TORONTO FIELD NATURALISTS' RAVINE SURVEY

STUDY NO. FIVE

****

THE PARK DRIVE RAVINE

ROSEDALE

****

Prepared by -

DALE TAYLOR and PAUL SCRIVENER

(for the North Rosedale Ratepayers' Association)

Published by the Toronto Field Naturalists' Club

1976

$2.00

THE TORONTO RAVINE SURVEY : AN INTRODUCTION

Urban biology is, unfortunately, a neglected study in our time. Only rarely do professional botanists, ornithologists, or ecologists treat the city as anything other than lost, and yet the urban environment desperately needs the preservation, and often the restoration, of any natural areas that remain within its boundaries. This is a task in which the informed amateur field naturalist can play an important part.

To a considerable degree natural areas still survive within Metro Toronto because of a fortunate natural legacy -- a series of steep-sided, deep ravines running from north to south across the city into Lake Ontario. To understand this legacy of ravines, it is necessary to go back a long way in time, to the last glacial period in Eastern Canada, about 10,000 years ago. All of Southern Ontario was then covered by ice. Later, as the ice retreated northward, the basic structure of the present surface landscape was left behind, including the numerous ravines which are a unique feature of Metro Toronto.

The first survey in this series, that of Chatsworth Ravine, was printed in October 1973, at the time of the Toronto Field Naturalists' Golden Jubilee. It was well received by the local residents' association and by the City of Toronto Parks Department, which undertook certain remedial work in the ravine, including the planting of more trees. Thus encouraged we have moved on to survey other areas. We believe that basic biological and ecological information on ravines is needed if the case for their preservation in a sound natural state is to be made clear to the public and to political bodies. The survey which follows is another in what we hope will be a continuing series of reports on Metropolitan Toronto's ravines.

NOTE OF ACKNOWLEDGEMENT

The Toronto Field Naturalists' Club appreciates the permission of the North Rosedale Ratepayers' Association to include this study of the Park Drive Ravine in its series of ravine surveys. A study which the authors originally prepared for the North Rosedale Ratepayers' Association. Close cooperation between the Club and local residents' associations is one of the most effective ways of preserving Toronto's ravines in a sound ecological state, both now and in the future.

Stewart Hilts,

Department of Geography
University of Western Ontario.

CONTENTS

ACKNOWLEDGEMENT

The authors would like to acknowledge the assistance of the following naturalists in the conduct of this study:

Michael Goldstein	(maps)
Michael Hough	(general)
Helen Juhola	(botany)
The late Erna Lewis	(botany)
John Livingston	(general)
Eric Nasmith	(birds)
Ron Tasker	(general)

We are also grateful for the information provided by the following public agencies:

City of Toronto:

Parks Department

Works Department

Metropolitan Toronto:

Roads Department

Works Department

We are particularly appreciative of Mr. Howard Chapman of the North Rosedale Ratepayers' Association and Jack Cranmer-Byng of the Toronto Field Naturalists' Club for their help and encouragement in initiating the study. A special word of thanks is also due to Helen Juhola, who commented extensively on a Draft, and our typist, Maureen Lindsell.

The North Rosedale Ratepayers' Association covered study expenses. However, the study does not necessarily represent the official views of the Ratepayers' Association.

TORONTO FIELD NATURALISTS' CLUB

RAVINE SURVEY # 5

THE PARK DRIVE RAVINE

Prepared by: Dale Taylor and Paul Scrivener

FOREWORD

Toronto's ravines are one of her few outstanding natural assets. Yet, city ravines are subject to various threats. Development and utilities installation on ravine lands pose drastic threats with the result that Toronto has left only half of its original ravine land. The ravines can also be threatened over longer periods of time by gradual changes in natural features, such as the destabilizing of a slope or deterioration of water quality.

A concern over nearby ravines by the North Rosedale Ratepayers' Association lead to the present study. After consulation in the spring of 1975 between members of the Ratepayers' executive, City Parks Department officials and members of the Toronto Field Naturalists' Club, it was decided that a study of at least one ravine in the area could be done.

The Park Drive Ravine was selected. This ravine has not been previously studied and it presents special issues because of its strategic central location and linkages to other ravines. The Park Drive Ravine has also been recently disturbed by major sewer work. However, it appears to have survived these disturbances and its natural potential has been increased as a result of the recent closure of the road in the ravine. It is therefore timely to consider policies for this ravine.

The study is based on eight visits to the ravine between May, 1975 and April, 1976 by a small group of interested area residents, sometimes accompanied by more expert naturalists. These were Dale Taylor (a T.F.N.C. member), Paul Scrivener and Frank Riese (both graduate students in environmental studies). Those who assisted are listed in the Acknowledgement.

RAVINE DESCRIPTION

LOCATION AND SIZE

The Park Drive Ravine is in central Rosedale between the neighbourhoods of North and South Rosedale. (See Map 1.) It derives its name from a road allowance running along its full length, known as the Park Drive Reservation. This contained an open public road for many years. In April, 1973, after Ratepayer requests, the road was closed to motor vehicles except for maintenance purposes and the City of Toronto Parks Department assumed management responsibility for the publically owned ravine bottomland from the Metro Roads and Works Department.

RAVINE DESCRIPTION

Location and size (continued)

Before the construction of the Mt. Pleasant Extension in the late 1940's, Roxborough Street cut through the ravine. The ravine on both sides of what is now Mt. Pleasant was then known as the Roxborough Ravine, and the road within it, the Roxborough Ravine Drive.

The ravine runs southeasterly for about 3/4 mile following a gentle downward slope from Mt. Pleasant Road at Roxborough Drive to the Don Valley. It now terminates rather abruptly at a rampwork carrying an interchange between the Don Valley Parkway and the Bayview Avenue Extension.

The ravine covers about 50 acres, some 15 acres of which is bottomland. It varies in width between a maximum of 900 feet at each end to about 600 feet at its narrowest central sections. The ravine floor is between 100 feet and 120 feet below surrounding Rosedale.

ACCESS

Public access to the ravine is possible at three points - at its western end and at its north-eastern end, and by Milkmen's Road which descends into the ravine from Craigleigh Gardens, a park atop the east end of the south slope. This road is also closed to motor vehicles.

The Park Drive Ravine is itself the southern half of a larger ravine that also contains David Balfour Park and the Vale of Avoca lying to the northwest across Mt. Pleasant Road. It is also linked to Moore Park Ravine by a pathway running along the North Rosedale slopes of the Don Valley past Chorley Park and the Don Valley Brick Works.

OWNERSHIP AND HISTORY

The ownership and control of ravine land in the Park Drive Ravine is complex. Within the Park Drive Ravine, ownership is about equally public and private. Map 2 shows that City ownership of both slope and bottomland is discontinuous and that some private properties (marked by asterisk in Map 1) are wholly within the ravine.

Several acres of the ravine bottom still constitute a 66' road allowance. Moreover, the main water-course in the ravine is one of the metropolitan area's major storm sewers.

Other utilities in this ravine include a large underground City storm sewer which carries the ravine's original creek from David Balfour Park. There is an overflow connection between this culvert and the existing open creek. There is also a 48-inch watermain and a 12-inch gas pipeline underground, and an overhead hydro line for street lights along the road in the ravine and on the expressway system to the

OWNDERSHIP AND HISTORY (continued)

east. There is no buried electric cable in the ravine according to Toronto and Ontario Hydro authorities.

Park Drive had been used for many years an an access to the crude system of roads in the Don Valley before the expressway construction there in the late 1950's. Residents remember the ravine as well wooded right up to the road until the sewer construction began in 1966. However, the road, flood damage and refuse detracted from its appearance as can be seen from 1966 Metro photos. It was then subject to heavy spring flooding. Until this time too there was a tiny settlement just to the east of the ravine, consisting of a beekeeper and hermit shacks.

Of special natural history interest, much of the local entomological collection in the Royal Ontario Museum was collected and donated in the early decades of this century by Paul Hahn, an amateur naturalist who lived along the Park Drive Ravine and frequented it.

WATER

The main water course lies to the south of the road. The open part of this creek now runs from a large concrete outfall about 800 feet in from the western entrance of the ravine to a concrete inlet at the foot of Milkmen's Road, 3/4 of the ravine's length.

The original natural stream in the ravine, known as the Yellow Creek, ran from the ravine to the northwest where it is still very scenic in the Vale of Avoca and David Balfour Park. This was disrupted in the late 1940's with the construction of the Mt. Pleasant Extension when the creek was routed through an underground culvert from David Balfour Park. In the late 1960's the Spadina trunk sewer was brought through the ravine in roughly the same alignment as the old Yellow Creek. The natural flow now seen in the open cut is a creek which comes from the Nordheimer Ravine a few miles away! It has not been determined how often storm water in the Yellow Creek overflows into the Park Drive Creek through the connection.

The present creek has steep gabions (walls of mesh and stone). It is quite shallow most of the time, with a maximum depth of about a foot at its eastern end. There is a noticeable current. Water flow is slowed and freshened by a few shallow wiers or falls. After a summer storm, however, the flow can reach 2/3 of the way up the gabions.

WATER (continued)

Unfortunately pollution is evident. Sudsing and some odour are apparent fairly often. The stream bottom is matted with heavy attached "cladaphora" algal growth living off the various nutrients which flow in the creek. The build-up of silt at the easterly inlet has also reached serious proportions.

During spring high water two shorter water courses in the ravine run along the eastern and western base of the north slope. There are two residual wet areas which are also apparently spring-fed. One of these is a cat-tail marsh at the extreme northwest end at the northern edge of the Roxborough Parkette. The other is a larger and less well defined wet area at the east end between the path and the north slope. Cat-tails and an interesting variety of other native marsh plants grow here.

SLOPES AND EROSION

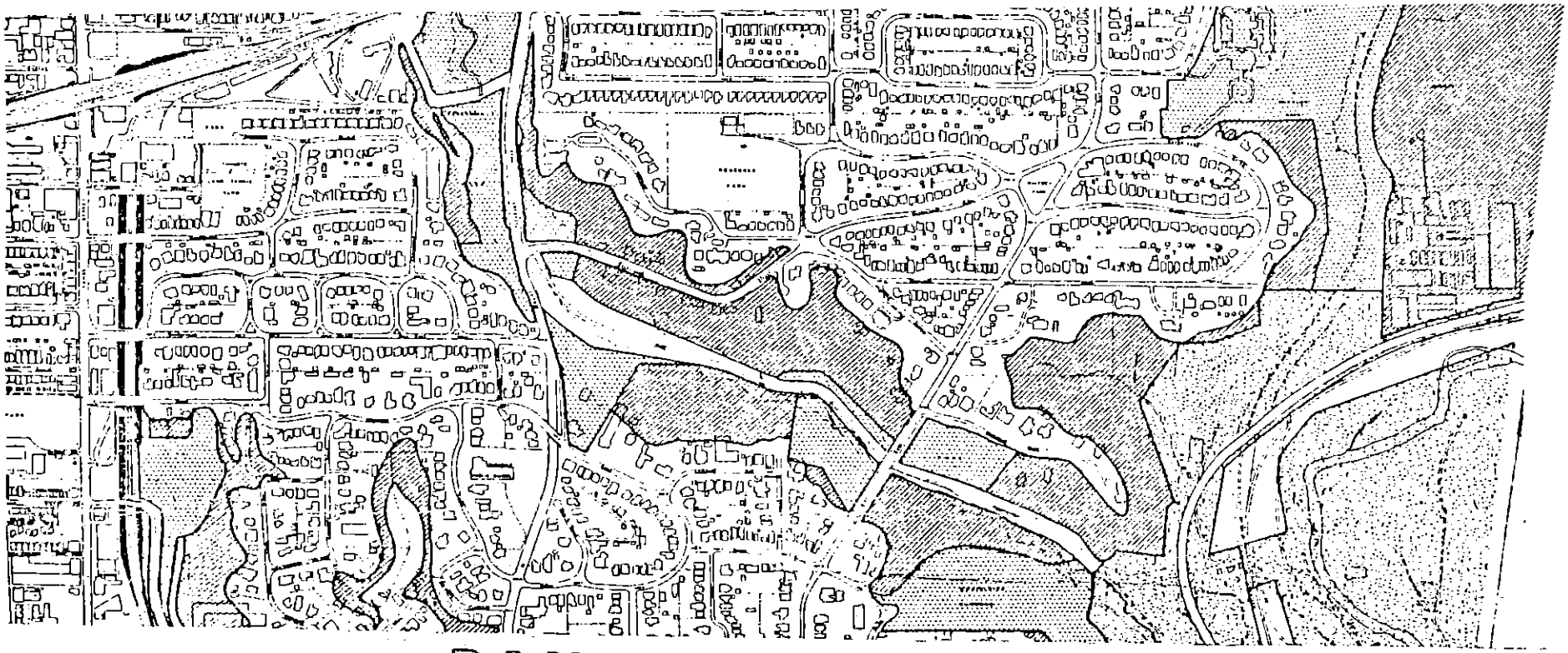
The slopes of this ravine are steep as in other City ravines (110-120 feet). For the most part, the slopes are continuously and well wooded, although understory species are sparse, especially at some points on the south slopes. Many of the trees identified are alien, either planted or garden escapees, but there are still many interesting native trees to be found. There is also an ample supply of dead trees and fallen wood which is attractive to birds and animals.

Local erosion can be serious where tree cover has been removed. For example, the rear of a private property on Roxborough Drive has recently been stripped and terraced for artificial land-scaping. Top soil has washed well down the ravine and the slope is likely to be unstable at this point for quite some time.

There is also serious local erosion on the dirt slopes immediately below the Glen Road Bridge. Drainage from the bridge has cut unsightly gullies into the slopes, and the gabions along the creek and the path itself have begun to erode.

A chain fence runs along the base of the north and south slopes throughout most of the ravine.

The contour of the north slope has been disturbed at times in the past, presumably either to obtain access to private property from the road or to build terraces or level areas on the slope for various private uses. Most of the areas affected have long since been overgrown, but there is thin understory cover and evidence of continued instability.



Map 2:

RAVINE LANDS

OWNERSHIP OF LANDS

SCALE 1" = 800'

CITY OF TORONTO OWNED LANDS

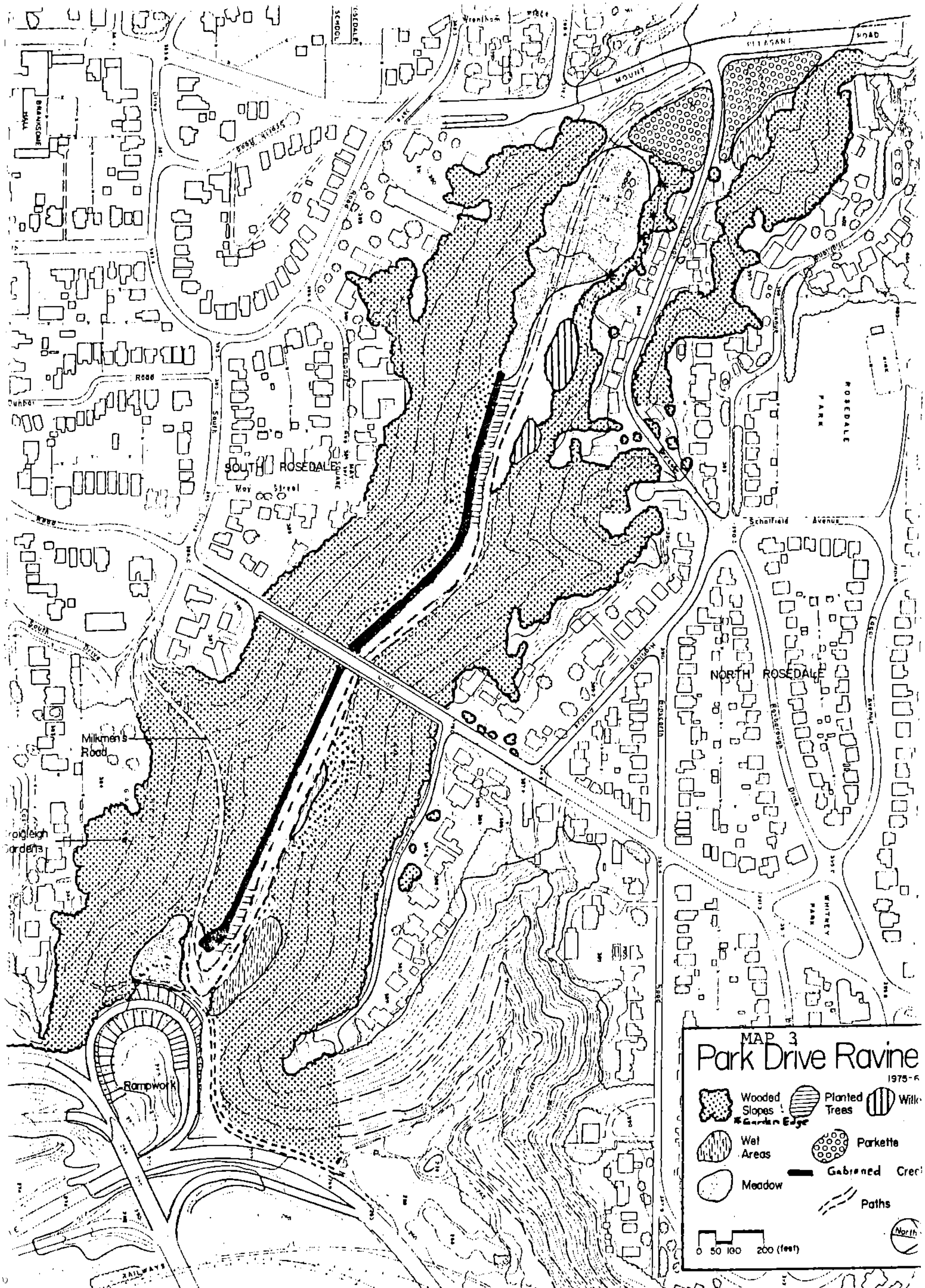
METROPOLITAN TORONTO OWNED LANDS

PRIVATELY OWNED LANDS

APRIL 1960

CITY OF TORONTO PLANNING BOARD

M 12


MAP 3
Park Drive Ravine
1975-6
Wooded Slopes
* Garden Edge
Planted Trees
Wet Areas
Parkette
Gabioned Creek
Meadow
Paths
0 50 100 200 (feet)
North
SOUTH ROSEDALE
NORTH ROSEDALE
ROSEDALE PARK
WHITNEY PARK
Milkmen's Road
Craigleigh Gardens
Rampwork
Mount Pleasant Road
Schofield Avenue
May Street
Dunbar Road
Branksome Hall
RAILWAYS

SLOPES AND EROSION (continued)

The only other major interference with the natural slope is Milkmen's Road which gives access from Craighleigh Gardens. Milkmen's Road is also badly eroded.

The steep earth rampwork at the east end of the ravine shows no signs of erosion or bad drainage at this stage but is covered only with grasses.

The downward slope of the ravine floor itself has also resulted in some local erosion in the open meadow area where groundcover is still sparse.

The experience with privately owned ravine slopes in this area is a mixed one. Happily, much of the ravine land in private tenure has been left alone and this is usually the best policy.

BOTTOMLAND HABITATS

The Park Drive Ravine has an interesting variety of bottomland habitats that should be preserved.

1. parkette

   The western entrance to the Park Drive Ravine consists of a formally grassed parkette on both sides of Roxborough Drive. The planted trees are flourishing in these parkettes. The backdrop of the cattail marsh is especially pleasing to the eye in the north parkette. The poplars in the south parkette are favourites of the Baltimore Oriole.

2. meadow

   The parkette gives way to a grass and clover meadow as one moves east into the ravine. This is different habitat and should be maintained. The line of willow trees along the base of the slope and the well landscaped private property are very pleasing to the eye.

   The main problems in this area are noxious weeds along the path, determining an appropriate frequency for cutting meadow grasses, and the beginnings of erosion. A row of old post holes several feet to the north of the path in this area has been noted. These are quite deep and should be filled.

3. creek

   Although channeling the creek has detracted from its appearance, especially in winter when there is no vegetation on the gabions, the creek provides an interesting and vital natural feature. Despite the

BOTTOMLAND HABITATS (continued)

3. creek (continued)

gabions and variation in the water level, vegetation is beginning to colonize the gabions, most notably nettles, nightshade, chinese elm and ailanthus trees. Much growth has occurred since a 1971 aerial photograph. This regrowth builds upon itself. Silt, dead plants and humus accumulate in the gabions and provide additional soil for each new year's growth. There is some disagreement about trees "disrupting" the gabions. Since trees can also stabilize an embankment and help conceal the otherwise sterile gabion more not less might well be planted.

The creek attracts numerous mallard ducks (this is probably due to the algae), and numerous song sparrows can be seen and heard in its immediate vicinity.

The thistles and nettles on the gabions also seem particularly attractive to butterflies. Six species of butterfly have been observed simultaneously at one point along the gabions. Butterflies may be one of the most interesting natural features of this ravine.

4. path

The floor of the ravine contains a road-width wood chip and gravel path - the former Park Drive. This parallels the creek along the full length of the latter. The path and creek are about 20 feet apart from the western end until the curve before the bridge at which point they begin to run together to the eastern end.

Most of the earth on the floor of the ravine has been disturbed in the last ten years during the utility construction. As a result the Parks Department had to plant grasses and clovers in the meadow areas already mentioned and has attempted to plant some of the area between the path and the creek with the following kinds of trees: plane trees, white pine, honey locust, cottonwood, linden and mulberry. Few of the trees planted are flourishing. The soil or the habitat generally may not be appropriate for the alien species chosen, and native species would perhaps have done better.

Our most general concern, however, is that there is too much road in this ravine, especially at its east end where Milkmen's Road and "Park Drive" intersect.

BOTTOMLAND HABITATS (continued)

5. forest edge

This kind of habitat is scenic and also important for bird life. Good forest edge can be found in the meadow area, the east end of the ravine, and along the west end of the south slope. It could also occur eventually on the earthwork at the east end of the ravine if this were planted with trees. This also might help conceal the rampway and act as a sound barrier.

Before the ravine was disturbed for utility construction in 1966, the roadway (from memory) was very shaded and almost overgrown with large willow and elm trees. Now, between the forested slopes and the bottomland, the forest edge is dense with vines and shrubs, such as wild grape, virginia creeper, purple flowering raspberry, etc. Many of these species bear fruit that is attractive to birds.

FAUNA

BIRDS

There is considerable bird life in this ravine and the fall migration in 1975 was very active. A list of birds identified on the six general-purpose visits between May and September is appended. Several interesting points can be made about birds in this ravine.

- Eastern Wood Peewees abounded in 1975. This indicates the depth of the woods.

- Although the marshy areas are not large, quite a variety of migrating small marsh birds was identified in May, including the usual thrushes, wrens, Ovenbird, Veery, etc., associated with such habitat. This illustrates the value of city ravines as migration stop-overs.

- Mallard ducks are frequently seen in numbers of up to a dozen or more along the creek, especially at its eastern and deeper end.

- Red-headed woodpeckers nested at the east end of the ravine in 1974. Other woodpeckers are seen frequently in the ravine (these include Downy, Flicker and Sapsuckers) reflecting the general supply of dead trees.

- Horned owls used to nest under the Glen Road Bridge but have not done so since 1972 when a female was killed. Only a single owl was seen in 1973 and 1974. Two were sighted in late 1975, however, and nesting may resume in 1976.

FAUNA (continued)

Some points should be made to supplement the appended list:

SMALL MAMMALS AND AMPHIBIANS

- In 1975, one family of racoons lived about midway along the south slope up in a dead tree and another lives just around the corner in the Binscarth Ravine. This would appear to be normal woodland density.

- Muskrat can frequently be seen in the early evening swimming in the eastern part of the creek. This is interesting, since it would suggest the creek remains a good food source. Perhaps, the gabion walls are not as sterile as they look, since muskrat especially like feeding on the banks of streams.

- During the spring walk, numerous toads were heard in the eastern wet areas.

INSECTS

- This may be a good ravine for butterflies. Very casual looking produced 7 species, 6 simultaneously in one spot alone. The thistles and nettles of the gabions and the meadow are the food of the immature forms of several species of butterflies.

- Generally, insects and bird density are correlated. The ideal ravine would support a higher than average insect population without affecting the nearby human population since this would be balanced by greater bird density. The problem is that bird density is also lessened by human presence. Hence the need for larvae-consuming agents such as toads, ducks and muskrat, all hopefully present in the Park Drive Ravine. In any event, this ravine is not insect-ridden. Mosquitoes, for example, seem far more prevalent along the path toward the Moore Park Ravine.

DOMESTIC ANIMALS

- No loose dogs were sighted, although many with their owners.

- Several cats were sighted and appear to take quite a toll on wildlife.

VEGETATION

Vegetation has been referred to in other sections. Trees and plants are those normally to be found in an eastern deciduous woods plus numerous alien species, either escaped from gardens or planted. The appended list is evidence that there are many interesting native species. The main problems have been identified as conserving the wet areas which contain a variety of marsh plants and establishing a future cutting and planting policy with respect to the bottomland and creek walls.

VEGETATION

(continued)

As with the fauna, it would be useful to compare the vegetation of this ravine with that of Moore Park Ravine and the Vale of Avoca. Coniferous trees, for example, are present here and in the Vale but not in Moore Park Ravine. Notably absent when compared with other Toronto ravines is the black walnut. Making up for this is a shagbark hickory, a rare find this far north. It is also disappointing to report the absence of any ferns in 1975, probably because the ravine has been so disturbed, and perhaps because of air pollution.

HUMAN USE

The Park Drive Ravine is a quiet and clean ravine, surprisingly so given its central location in the City. For most of the year, people use this ravine mainly and about equally for biking, jogging and exercising dogs. On a few Indian summer weekends, however, many people were encountered simply taking a walk. The variety of the vegetation makes the ravine particularly colourful during the fall.

There is some refuse in the ravine at the east end and in the west area and in the creek itself, although this has not become a serious problem. The closing of the road and perhaps the relative absence of children compared with some other ravines in the City may explain this.

The only substantial problem arising from the current pattern of human use concerns the servicing of the numerous utilities in the ravine. The problem is whether the path could be narrowed as in David Balfour Park and possibly rerouted to create greater interest in some spots without affecting service vehicle access. It should also be noted that a wide path has some value in keeping people concentrated on the path. This in turn relates to the question of doing away with the road allowance entirely. It should also be noted that two properties at the east end of the ravine are not sewered and have holding tanks that are emptied each year by large trucks which must use the ravine.

The ravine is now well posted with signs prohibiting the use of motor vehicles and motor bikes. Even so, some trail bikes have been heard or seen.

Normally, there are more people in the David Balfour Park across Mt. Pleasant than in this ravine. Hence, a direct link under or over Mt. Pleasant would probably increase the number of people in the Park Drive Ravine. However, this ravine could probably sustain somewhat greater human activity without significant natural consequences.

****

NOTE:

A companion slide presentation of the ravine as it looked in 1975 has also been prepared to illustrate the major points in the study.

RECOMMENDATIONS

1. The main objective for the Park Drive Ravine is that it remain a natural ravine. The conditions that will ensure this include:

   (a) Doing away with the legal road allowance, thus giving the City Parks Department firmer control over the bottom land and helping to ensure that a road is never built through the ravine.

   (b) Passing ravine zoning by-laws, by the City, backed by firm Metro and Provincial policies for the protection of urban natural areas, that will protect the natural condition of the ravine slopes from private or public actions that would disturb them.

2. The open bottomland of this ravine should be preserved and no attempt should be made to achieve dense regrowth to the path throughout the ravine.

3. The road intersection at the east end of the ravine should be greatly reduced, and consideration should be given to altering the route of the path near its western end in order to add visual interest and a new habitat between the path and creek.

4. Special ravine habitats such as the cat-tail marshes, the meadow, and the forest and garden edges should be carefully conserved.

5. A direct link between this ravine and the David Balfour Park across Mt. Pleasant would probably increase the number of people aware of and using this ravine without adverse natural consequences and should therefore be considered.

6. A gabion management policy should be developed. In the meantime, evergreen shrubs and some native plants could be introduced to give the creek a more natural and attractive appearance.

7. The western meadow north of the path should continue to be cut sufficiently frequently to maintain it as an open meadow but not so frequently as to discourage the growth of native wild flowers and shrubs to deter erosion (See Map 3). Post holes in this meadow should be filled in.

RECOMMENDATIONS
(continued)

8. The western meadow south of the path and west of the creek should not be cut again and unrestricted natural succession should be the policy for this area, eventually resulting in a most interesting and educational contrast between purely natural succession and managed open meadow on each side of the path (See Map 3).

9. Drainage from the Glen Road Bridge should be corrected so that destruction of the gabions and the path under the bridge would stop. A better treatment of slopes under the bridge is also needed to improve appearance.

10. The build-up of silt should be removed from the eastern egress of the creek before major blockage occurs.

11. No more trees should be planted to replace the ones planted between the creek and the path that are dead or not flourishing. If planting on the bottomland seems to be required, a few native shrubs could be planted instead. This would be consistent with an open bottomland policy. Cedars could be planted in wet areas, however.

12. There is sufficient refuse in this ravine to warrant a late fall or winter clean-up each year.

13. The City should consider having a manual prepared to guide residents in the care and managment of privately-owned ravine slopes.

14. A general environmental study of the entire central City ravine system (Vale of Avoca-David Balfour Park Drive-Moore Park-Rosedale Valley -- see Map 1) should be undertaken as soon as possible. Detailed follow-up studies in the Park Drive Ravine could be best undertaken in relation to the more general study.

APPENDIX 1

PARK DRIVE RAVINE

BIRDS

May - October, 1975

Mallard
Turkey Vulture
American Kestrel (Sparrow Hawk
Red-shouldered Hawk
Chimney Swift
Yellow-shafted Flicker
Downy Woodpecker
Yellow-bellied Sapsucker
Eastern Phoebe
Eastern Wood Peewee
Great Crested Flycatcher
Least Flycatcher
Blue Jay
Black-capped Chickadee
Common Crow
White-breasted Nuthatch
Brown-headed Cowbird
Robin
Veery
Golden-crowned Kinglet
Ruby-crowned Kinglet
Starling
Solitary Vireo
Red-eyed Vireo
Winter Wren
Yellow Warbler
Parula Warbler
Black-throated Blue Warbler
Yellow-rumped Warbler
Blackburnian Warbler
Ovenbird
Northern Waterthrush
House Sparrow
Red-winged Blackbird
Baltimore Oriole
Common Grackle
Cardinal
Rose-breasted Grosbeak
Indigo Bunting
American Goldfinch
White-crowned Sparrow
Song Sparrow

SMALL ANIMALS

Toad
Brown Bat
Black Squirrel
Chipmunk
Raccoon
Muskrat
Groundhog

INSECTS

Butterflies
- Monarch
- Painted Lady
- Goldbanded Skipper
- Thistle
- Orange Sulpher
- Cabbage
- Fritillary
- Mourning Cloak

Grasshopper

DECEMBER, 1975 sightings:

Horned Owls (2)
Northern Shrike
Red-tailed Hawk
Slate-coloured Junco

APRIL, 1976 sighting:

Kingfisher

Significant Previous Sightings (1973-4):

Red-headed Woopecker 74 (nested)
Cooper's Hawk W'74
Rough-legged Hawk W'73
Screech Owls S'73

APPENDIX 2

PARK DRIVE RAVINE

CHECKLIST OF PLANTS

July, 1975

(Compiled by Helen Juhola and Erna Lewis)

For woody plants, the family and species names are listed according to A Field Guide to Trees and Shrubs by George A. Petrides (published by Houghton Mifflin Company, Boston, 1958).

For herbaceous plants, the family and species names are listed according to A Field Guide to Wildflowers by Roger Tory Peterson and Margaret McKenny published by Houghton Mifflin Company, Boston, 1968).

Alien or introduced species are noted with an asterisk.

TREES, SHRUBS, AND WOODY VINES

PINACEAE (PINE FAMILY)

Picea glauca	White Spruce
Pinus strobus	White Pine
Thuja occidentalis	White Cedar
Tsuga canadensis	Eastern Hemlock

SALICACEAE (WILLOW FAMILY)

Populus balsamifera	Balsam Poplar
Populus alba	* Silver-leaved Poplar
Populus deltoides	Cottonwood
Populus tremuloides	Trembling Aspen
Salix fragilis	* Crack Willow
Salix interior	Sandbar Willow

JUGLANDACEAE (WALNUT FAMILY)

Carya ovata	Shagbark Hickory
Juglans cinera	Butternut

BETULACEAE (BIRCH FAMILY)

Carpinus caroliniana	Blue Beech
Betula lutea	Yellow Birch
Betula papyrifera	White Birch

FAGACEAE (BEECH FAMILY)

Fagus grandifolia	Beech
Quercus rubra	Red Oak
Quercus macrocarpa	Bur Oak

ULMACEAE (ELM FAMILY)

Ulmus sp.	Elm
Ulmus pumila	* Chinese Elm

MORACEAE (MULBERRY FAMILY)

Morus sp.	Mulberry

SAXIFRAGACEAE (SAXIFRAGE FAMILY)

Philadelphus coronarius	* Garden Mock-Orange

HAMAMELIDACEAE (WITCH-HAZEL FAMILY)

Hamamelis virginiana	Common Witch-Hazel

PLATANACEAE (SYCAMORE FAMILY)

Platanus sp.	* Plane Tree

ROSACEAE (ROSE FAMILY)

Sorbus aucuparia	* European Mountain Ash
Malus sp.	* Flowering Crab Apple
Craetegus sp.	* English Hawthorn
Rubus sp.	Raspberry
Rubus sp.	Black Raspberry
Rubus odoratus	Flowering Raspberry
Rubus sp.	Thimbleberry
Prunus serotina	Black Cherry
Prunus virginiana	Choke Cherry

LEGUMINOSAE (LEGUME FAMILY)

Gleditsia triacanthos	Honey Locust
Robinia pseudo-acacia	Black Locust

SIMAROUBACEAE (QUASSIA FAMILY)

Ailanthus altissima	* Chinese Sumac

ANACARDIACEAE (CASHEW OR 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 saccharinum	Silver Maple
Acer saccharum	Sugar Maple
Acer platanoides	* Norway Maple

HYPPOCASTANACEAE (HORSECHESTNUT FAMILY)

Aesculus hyppocastanum	* Horsechestnut

VITACEAE

Parthenocissus quinquefolia	Virginia Creeper
Vitis sp.	Grape

TILIACEAE (LINDEN FAMILY)

Tilia americanum	American Basswood
Tilia cordata	* Linden

CORNACEAE (DOGWOOD FAMILY)

Cornus stolonifera	Red Osier Dogwood
Cornus alternifolia	Alternate-leaf Dogwood

OLEACEAE (OLIVE FAMILY)

Fraxinus americana	White Ash

SOLANACEAE (NIGHTSHADE FAMILY)

Solanum dulcamara	Bitter Nightshade

CAPRIFOLIACEAE (HONEYSUCKLE FAMILY)

Lonicera tatarica	Tartarian Honeysuckle
Lonicera sp.	Honeysuckle
Viburn trilobum	Cranberry Virburnum
Sambucus sp.	Elderberry

FERNS AND FERN ALLIES

No ferns seen

EQUISETACEAE (HORSETAIL FAMILY)

Equisetum arvense	Field Horsetail

HERBACEOUS PLANTS

TYPHACEAE (CATTAIL FAMILY)

Typha angustifolia	Narrow-leaved Cattail
Typha latifolia	Common Cattail

ALISMATACEAE (ARROWHEAD FAMILY)

Alisma subcordatum	Water Plantain

LILIACEAE (LILY FAMILY)

Erythronium americanum	Adder's Tongue
Smilacina racemosa	False Spikenard
Convallaria majalis	* Lily of the Valley
Scilla bifolia	* Scilla

ORCHIDACEAE (ORCHID FAMILY)

Epipactis helleborine	* Green Helleborine

POLYGONACEAE (BUCKWHEAT FAMILY)

Polygonum sp.	Knotweed
Polygonum cuspidatum	* Japanese Knotweed
Rumex crispus	Curled Dock

CHENOPODIACEAE (GOOSEFOOT FAMILY)

Chenopodium album	Lamb's Quarters

URTICACEAE (NETTLE FAMILY)

Urtica sp.	* Stinging Nettle

RANUNCULACEAE (BUTTERCUP FAMILY)

Ranunculus sp.	* Buttercup
Thalictrum dioicum	Early Meadow-rue

PAPAVERACEAE (POPPY FAMILY)

Chelidonium sp.	* Celandine

CRUCIFERAE (MUSTARD FAMILY)

Hesperis matronalis	* Dame's Rocket
Capsella bursa-pastoris	Shepherd's Purse
Allaria officinalis	* Garlic Mustard

ROSACEAE (ROSE FAMILY)

Fragaria sp.	Strawberry
Agrimonia sp.	Agrimony
Geum aleppicum	Yellow Avens
Rosa sp.	Rose

LEGUMINOSAE (PEA FAMILY)

Medicago sativa	* Alfalfa
Medicago lupulina	* Black Medick
Lotus corniculatus	* Bird's-foot Trefoil
Melilotus alba	* Sweet Clover
Vicia sp.	Vetch

OXALIDACEAE (WOOD SORREL FAMILY)

Oxalis sp.	Yellow Wood Sorrel

GERANIACEAE (GERANIUM FAMILY)	
Geranium maculatum	Wild Geranium
BALSAMINACEAE (TOUCH-ME-NOT FAMILY)	
Impatiens capensis	Jewelweed
GUTTIFERAE (ST. JOHNSWORT FAMILY)	
Hypericum perforatum	* St. Johnswort
VIOLACEAE (VIOLET FAMILY)	
Viola sp.	Violet
LYTHRACEAE (LOOSESTRIFE FAMILY)	
Lythrum salicaria	* Purple Loosestrife
Lysimachia sp.	* Loosestrife
ONAGRACEAE (EVENING PRIMROSE FAMILY	
Epilobium hirsutum	* Hairy Willowherb
Oenothera biennis	Evening Primrose
Circaea quadrisulcata	Enchanter's Nightshade
PRIMULACEAE (PRIMROSE FAMILY)	
Lysimachia ciliata	Fringed Loosestrife
UMBELLIFERAE (CARROT FAMILY)	
Daucus carota	* Wild Carrot
	* Goutweed
APOCYNACEAE (DOGBANE FAMILY)	
Apocynum androsaemifolium	Spreading Dogbane
ASCLEPIADACEAE (MILKWEED FAMILY)	
Asclepias syriaca	Common Milkweed
CONVOLVULACEAE (MORNING-GLORY FAMILY)	
Convolvulus arvensis	Common Bindweed
BORAGINACEAE (FORGET-ME-NOT FAMILY)	
Myosotis scorpiodes	Forget-me-not
VERBENACEAE (VERVAIN FAMILY)	
Verbena hastata	Blue Vervain

LABATIAE (MINT FAMILY)

	Horehound
Nepeta cataria	* Catnip
Glechoma hederacea	* Ground Ivy
Prunella vulgaris	* Heal All

SCHROPHURARIACEAE (SNAPDRAGON FAMILY)

Linaria vulgaris	* Butter and Eggs

PLANTAGINACEAE (PLAINTAIN FAMILY)

Plantago major	* Common Plantain

CUCURBITACEAE (CUCUMBER FAMILY)

Echinocystis lobata	Wild Cucumber

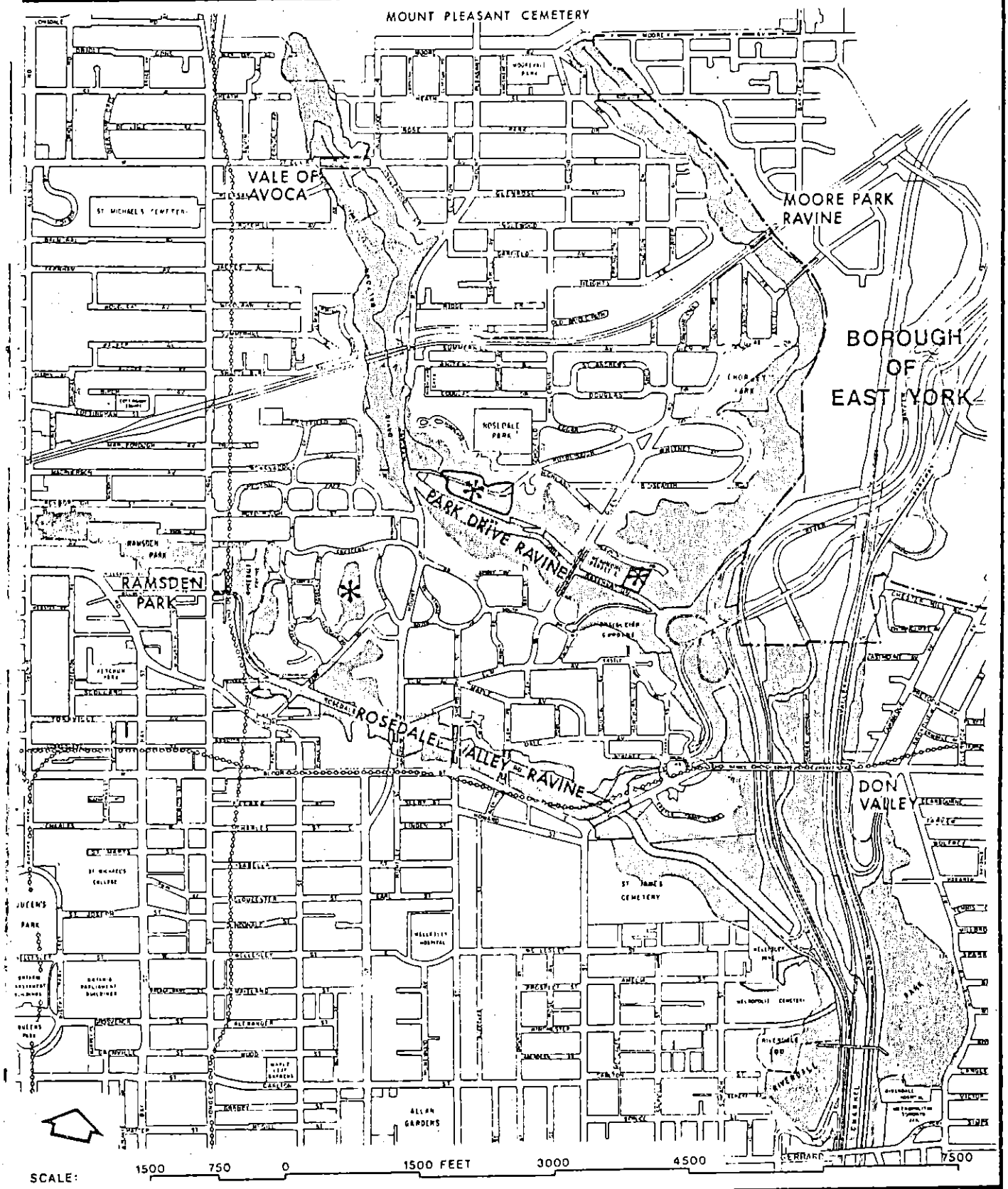
CAMPANULACEAE (BLUEBELL FAMILY)

Campanula rapunculoides	* Bellflower

COMPOSITAE (DAISY FAMILY)

Eupatorium maculatum	Joe-Pye-weed
Solidago flexicaulis	Zig-Zag Goldenrod
Solidago canadensis	Canada Goldenrod
Aster Sp.	Aster
Aster ericoides	Heath Aster
Erigeron annuus	Daisy Fleabane
Inula helenium	* Elecampagne
Ambrosia artemisiifolia	Ragweed
Helianthus annus	Common Sunflower
Bidens sp.	Beggar's Ticks
Tanacetum vulgare	* Tansy
Tussilago farfara	* Coltsfoot
Arctium minus	* Burdock
Xanthium chinese	Cocklebur
Cirsium arvense	* Canada Thistle
Lapsana communis	* Nipplewort
Cichorium intybus	* Chickory
Tragopogon pratensis	* Goat's-beard
Sonchus arvensis	* Sow Thistle
Taraxacum officinale	* Dandelion

CITY OF TORONTO PLANNING AREA



OFFICIAL PLAN PART I

MAP 5(a). AREA OF RAVINE CONTROL

MAP 1.

RAVINES

AREA IN WHICH PRIVATELY-OWNED PROPERTIES EXEMPTED FROM SECTIONS 5.2 AND 5.9