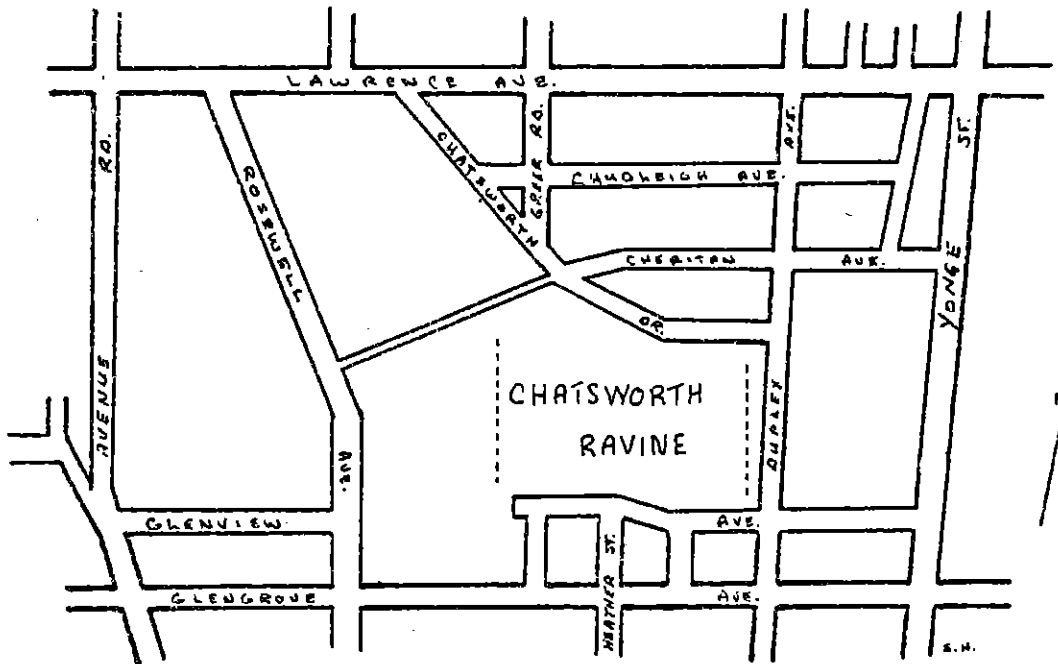


TORONTO RAVINE SURVEY PROGRAM  
TORONTO FIELD NATURALISTS  
STUDY # 1

# CHATSWORTH RAVINE



Prepared by

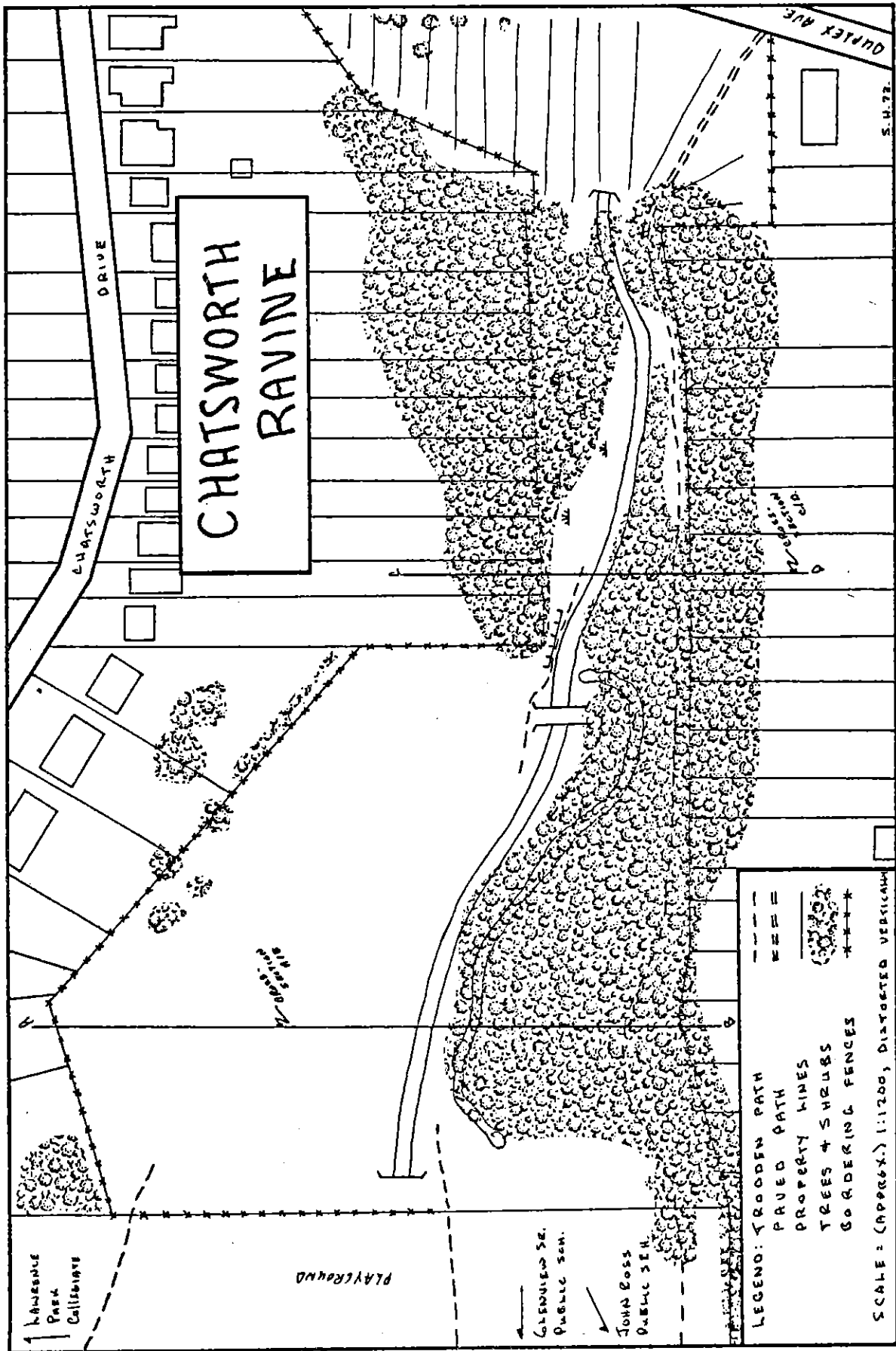
Jack Cranmer-Byng  
Emily Hamilton  
Stewart Hilts

Published by

Toronto Field Naturalists' Club

1973

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# TORONTO FIELD NATURALISTS' CLUB

## RAVINE SURVEY

### SURVEY OF CHATSWORTH RAVINE

Prepared by Jack Cranmer-Byng and Emily Hamilton with the assistance of Stewart Hilts.

#### NOTE

This is the first of what we hope will be a series of ravine surveys carried out under the aegis of the Toronto Field Naturalists' Club. The method used has been to answer specific questions set out in the Club's Toronto Ravine Survey (preliminary form) of May 1973. Since this is the first survey to be attempted we have added a number of general comments at the end. Compilers of future surveys, however, may wish to substitute for such comments a more specific list of proposals for improving the ecological stability of the particular ravine which they have been studying. We visualize up-dating our own survey, especially the check-lists in the appendices, as further studies are carried out and more data becomes available.

**OFFICIAL NAME:** CHATSWORTH RAVINE PARK. Sometimes referred to locally as Lawrence Park Ravine or Glenview Ravine.

**STATUS:** The lower slopes and bottom land are public property and are maintained by the City of Toronto Parks Department. The higher sides of the ravine, which are fenced off, are the property of houses which back onto the ravine.

**LOCATION:** Between Rosewell Avenue and Duplex Avenue; Chatsworth Drive and Glenview Avenue (see maps on cover and at Appendix 3).

**POINTS OF ENTRY:**

- a) From Duplex Avenue at a point just north of Glenview Avenue down an asphalt path.
- b) From the junction of Chatsworth Drive and Cheritan Avenue (by the parking lot at Lawrence Park Collegiate Institution) down an asphalt path into the playground of Glenview Public School Senior, and thence by the footpath starting at the N.E. end of the playground and passing through the wire fence.

**HISTORY:** Originally this ravine ran from Rosewell Avenue to Duplex Avenue, a distance of about 400 yards. The sides of the ravine were moderately steep, and near to Rosewell Ave. on the south side it was bounded by the playground of John Ross Robertson Public School Junior, and the playing fields of Lawrence Park Collegiate Institution on the north side.

A new school, Glenview Public School Senior, taking only grades seven and eight, was built at the Rosewell end of the ravine between 1965 and 1966. In order to do this the ravine was amputated about half way along, and the western half was filled to make a large playground. The school buildings were constructed on the southern edge of this playground, and the trees and bushes in this part of the ravine were uprooted. This was an ecological disaster for the ravine, though at that time economic arguments and the proximity to the other two schools appeared to make it the obvious site for a new school no matter at what ecological cost. When the work on the school was finished the City Parks Department landscaped the school part of the ravine, and this area is now under the control of the school authorities.

The area of Chatsworth Ravine, as it now stands, measures approximately 200 yards in length and about 150 yards at its widest point. It is, therefore, a very small ravine.

**WATER-COURSE:** There is a small watercourse running through the centre of the ravine though it is too small to be dignified with a name. It emerges through a culvert from under Glenview School playground and disappears again into a culvert under Duplex Avenue, flows under Yonge Street and Alexander Muir Gardens, emerging into the open again in Lawrence Park, and flows through Sherwood Park. It eventually joins the west Don River in Sunnybrook - Wilket Creek Park. The origin of this stream can be traced to a spur ravine which runs, partly underground, north of Lawrence Avenue and parallel to Avenue Road on its west side, from Old Orchard Grove to Woburn Avenue, where it crosses to the east side of Avenue Road and goes under Lawrence Avenue west in the vicinity of Rosewell Avenue. It is also fed by a small spur ravine within the grounds of Havergal Girls School which lies south of Lawrence and west of Rosewell Avenue.

CONDITION  
OF THE  
WATER:

(Algae, oil, detergents etc.)

- a) Visible pollution: There is a fair amount of algae; oil is occasionally seen on the water. From time to time, more especially in the spring, the water gives off a strong chemical smell, in particular at a point just after the culvert at the school playground end of the ravine.
- b) Garbage and litter: The stream contained considerable garbage (metal objects etc.) until City Parks Department conducted a clean up in the spring of 1973. During school term it regularly has discarded pop cans, candy wrappings and paper lunch bags on its banks or in the water.
- c) Size of flow: Most of the year it has a steady flow, with a slight spring peak.
- d) Variations in size of flow with seasons: Hardly noticeable.
- e) Variation in size after storms: Flow may reach up to tops of banks but not over them.
- f) Clarity of water (i.e. silt content): Fair to good, according to amount of run off.
- g) Clarity after a storm: Heavily silted with earth.

Portion of total area of ravine which is :-

- a) Open and grassed and mown: About one quarter .
- b) Open and grassed and not mown: Only an insignificant portion.
- c) Marshy area: One small patch about five yards wide and twenty yards long. There is a second area which could become a viable marsh community but at present is clogged with old logs of wood.
- d) Has it been subject to "fill" in the past ? None in the present ravine, but if the total area of the ravine before the school was built is considered then the answer is 'nearly one half'.
- e) Does the ravine contain any underground storm sewer ? Not that we are aware of.

TALL  
TREES:

The slope on the Glenview Avenue side of the ravine is well wooded with a fair number of mature trees. Some of these are in the park area but the majority are on the properties attached to the houses on Glenview Avenue. On the north side of the ravine the only trees are in the gardens of houses along Chatsworth Drive which extend down into the ravine. This area contains a number of mature apple trees which make a fine show of blossom in May.

SHRUBS  
AND  
SAPLINGS:

There are a fair number on the ravine sides and some beside the stream. These provide a certain amount of cover and food for birds. The best area of shrubs and underbrush is around the apple trees on the Chatsworth side of the ravine, mainly in private property. An excellent opportunity exists for the selective planting of shrubs and some trees on the northside of the meadow where a small group of shrubs already exist on the grass slope.

(For a preliminary list of trees, shrubs and plants identified in the ravine see check list at Appendix I).

There are a fair number of plants and woody vines (climbers) as the checklist attached shows. The small marshy area contains a varied plant community which changes with the summer months and is attractive to birds and insects.

EROSION:

Are there bare patches on the ravine slopes: Yes, in the meadow. This is caused by the grass on the upper slopes being mown too often and cut too short, thus exposing the roots to the sun for long periods and thus drying up the moisture unduly. As a result the grass withers and dies off leaving bare patches. These patches tend to expand in the course of time.

Also there are 3 areas along the path in the wooded area where some soil erosion is evident.

SKETCH  
MAPS:

One showing the general area in which Chatsworth Ravine is situated is printed on the cover. One sketch map of the ravine giving the main features can be found at Appendix 3. The maps were prepared by Stewart Hilts.

**PHOTO-GRAPHS:** A selection of colour slides are available of this ravine taken in early spring, in high summer and in the fall. These illustrate not only its pleasant aspects but also some of its ugly aspects, and certain unsatisfactory ecological facets.

**ARE THERE ANY SIGNS OF DETE-RIORATION?:** Yes. There is evidence of some soil erosion at two points on the path through the wooded part of the ravine on the Glenview Avenue side. Each spring a considerable number of branches of trees and shrubs are twisted off by boys playing in the ravine. There is always a noticeable amount of litter strewn about during most of the year. This reaches a high-litter mark in the spring, early summer and fall when the children are at school and tend to drop the debris of their lunches and snacks wherever they happen to eat them.

- WHAT FORM OF USE DOES THE AREA RECEIVE ?:**
- a) Picnicing: No. This is a very small area and is designated for quiet enjoyment rather than active recreation. It is too small for organized picnic facilities.
  - b) Bicycles: There is no official bicycle trail, but children ride on an earth pathway along the slope of the ravine through the wood on the south side and sometimes on the foot-path beside the stream.
  - c) Walkers with dogs: This is the main use to which the ravine is put by adults. It is used by people exercising dogs regularly throughout almost the whole year. It is also used by naturalists, walkers who pass through it on their way elsewhere (e.g. to Sherwood Park, Wilket Creek etc.), by joggers, and by athletes in practice for distance running.
  - d) Children playing: The ravine is a popular play area for a fair number of children throughout the spring, summer and fall. They enjoy riding their bikes in it, playing various chasing games among the trees and bushes on the slopes near Glenview School, and playing in the stream itself.  
  
Some children eat their lunch in the wooded area beside the school. Sometimes teenage boys ride motorcycles, minibikes or trail bikes in the ravine inspite of a notice prohibiting this.
  - e) How many people use it ? : This is difficult to estimate without making a regular check. Our impression is that from April through October it is used regularly to children, especially on week days after school. Perhaps in the region of 60-70 children per week. Adults also tend to use it regularly on weekday evenings, but rather more on week ends. A realistic estimate might be 40 - 50 adults per week, with fewer in the winter months.

**WHAT FACILITIES, IF ANY, EXIST ?:** None, except for a footpath system and a small bridge across the stream, since this ravine is intended for quiet recreation and does not lend itself to anything else.

#### GENERAL COMMENTS

Chatsworth Ravine is small and is situated in a neighbourhood where more than average numbers of children live. Also it is surrounded by three schools. As a result it gets fairly intensive use. On the Glenview side of the ravine, inside the grounds of Glenview Public School Senior, there is a clear example of the effects of overuse on the slope of a ravine. A small wooded area of approximately 20 yards square, which formerly had a thick growth of underbrush and plants of various kinds during the summer, now has a hard earthen floor with almost all the undergrowth killed off. This has been caused by a few students from the school eating their lunch there regularly during the warmer weather. No great disaster has resulted from this small area being damaged by over use, and it is enjoyable for students to eat their lunch under the trees. But it demonstrates very clearly the ecological results of overuse during the school year when the natural regeneration processes of the spring and summer are quite unable to make good human damage to the environment.

This point leads to an examination of another, namely: What is the natural function of a ravine ? Its function is not so much to provide pleasant amenities for human use but rather to maintain an island of biological diversity. Even if a ravine is not heavily used by human beings it is, nevertheless, extremely valuable to the urban environment by its very existence. In the case of Chatsworth Ravine there exists a good balance between the area of the ravine which is in public ownership, and is, therefore, subject to continual public use, and that part of the ravine (mainly along the higher slopes) which is in private ownership, and therefore is subject to almost no use at all. Whereas the trees and shrubs in the public part of the ravine suffer deliberate damage from time to time, the trees and shrubs in the private areas are undamaged and are allowed to grow to maturity in their natural state. Although members of the public cannot enter the private areas of the ravine, and are

separated from them by high wire fences, nevertheless they can enjoy the sight of the trees and shrubs on the ravine slopes growing in natural profusion. This is particularly true if one happens to be watching birds in this ravine. The main concentration of birds is to be seen on the private side of the wire fences where the birds are undisturbed, and the underbrush is thicker than in the public part of the ravine. However, all this depends on the private owners of ravine property having a sense of responsibility to the community, and a strong desire to preserve their own ravine property in its natural state exactly like that of their neighbours. If a single owner was to cut the trees and clear the underbrush on his property running down into the ravine the effect would be devastating and the enjoyment of the ravine as a wild area by the rest of the community spoilt. Private ownership of part of the slopes of a ravine can be a good thing from a long-term ecological point of view as long as all the owners realize their responsibility to each other and to the local community. Owning a strip of land which extends down into a ravine is a privilege and a trust.

As regards public use of that part of a ravine which is in public ownership it is essential to have some method by which local inhabitants can bring their views and complaints to the notice of the appropriate Parks authority. The best way to do this is to obtain the co-operation of the local Residents' Association which can then appoint one or two of its members to watch over local interests as regards that particular ravine, and to maintain good relations with Metro, City or whatever Borough Parks Department is responsible for its maintenance. Our experience in this direction as regards Chatsworth Ravine Park has been encouraging.

Another point worth following up is the possibility of co-operation with any school which happens to be near a ravine, through the principal, and thence through the biology teachers, and ecology club if the school has one. In this way encouragement can be given to the school to use the ravine as a biological laboratory for the study of ecology and to play an active part in the preservation of the ravine in a healthy ecological state.

Finally, the importance of biological inventories cannot be stressed too strongly. It is vital to make checklists of the trees, shrubs, plants and woody vines growing in the ravine, of the birds seen in it, of the insects recorded, as well as a list of animals if the ravine is able to support them. (As far as we can tell Chatsworth Ravine appears to support no larger mammals). These inventories provide a base line from which to monitor the ecological health of a ravine, and to judge whether it has deteriorated significantly (or flourished) over a specific period of time. Even if the preliminary checklists are incomplete it is important to make a start. The preliminary list can be added to and revised regularly so that the data it contains is accumulative. Such biological inventories are not merely of interest to field naturalists but should be made available to local schools, to the particular Parks Department (if any) responsible for the maintenance of a particular ravine, and to the local Residents' Associations. Such inventories will be of permanent value as a basis on which to make decisions concerning the ecological welfare of the ravine in the future.

- |              |   |   |
|--------------|---|---|
| Appendix I   | - | Checklist of trees, shrubs, plants and vines. |
| Appendix II  | - | Checklist of birds                            |
| Appendix III | - | Map.  |

## APPENDIX I

### CHECK-LIST OF PLANTS IN CHATSWORTH RAVINE

#### TREES AND SHRUBS

White Pine  
Eastern Hemlock  
Balsam Poplar  
Crack Willow  
Black Willow  
Butternut (White Walnut)  
White Birch  
Yellow Birch  
Blue "Beech"  
Beech  
Sugar Maple  
Manitoba Maple  
Norway Maple  
Horse Chestnut  
Basswood  
White Ash  
Black Cherry  
Choke Cherry  
Hawthorn Species  
Rowan  
Domestic Apple  
Staghorn Sumach  
Alternate-lvd. Dogwood  
Red-Osier Dogwood  
Highbush Cranberry Viburnum  
Red-Berried Elder  
Tartarian Honeysuckle  
Japanese Barberry  
Red Currant  
Common Buckthorn

*Pinus strobus*  
*Tsuga canadensis*  
*Populus balsamifera*  
*Salix fragilis*  
*S. nigra*  
*Juglans cinerea*  
*Betula papyrifera*  
*B. alleghaniensis (lutea)*  
*Carpinus caroliniana*  
*Fagus grandifolia*  
*Acer saccharum*  
*A. negundo*  
*A. platanoides*  
*Aesculus hippocastanum*  
*Tilia americana*  
*Fraxinus americana*  
*Prunus serotina*  
*P. virginiana*  
*Crataegus sp.*  
*Sorbus aucuparia*  
*Pyrus sp.*  
*Rhus typhina*  
*Cornus alternifolia*  
*C. stolonifera*  
*Viburnum trilobum*  
*Sambucus pubens*  
*Lonicera tatarica*  
*Berberis sp.*  
*Ribes sativa*  
*Rhamnus cathartica*

#### FERNS AND ALLIES

Lady Fern  
Field Horsetail

*Athyrium felix-femina (angustum)*  
*Equisetum arvense*

#### HERBACEOUS PLANTS AND WOODY VINES

*Typha latifolia*  
*Arisaema atrorubens*  
Lemna sp.  
*Smilacina stellata*  
*Polygonum aviculare*  
*P. persicaria*  
*P. coccineum*  
*Rumex crispus*  
*Pilea pumila*  
*Chenopodium album*  
*Actaea pachypoda*  
*A. rubra*  
*Ranunculus acris*  
*Podophyllum peltatum*  
*Alliaria officinalis*  
*Capsella bursa-pastoris*  
*Hesperis matronalis*  
*Lepidium campestre*  
*Agrimonia gryposepala*  
*Fragaria vesca*  
*Geum aleppicum*  
*G. canadense*  
*Rubus occidentalis*  
*R. strigosus*  
*R. odoratus*  
*Amphicarpa bracteata*  
*Melilotus alba*

Broad-lvd. Cat-tail  
Jack-in-the-pulpit  
Duckweed  
Starry Smilacina  
Prostrate knotweed  
Lady's-thumb  
Swamp Smartweed  
Curled Dock  
Clearweed  
Lamb's-quarters  
White Baneberry  
Red Baneberry  
Tall Buttercup  
May-apple  
Garlic-mustard  
Shepherd's Purse  
Dame's Rocket  
Field Peppergrass  
Agrimony  
Wild Strawberry  
Yellow Avens  
White Canada Avens  
Black Raspberry  
Red Raspberry  
Purple-flowering Raspberry  
Hog-peanut  
White Sweet Clover

## HERBACEOUS PLANTS AND WOODY VINES

- M. officinalis*  
*Trifolium pratense*  
*T. repens*  
*Medicago lupulina*  
*Vicia cracca*  
*Lotus corniculatus*  
*Oxalis europaea*  
*Geranium robertianum*  
*Rhus radicans*  
*Impatiens capensis*  
*Parthenocissus quinquefolia*  
*Vitis sp.*  
*Hypericum perforatum*  
*Viola pensylvanica*  
*Circaea quadrisulcata*  
*Epilobium hirsutum*  
*Cenothera biennis*  
*Cicuta maculata*  
*Daucus carota*  
*Asclepias syriaca*  
*Convolvulus arvensis*  
*Hydrophyllum virginianum*  
*Verbena urticifolia*  
*V. hastata*  
*Leonurus cardiaca*  
*Lycopus americanus*  
*Mentha arvensis*  
*M. piperita*  
*Prunella vulgaris*  
*Sloanea dulcamara*  
*Linaris vulgaris*  
*Chelone glabra*  
*Plantago rugelii*  
*P. major*  
*Echinocystis lobata*  
*Campanula rapunculoides*
- Ambrosia artemisiifolia*  
*A. trifida*  
*Arctium minor*  
*Artemisia Vulgaris*  
*Aster lateriflorus*  
*A. cordifolius*  
*A. macrophyllus*  
*A. novae-angliae*  
*A. puniceus*  
*Bidens frondosa*  
*B. cernua*  
*Chrysanthemum leucanthemum*  
*Cichorium intybus*  
*Cirsium arvense*  
*C. vulgare*  
*Erigeron annuus*  
*E. canadensis*  
*E. philadelphicus*  
*E. strigosus*  
*Eupatorium maculatum*  
*E. perfoliatum*  
*Lapsana communis*  
*Solidago canadensis*  
*S. flexicaulis*  
*Taraxacum officinale*  
*Tragopogon pratensis*  
*Xanthium chinense*  
*Helianthus decapetalus*  
*Lactuca scariola*  
*Sonchus arvensis*
- Yellow Sweet Clover  
Red Clover  
White Clover  
Hop Clover  
Tufted Vetch  
Birds-foot Trefoil  
Yellow Wood-sorrel  
Herb Robert  
Poison-ivy  
Jewelweed, Touch-me-not  
Virginia Creeper  
Wild Grape  
Common St. John's-wort  
Smooth Yellow Violet  
Enchanter's Nightshade  
Willow-herb  
Evening Primrose  
Water Hemlock  
Queen-Anne's-lace  
Common Milkweed  
Field Bindweed  
Virginia Waterleaf  
White Vervain  
Blue Vervain  
Motherwort  
Water-horehound  
Field Mint  
Peppermint  
Self-heal  
Climbing Bittersweet Nightshade  
Butter-and-eggs, Common Toadflax  
Turtlehead  
Rugel's Plantain  
Broad-ld. Plantain  
Wild Cucumber  
Creeping Bellflower
- Ragweed  
Giant ragweed  
Common Burdock  
Mugwort  
Calico Aster  
Heart-leaved Aster  
Large-ld. Aster  
New England Aster  
Swamp, Purple-leaved Aster  
Beggar-ticks, Rayless Bur-marigold  
Nodding Bur-marigold  
Ox-eye Daisy  
Chicory  
Field Thistle  
Bull Thistle  
Annual Daisy Fleabane  
Canada Fleabane, Horseweed  
Daisy Fleabane  
Rough Fleabane  
Joe-Pye-Weed  
Boneset  
Nipplewort  
Goldenrod  
Zig-zag Goldenrod  
Dandelion  
Common Goatsbeard  
Cocklebur  
Ten-petalled Sunflower  
Prickly Lettuce  
Perennial Sow-thistle

Visits to park made — June 2, July 18th, August 15th, September 16, 1973.



## APPENDIX II

### CHECK-LIST OF BIRDS OBSERVED IN CHATSWORTH

#### RAVINE 1969 - 1973

- |                           |                              |
|---------------------------|------------------------------|
| Spotted Sandpiper         | Yellow Warbler               |
| Ruby-throated Hummingbird | Magnolia Warbler             |
| * Yellow-shafted Flicker  | Cape May Warbler             |
| Yellow-bellied Sapsucker  | Black-throated Blue Warbler  |
| Downy Woodpecker          | Myrtle Warbler               |
| Great Crested Flycatcher  | Black-throated Green Warbler |
| Eastern Phoebe            | Cerulean Warbler             |
| Yellow-bellied Flycatcher | Blackburnian Warbler         |
| Least Flycatcher          | Chestnut-sided Warbler       |
| Eastern Wood Pewee        | Bay-breasted Warbler         |
| Olive-sided Flycatcher    | Blackpoll Warbler            |
| Blue Jay                  | Ovenbird                     |
| * Common Crow             | Northern Waterthrush         |
| Black-capped Chickadee    | Mourning Warbler             |
| White-breasted Nuthatch   | Yellowthroat                 |
| Red-breasted Nuthatch     | Wilson's Warbler             |
| Brown Creeper             | Canada Warbler               |
| Winter Wren               | American Redstart            |
| Catbird                   | House Sparrow                |
| Brown Thrasher            | Red-winger Blackbird         |
| * Robin                   | Baltimore Oriole             |
| Wood Thrush               | Common Grackle               |
| Hermit Thrush             | Brown-headed Cowbird         |
| Swainson's Thrush         | Scarlet Tanager              |
| Veery                     | * Cardinal                   |
| Golden-crowned Kinglet    | Rose-breasted Grosbeak       |
| Ruby-crowned Kinglet      | Indigo Bunting               |
| Cedar Waxwing             | Purple Finch                 |
| Starling                  | American Goldfinch           |
| White-eyed Vireo          | Rufous-sided Towhee          |
| Yellow-throated Vireo     | Savannah Sparrow             |
| Solitary Vireo            | Slate-coloured Junco         |
| Red-eyed Vireo            | Tree Sparrow                 |
| Philadelphia Vireo        | Chipping Sparrow             |
| Warbling Vireo            | Field Sparrow                |
| Black-and-White Warbler   | White-crowned Sparrow        |
| Tennessee Warbler         | White-throated Sparrow       |
| Orange-crowned Warbler    | Fox Sparrow                  |
| Nashville Warbler         | * Song Sparrow               |

#### SEEN FLYING OVER THE RAVINE:

Great Blue Heron  
Turkey Vulture  
Cooper's Hawk  
Sparrow Hawk

Herring Gull  
Ring-billed Gull  
Chimney Swift  
Barn Swallow

\* Birds known to have nested in the ravine.

This is rather deceptive since the most secluded breeding places are in the private property which runs down into the ravine from Glenview Avenue and from Chatsworth Drive. At least another five species almost certainly have nested there during the past five years though it has not been possible to prove this.

#### COMMENTS

- a) The few winter visitors recorded is partly the result of only irregular visits made to the ravine in the winter months, but also reflects the ravine's extremely small size and lack of Birch trees and evergreens. Consequently there is not much winter feed available. Some active feeding stations in back gardens would probably attract and keep a wider variety of winter birds.
- b) The list of 22 Warblers is impressive and shows that even a small area, if it has the right kind of habitat, will attract considerable numbers of warblers in migration. All these species of warbler were seen between mid-April and mid-June, when a careful record was kept in connection with the Toronto Ornithological Club's Co-operative Warbler Migration Study. The best place to watch warblers feeding in the ravine is in the area of the old apple trees, and other trees and woody climbers, which grow on the lower slopes of

COMMENTS (Cont'd...)

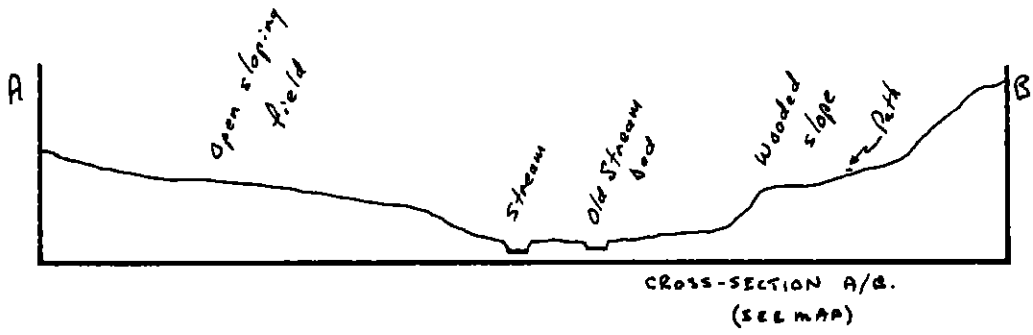
Chatsworth Drive. This adjoins the small marsh, and it is here that the Northern Waterthrush was seen on the spring migration.

The record for Flycatchers and Vireos is also good and reflects the suitable habitat. Of course many of the rarer species recorded were only seen once or twice during a five year period, and few of these migrants stayed for more than a day or two.

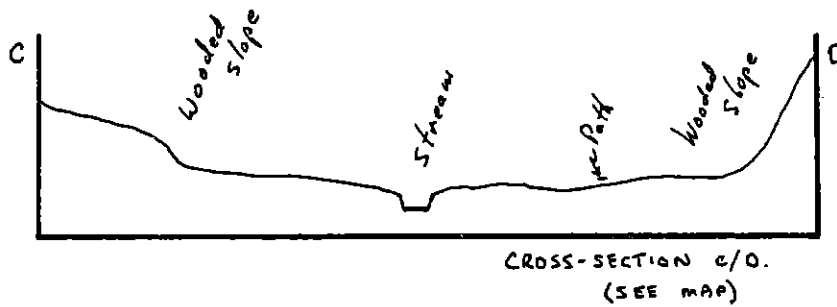
Toronto

September, 1973.

RAVINE CROSS-SECTIONS.



SCALE IS APPROXIMATE ONLY, IN EACH CASE.



S.H. 73.

TORONTO FIELD NATURALISTS' RAVINE SURVEY

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

Obtainable from:

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

\$2.00