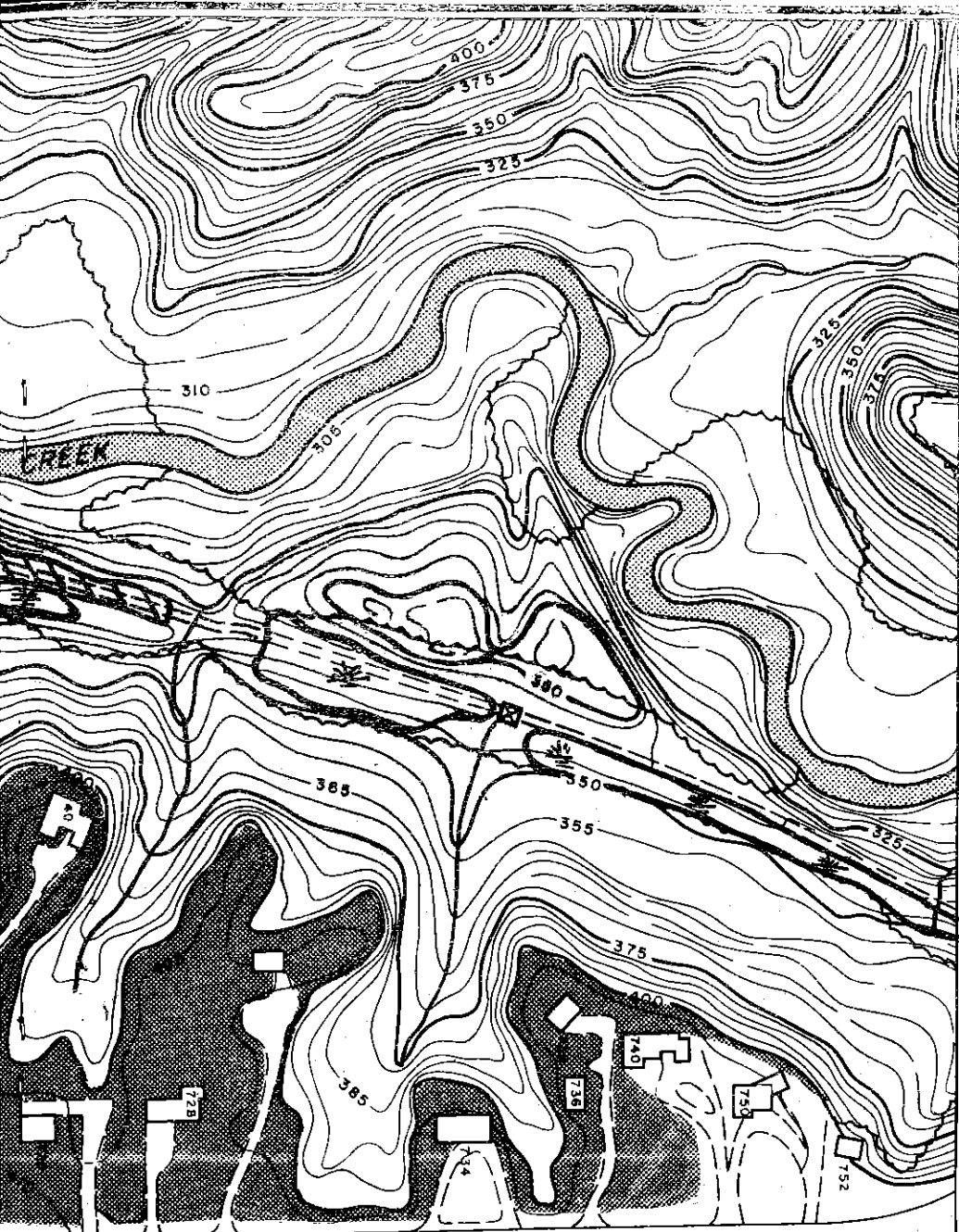
DRY MEADOW



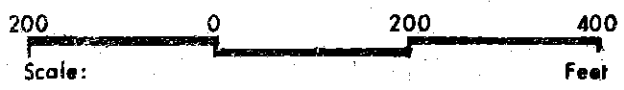
WOODED SLOPES



HYDRO PYLON



O'CONNOR . 409.5 DRIVE . 408.0



HUMAN USES AND ABUSES

The quiet natural setting of the Woodbine Bridge Ravines area is popular with local residents. Children have built a tree house and a small hut in two of the ravines. Several trails have been worn between the tableland and the embankment. On every visit to the area, even during the coldest winter months, people were observed walking along the embankment. During the year children were observed walking, collecting insects, collecting bottles; adults were observed walking, jogging, walking dogs, collecting wildflowers. The profusion of berry bushes is no doubt known to many residents of the area. Field trips for students in forestry, landscape architecture, and botany from the University of Toronto are held in the area. The proximity to a Metro park means human use in the general area is fairly extensive.

Until recently, private ownership of the tablelands and slopes has meant minimal pedestrian traffic in sensitive natural areas. Most home owners in the area seem to appreciate the natural woodland character of their properties. Extensive mowing, trimming, or planting among the trees and on the slopes was not in evidence.

Although some litter has been thrown over the edge of the slopes and a few of the houses are dangerously close to the edge, these abuses are minor when compared with the destruction caused by road construction and sewer work. Eventual paving will disrupt the hydrology of the area, undoubtedly reducing the water supply to the ponds and Taylor Creek below. Removal of tall trees

and soil leaves the remaining trees more vulnerable to destruction by strong northwest winds. As well as destroying much of this valuable natural area, the increase in the number of houses in the area will mean that more people will be using what remains.

RECOMMENDATIONS

1. Establishment as a Protected Site

The Toronto Field Naturalists' Club recommends that the Borough of East York designate the Woodbine Bridge Ravines area a protected site and maintain what remains in as natural a state as possible; that is, no redevelopment should be allowed in the area.

In the club's publication "Toronto the Green", recommendations were made about the kinds of areas that should have their use limited. The area described in this ravine study falls into several of the categories considered necessary for this designation. The steep slopes are hazard areas; the forest, marshy areas, and ponds are sensitive areas subject to damage by human interference; and the oak forest on the tableland is a remnant habitat.

2. Environmental Assessment Legislation

The Toronto Field Naturalists' Club recommends that the Borough of East York enact environmental assessment by-laws that require an environmental assessment for any proposed activities in or near any ravines or valley lands within the borough.

If enacted such legislation would require a detailed resource inventory to establish a baseline against which proposed and subsequent activities could be measured. Any assessment should identify the effects of the proposed changes on the natural features of the site and describe means of mitigating adverse effects.

3. Protection of Ravines

The Toronto Field Naturalists' Club recommends that the Borough of East York enact by-laws to protect ravine lands by regulating destruction of trees and other vegetation, excavation, filling, and contour alteration.

Such by-laws are especially important for privately owned slopes such as those in the study area, for few powers presently exist to prevent the type of destruction recently incurred.

4. Management Guidelines

The Toronto Field Naturalists' Club recommends that the Borough of East York, the Metropolitan Toronto Parks Department, and Ontario Hydro consider the following guidelines for managing the Woodbine Bridge Ravines area:

- a. Thorny or dense shrubs such as roses, locusts, and hawthorns should be planted along the edges of Cullen Bryant Park to restrict pedestrian movement on the slopes.
- b. An annual clean-up should be made to remove litter such as cans, bottles, and plastics from the area. (The clean-up should not include fallen branches, leaves, underbrush, or other organic material that enriches soil and provides some shelter for wildlife.)
- c. Landscaping on the slopes north of the redeveloped area should be of a restorative nature with effort to bring the area back to its original condition. Native shrubs and trees

- such as cranberry viburnum, dogwood, alder, poplars, and red maple should be planted.
- d. The trail along the hydro right-of-way should be repaired where damage from erosion is most severe. Culverts could be placed in some of the most eroded locations and shrubs and grasses planted on bare slopes.
 - e. An access stairway to the valley from the redeveloped site should be provided on the slope cleared for the sewer right-of-way.
 - f. The stairway between Cullen Bryant Park and the valley should be repaired. Some railings are broken; others are missing. Erosion beside the stairs is damaging the hillside. Bushes planted beside the stairs might prevent further erosion from occurring.

CONCLUSION

The study area offers a diversity of habitats and corresponding wildlife species. An oak forest and spring-fed ponds are particularly rare habitats in the Toronto region. The slopes (prior to redevelopment) were self-maintaining. The rapid destruction of a thriving natural area maintained at no cost to man heightens one's appreciation for the remaining woodlands and ravines. Surely the only argument against keeping the area in its present use is an economic one for the benefit of a few people. We believe the public interest would best be served by retaining the natural values of the Taylor Creek woodlands. It is imperative that protection policies be enacted.

As Joseph Wood Krutch has pointed out:
"When a man despoils a work of art we call him a vandal, when he despoils a work of nature we call him a developer".

BIBLIOGRAPHY

Field Guides

- A Field Guide to the Ferns and their Related Families, B. Cobb, 1956/1963
A Field Guide to the Trees and Shrubs, G.A. Petrides, 1958
A Field Guide to Wildflowers, R.T. Peterson and M. McKenny, 1968
Birds of North America, C.S. Robbins et al, 1966
Pond Life, G.K. Reid, 1967

Newspaper Articles

- "Don't blame me, everyone says in aftermath of one-death slide", Globe and Mail (June 22, 1966)
 True Davidson, Toronto Sun (August 24, 1976)
 "Ravine subdivision endorsed despite environmental fears", Globe and Mail (September 21, 1976)
 "Tosh homes on ravine endorsed", Toronto Star (September 21, 1976)
 "East York panel backs Taylor Creek housing", Globe and Mail (September 28, 1976)
 "Smaller project offered for ravine", Globe and Mail (October 8, 1976)
 "Naturalists protest against development" by Loren Lind, Globe and Mail (October 18, 1976)
 "Naturalists hope to save oak forest from houses", Toronto Star (October 19, 1976)
 "Quick approval urged of ravine edge site", Globe and Mail (November 2, 1976)
 "Democracy thrives in East York, but it may destroy ravine beauty" by Harvey Shepherd Globe and Mail (November 6, 1976)
 "Developer, naturalists fight over East York ravine" by Rex MacLeod, Toronto Star (November 12, 1976)
 "Zoning doesn't protect resources, naturalist charges" by R.C. Thorpe, Toronto Star (December 4, 1976)
 "Changes requested in subdivision site", Globe and Mail (December 10, 1976)

Reports

- "The Flowers of Taylor Creek Park" by Erna Lewis, Toronto Field Naturalists' Club Newsletter #284, May 1974
The West Don Valley, Land Use Conflicts and Management, York University, Dept. of Geography, and the Ministry of the Environment, 1976
East York Housing Study, Klein and Sears, 1976
 "Woodbine Bridge Ravine", TFNC Newsletter #301, October 1976
 "Attention East York Residents", TFNC Newsletter #302, November 1976
 "FON endorses Toronto Field Naturalists in opposition to valley development", Ontario Naturalist (December/January 1977)

STUDY METHODS AND ACTIVITIES

The authors explored the area beginning in late June of 1976 through to May 1977. Thus the area has been studied in all seasons. By walking around the area, traversing the slopes, and examining the 730 O'Connor Drive property, the authors developed an understanding of the natural features of the area. During each outing notes were made of the plants and animals observed, human activities in the area, the topography, soil characteristics, and drainage. No soil or water analyses were made, but visual observations were noted. A landscape architect measured a sample of the trees at 730 O'Connor Drive.

Photographs taken during each season show the habitats and the general appearance of the area both before and after redevelopment work began. These are available through the club's archivist who can be reached through the club's Secretary.

Field guides as listed were consulted for plant and animal identification. Local libraries were consulted for related studies and historical information including old maps.

Once the authors realized that part of the study area was slated for redevelopment we tried to let the decision-makers and public know why we objected to the proposals. A list of our activities follows.

- August 1976 spoke to Ministry of the Environment staff about redevelopment scheme for 728 and 730 O'Connor Drive
- August 22 discussed proposed redevelopment with True Davidson, columnist and former mayor of East York
- August 26 wrote Federation of Ontario Naturalists requesting support for objections to redevelopment
- September 9 wrote Minister of Housing objecting to first scheme and sent copies of letter to the Clerk for Metropolitan Toronto, the Metropolitan Toronto Planning Commissioner, the Clerk for East York, and the East York Planning Commissioner
- September 13 sent brief to East York Development Committee objecting to second scheme
- September 20 addressed East York Council during time allotted for public participation and objected to second scheme
- October 2 had TFNC Vice President present brief about the issue to the Federation of Ontario Naturalists' monthly directors' meeting
- October 6 sent brief to Sierra Club for consideration at its annual meeting
- October 8 wrote Metropolitan Toronto Clerk requesting notification of any decision made on second redevelopment
- October 16 had environmental walk (see below) announced on CFRB radio
- October 17 led TFNC environmental action walk to the area and invited press to attend
- November 10 TFNC sent copy of "Toronto the Green" and questionnaire to all candidates for mayor and alderman in Metropolitan Toronto. (Results showed redevelopment of Taylor Creek to be a well-known and controversial issue in East York.)
- November 11 interviewed on CBC radio's Metro Morning Show about our objections to redevelopment
- November 11 met with Federation of East York Ratepayers to explain activities and objectives of the club
- November 22 TFNC sent brief to Toronto City Council supporting passage of ravine by-law
- December 4 had environmental walk (see below) announced on CFRB radio
- December 5 led TFNC hike to the area

HISTORY OF THE REDEVELOPMENT PROPOSALS

One major reason why the future of this area is so controversial is its extensive history of redevelopment proposals dating back to the early 1970's. To some local residents the present proposals for single-family homes represent the best that could be hoped for when compared with previous proposals. As noted in the recommendations of this study, the Toronto Field Naturalists' Club opposes any form of redevelopment of the area for the environmental reasons stated in "Toronto the Green".

The previous schemes are summarized below partly to illustrate how intense redevelopment pressures can be, even on an apparently stable area of well-maintained homes on large lots. The message this carries for other neighbourhoods backing on ravines or having remnants of undeveloped land is ominous and should alert concerned citizens throughout Metro Toronto.

In 1960 the tableland portions of the study area were zoned R1 (single-family dwellings only), the most restrictive zoning in the borough. This zoning recognized and attempted to preserve the existing use of the area. Despite the zoning, an application for high-density apartment towers was submitted by Hemus Corporation in 1971. Outcry by residents in the adjacent area (living in single-family homes) was no doubt instrumental in achieving official rejection of the scheme.

In 1973 similar opposition to another proposal — this time by Claverly Investments — to build medium-density town houses was

squelched. No doubt in response to pressure from developers, the borough amended its official plan in 1974, designating the area "non-apartment residential". This was upheld by the Ontario Municipal Board in late 1975.

The land use restrictions set the stage for another scheme to redevelop the lots — this time for single-family homes, but at a much greater density than existed. In 1976 Trimontium Developments submitted two applications — one to redevelop 728 and 730 O'Connor Drive, the other to redevelop 726 O'Connor Drive and 36 and 40 Taylor Drive. Each scheme proposed a traditional subdivision of houses fronting on cul-de-sacs running north from O'Connor Drive. Because so many homes (23 in each subdivision) would be concentrated on small sites (4 acres each), it was clear that extensive levelling of slopes and removal of vegetation would be necessary. Experience has borne this out: the 730 O'Connor Drive property is no longer recognizable as inventoried in this study. Although the Metropolitan Toronto and Region Conservation Authority objected to the application and the Ministry of the Environment stated that cluster development of townhouses or apartments would be less destructive to the area's environmental features than so many single-family dwellings, the first application was approved and as of May 1977, approval of the second seems likely.

CHECK-LIST OF PLANTS IN THE TAYLOR CREEK-WOODBINE BRIDGE RAVINES 1976-77

* alien species

Trees, Shrubs, and Woody Vines

TAXACEAE (YEW FAMILY)

<i>Taxus</i> sp.	Yew
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PINACEAE (PINE FAMILY)

<i>Juniperus virginiana</i>	Red Cedar
<i>Larix decidua</i>	* European Larch
<i>Picea glauca</i>	White Spruce
<i>Picea abies</i>	* Norway Spruce
<i>Pinus strobus</i>	White Pine
<i>Pinus nigra</i>	* Austrian Pine
<i>Pinus mugo</i>	* Mugo Pine
<i>Thuja occidentalis</i>	White Cedar
<i>Tsuga canadensis</i>	Hemlock
<i>Pseudotsuga menziesii</i>	* Douglas Fir

LILIACEAE (LILY FAMILY)

<i>Smilax herbacea</i>	Carrion Flower
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SALICACEAE (WILLOW FAMILY)

<i>Populus balsamifera</i>	Balsam Poplar
<i>Populus nigra</i>	* Lombardy Poplar
<i>Populus deltoides</i>	Cottonwood
<i>Populus tremuloides</i>	Trembling Aspen
<i>Salix fragilis</i>	* Crack Willow
<i>Salix babylonica</i>	* Weeping Willow
<i>Salix lucida</i>	Shining Willow

MYRICACEAE (BAYBERRY FAMILY)

<i>Comptonia peregrina</i>	Sweetfern
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BETULACEAE (BIRCH FAMILY)

<i>Ostrya virginiana</i>	Ironwood
<i>Betula lutea</i>	Yellow Birch
<i>Betula papyrifera</i>	White Birch
<i>Corylus cornuta</i>	Beaked Hazel

FAGACEAE (BEECH FAMILY)

<i>Fagus grandifolia</i>	American Beech
<i>Quercus rubra</i>	Red Oak
<i>Quercus alba</i>	White Oak

ULMACEAE (ELM FAMILY)

<i>Ulmus americana</i>	White Elm
<i>Ulmus rubra</i>	Red Elm
<i>Ulmus pumila</i>	* Siberian Elm

MORACEAE (MULBERRY FAMILY)

Morus sp.

* Mulberry

BERBERIDACEAE (BARBERRY FAMILY)

Berberis vulgaris

* Barberry

MAGNOLIACEAE (MAGNOLIA FAMILY)

Magnolia sp.

* Magnolia

SAXIFRAGACEAE (SAXIFRAGE FAMILY)

Philadelphus sp.

* Mock Orange

Ribes sp.

Gooseberry

HAMMELIDACEAE (WITCH HAZEL FAMILY)

Hamamelis virginiana

Common Witch Hazel

RANUNCULACEAE (BUTTERCUP FAMILY)

Clematis virginiana

Virgin's Bower

ROSACEAE (ROSE FAMILY)

Physocarpus opulifolius

Ninebark

Pyrus aucuparia

* European Mountain Ash

Malus sp.

Apple

Crataegus sp.

Hawthorn

Rubus idaeus

Red Raspberry

Rubus occidentalis

Black Raspberry

Rubus odoratus

Flowering Raspberry

Rosa sp.

* Rose

Rosa sp.

Wild Rose

Prunus serotina

Black Cherry

Prunus virginiana

Choke Cherry

Prunus pensylvanica

Pin Cherry

LEGUMINOSAE (LEGUME FAMILY)

Robinia pseudo-acacia

Black Locust

SIMAROUBACEAE (QUASSIA FAMILY)

Allanthurus altissima

* Allanthurus

ANACARDIACEAE (SUMAC FAMILY)

Rhus radicans

Poison Ivy

Rhus typhina

Staghorn Sumac

CELASTRACEAE (BITTERSWEET FAMILY)

Celastrus scandens

American Bittersweet

ACERACEAE (MAPLE FAMILY)

Acer negundo

Manitoba Maple

Acer spicatum

Mountain Maple

ACERACEAE (cont'd)

<i>Acer rubrum</i>	Red Maple
<i>Acer saccharinum</i>	Silver Maple
<i>Acer saccharum</i>	Sugar Maple
<i>Acer nigrum</i>	Black Maple
<i>Acer platanoides</i>	* Norway Maple

VITACEAE (VINE FAMILY)

<i>Parthenocissus quinquefolia</i>	Virginia Creeper
<i>Vitis riparia</i>	Riverbank Grape

TILIACEAE (LINDEN FAMILY)

<i>Tilia americanum</i>	American Basswood
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CORNACEAE (DOGWOOD FAMILY)

<i>Cornus rugosa</i>	Roundleaf Dogwood
<i>Cornus stolonifera</i>	Red Osier Dogwood
<i>Cornus alternifolia</i>	Alternate-leaf Dogwood

OLEACEAE (OLIVE FAMILY)

<i>Fraxinus americana</i>	White Ash
<i>Syringa vulgaris</i>	* Common Lilac
<i>Forsythia</i> sp.	* Forsythia
<i>Ligustrum</i> sp.	* Privet

SOLANACEAE (NIGHTSHADE FAMILY)

<i>Solanum dulcamara</i>	Nightshade
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DIGNONACEAE (TRUMPET CREEPER FAMILY)

<i>Catalpa speciosa</i>	Northern Catalpa
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CAPRIFOLIACEAE (HONEYSUCKLE FAMILY)

<i>Diervilla lonicera</i>	Northern Bush Honeysuckle
<i>Lonicera</i> sp.	Honeysuckle
<i>Symphoricarpos albus</i>	Snowberry
<i>Viburnum trilobum</i>	Cranberry Viburnum
<i>Viburnum acerfolium</i>	Mapleleaf Viburnum
<i>Sambucus</i> sp.	Elder

Non-flowering Plants

ALGAE

Chara

EQUISETACEAE (HORSETAIL FAMILY)

<i>Equisetum arvense</i>	Field Horsetail
<i>Equisetum palustre</i>	Marsh Horsetail
<i>Equisetum hyemale</i>	Rough Horsetail

ICHTYODIACEAE (FERN FAMILY)

<i>Matteuccia struthiopteris</i>	Ostrich Fern
<i>Cheilanthes sensibilis</i>	Sensitive Fern
<i>Pteridium aquilinum</i>	Bracken
<i>Cystopteris bulbifera</i>	Bulb Fern
<i>Athyrium filix femina</i>	Lady Fern
<i>Dryopteris marginalis</i>	Marginal Woodfern
<i>Dryopteris spinulosa</i>	Spinulose Woodfern

Herbaceous Plants

TYPHACEAE (CATTAIL FAMILY)

<i>Typha latifolia</i>	Common Cattail
<i>Typha angustifolia</i>	Narrow-leaved Cattail

ALISMATACEAE (ARROWHEAD FAMILY)

<i>Sagittaria</i> sp.	Arrowhead
<i>Alisma trivale</i>	Water-plantain

LILIACEAE (LILY FAMILY)

<i>Monocallis</i> sp.	* Day Lily
<i>Lilium canadense</i>	May Lily
<i>Clintonia borealis</i>	Corn Lily
<i>Erythronium americanum</i>	Trout Lily
<i>Polygonatum biflorum</i>	Solomon's Seal
<i>Smilacina racemosa</i>	False Spikenard
<i>Trillium grandiflorum</i>	White Trillium
<i>Trillium erectum</i>	Wake Robin
<i>Convallaria majalis</i>	* Lily-of-the-Valley

ARACEAE (ARUM FAMILY)

<i>Arisaema triphyllum</i>	Jack-in-the-pulpit
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ORCHIDACEAE (ORCHID FAMILY)

<i>Epipactis helleborine</i>	* Green Helleborine
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SANTALACEAE (SANDALWOOD FAMILY)

<i>Conandra umbellata</i>	Bastard Toadflax
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POLYGONACEAE (BUCKWHEAT FAMILY)

<i>Polygonum cuspidatum</i>	* Japanese Knotweed
<i>Rumex crispus</i>	Curled Dock

CHENOPODIACEAE (GOOSEFOOT FAMILY)

<i>Chenopodium album</i>	lamb's Quarters
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URTICACEAE (NETTLE FAMILY)

<i>Urtica dioica</i>	* Stinging Nettle
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PLANTAGINACEAE (PLANTAIN FAMILY)

Plantago major

* Plantain

CARYOPHYLLACEAE (PINK FAMILY)

*Saponaria officinalis** Bouncing Bet
White Campion*Lychnis sp.*

RANUNCULACEAE (BUTTERCUP FAMILY)

Actaea pachyoda

White Baneberry

Anemone sp.

Anemone

Ranunculus acris

Tall Buttercup

Thalictrum dioicum

Early Meadowrue

Thalictrum polygamum

Tall Meadowrue

BERBERIDACEAE (BARBERRY FAMILY)

Caulophyllum thalictroides

Blue Cohosh

PAPAVERACEAE (POPPY FAMILY)

Sanguinaria canadensis

Bloodroot

ROSACEAE (ROSE FAMILY)

Fragaria vesca

Wood Strawberry

Potentilla sp.

Common Cinquefoil

Waldsteinia fragarioides

Barren Strawberry

LEGUMINOSAE (PEA FAMILY)

Medicago lupulina

* Black Medic

Medicago sativa

* Alfalfa

Arachis hypogaea

Hog Peanut

Desmodium sp.

Tick Trefoils

Melilotus alba

* White Sweet Clover

Trifolium pratense

* Red Clover

Vicia americana

American Vetch

OXALIDACEAE (WOOD SORREL FAMILY)

Oxalis sp.

* Common Wood Sorrel

BALSAMINACEAE (JEWELWEED FAMILY)

Impatiens capensis

Spotted Touch-me-not

HYPERICACEAE (ST. JOHN'S WORT FAMILY)

Hypericum perforatum

* Common St. John's Wort

VIOLACEAE (VIOLET FAMILY)

Viola sp.

Violet

ONAGRACEAE (EVENING PRIMROSE FAMILY)

Circaea quadrisulcata

Enchanter's Nightshade

Epilobium hirsutum

Willow Herb

ONAGRACEAE (con't)

Eriolobium angustifolium Fireweed
Oenothera biennis Evening Primrose

ARALIACEAE (GINSENG FAMILY)

Aralia nudicaulis Wild Sarsaparilla

UMBELLIFERAE (PARSLEY FAMILY)

Daucus carota * Wild Carrot
Heraclium maximum Cowparsnip

APOCYNACEAE (DOGBANE FAMILY)

Vinca minor * Periwinkle
Asocynum androsaemifolium Spreading Dogbane

ASCLEPIADACEAE (MILKWEED FAMILY)

Asclepias syriaca Common Milkweed
Cynanchum s. * Black Swallowwort

HYDROPHYLLOIDACEAE (WATERLEAF FAMILY)

Hydrophyllum virginianum Virginia Waterleaf

BORAGINACEAE (BURAGE FAMILY)

Echium vulgare Blueweed
Hertensia virginica Bluebells

LABIATAE (MINT FAMILY)

Clethoma hederacea * Ground Ivy
Meteta cataria Catnip
Prunella vulgaris Self-heal
Mentha arvensis Canada Mint
Honarda fistulosa Wild Bergamot

SCROPHULARIACEAE (SNAILDRAGON FAMILY)

Linaria vulgaris Butter-and-eggs

CUCURBITACEAE (CUCUMBER FAMILY)

Echinocystis lobata Wild Cucumber

COMPOSITAE (ASTER FAMILY)

Tussilago farfara * Coltsfoot
Gonyza canadensis Horseweed
Cichorium intybus * Chicory
Achillea lanulosa Yarrow
Ambrosia trifida Giant Ragweed
Ambrosia artemisiifolia Common Ragweed
Arctium minus Common Burdock
Aster novae-angliae New England Aster
Aster ericoides Heath Aster

Aster umbellatus
Chrysanthemum leucanthemum
Cirsium arvense
Erigeron annuus
Eupatorium maculatum
Eupatorium perfoliatum
Eupatorium rugosum
Helianthus divaricatus
Frenanthes sp.
Solidago caesia
Solidago flexicaulis
Solidago canadensis
Sonchus sp.
Tragopogon pratensis
Taraxacum officinale
Bidens sp.

Flat-topped White Aster
* Ox-eye Daisy
Canada Thistle
Daisy Fleabane
Joe-Pye-weed
Boneset
White Snakeroot
Woodland Sunflower

Blue-stemmed Goldenrod
Zig-Zag Goldenrod
Canada Goldenrod
* Sow Thistle
* Goat's Beard
* Dandelion
Beggar Ticks

CHECK-LIST OF ANIMALS OBSERVED IN TAYLOR CREEK-WOODBINE BRIDGE RAVINES 1976-77

Invertebrates

Aquatic Snails	Deer Fly
Sulphur Butterfly	Damsel-fly
Mourning Cloak Butterfly	Cricket
Skipper Butterfly	Grasshopper
Water Beetle	Cicada

Fishes

None

Reptiles and Amphibians

Eastern Garter Snake	Green Frog
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Mammals

Domestic Dog	Deer House
Domestic Cat	Shorttail Shrew
Gray Squirrel	Mole
Raccoon	Chipmunk

Birds

This bird list is arranged according to the order given in the Federation of Ontario Naturalists' "Check-list of Birds for the Province of Ontario (1974)".

Great Blue Heron	Yellow-throated Vireo
Mallard	Solitary Vireo
Red-tailed Hawk	Red-eyed Vireo
Killdeer	Black-and-white Warbler
Rock Dove	Magnolia Warbler
Mourning Dove	Black-throated Blue Warbler
Common Flicker	Blackburnian Warbler
Yellow-bellied Sapsucker	Ovenbird
Eastern Wood Pewee	House Sparrow
Blue Jay	Northern Oriole
Common Crow	Red-winged Blackbird
Black-capped Chickadee	Common Grackle
Red-breasted Nuthatch	Brown-headed Cowbird
Brown Creeper	Cardinal
Winter Wren	Rose-breasted Grosbeak
Gray Catbird	Indigo Bunting
Brown Thrasher	American Goldfinch
American Robin	Dark-eyed Junco
Wood Thrush	Chipping Sparrow
Hermit Thrush	White-throated Sparrow
Golden-crowned Kinglet	Song Sparrow
Ruby-crowned Kinglet	
Cedar Waxwing	
Starling	

CHECK-LIST OF ANIMALS OBSERVED BY WARREN RUSSELL

Although these observations were made from February to December 1976 in another (but nearby) ravine, it is reasonable to assume that many of the species also occur in or near the study area since it is part of the same valley system.

Reptiles and Amphibians

Red Eft
 Eastern Garter Snake
 Milk Snake

Mammals

Raccoon
 Skunk
 Eastern Cottontail Rabbit
 Woodchuck

Gray Squirrel
 Chipmunk
 Red Fox
 Shorttail Shrew

Birds

Common Loon
 Mallard
 Sharp-shinned Hawk
 Red-tailed Hawk
 American Kestrel
 Ring-necked Pheasant
 Killdeer
 Spotted Sandpiper
 Herring Gull
 Ring-billed Gull
 Rock Dove
 Mourning Dove
 Black-billed Cuckoo
 Great Horned Owl
 Common Nighthawk
 Chimney Swift
 Ruby-throated Hummingbird
 Belted Kingfisher
 Common Flicker
 Red-bellied Woodpecker
 Yellow-bellied Sapsucker
 Hairy Woodpecker
 Downy Woodpecker
 Eastern Kingbird
 Great Crested Flycatcher
 Eastern Phoebe
 Yellow-bellied Flycatcher
 Least Flycatcher
 Eastern Wood Pewee
 Olive-sided Flycatcher
 Purple Martin
 Tree Swallow
 Barn Swallow

Blue Jay
 Common Crow
 Black-capped Chickadee
 White-breasted Nuthatch
 Red-breasted Nuthatch
 Brown Creeper
 House Wren
 Winter Wren
 Gray Catbird
 American Robin
 Wood Thrush
 Swainson's Thrush
 Veery
 Blue-gray Gnatcatcher
 Golden-crowned Kinglet
 Ruby-crowned Kinglet
 Cedar Waxwing
 Northern Shrike
 Starling
 Solitary Vireo
 Red-eyed Vireo
 Philadelphia Vireo
 Warbling Vireo
 Black-and-White Warbler
 Tennessee Warbler
 Orange-crowned Warbler
 Nashville Warbler
 Northern Parula Warbler
 Magnolia Warbler
 Cape May Warbler
 Black-throated Blue Warbler
 Black-throated Green Warbler
 Cerulean Warbler
 Blackburnian Warbler
 Chestnut-sided Warbler
 Bay-breasted Warbler

Fine Warbler
Palm Warbler
Northern Waterthrush
Connecticut Warbler
Houning Warbler
Common Yellowthroat
Wilson's Warbler
Canada Warbler
American Redstart

House Sparrow

Red-winged Blackbird
Northern Oriole
Common Grackle
Brown-headed Cowbird
Scarlet Tanager

Cardinal
Rose-breasted Grosbeak
Indigo Bunting
Purple Finch
Hoary Redpoll
Common Redpoll
American Goldfinch
Dark-eyed Junco
Tree Sparrow
Chipping Sparrow
White-crowned Sparrow
Fox Sparrow
Lincoln's Sparrow
Swamp Sparrow
Song Sparrow
White-throated Sparrow

TORONTO FIELD NATURALISTS' RAVINE SURVEYS

1. Chatsworth Ravine - City of Toronto - 1973
2. Brookbanks Ravine - North York - 1974
3. Chapman Creek Ravine - Etobicoke - 1975
4. Wigmore Park Ravine - North York - 1975
5. Park Drive Ravine - City of Toronto - 1976
6. Burke Ravine - North York - 1977
7. Taylor Creek-Woodbine Bridge Ravines
- East York - 1977

Available from:

Toronto Field Naturalists' Club
83 Joicey Blvd.
Toronto, Ont. M5M 2T4