- Tony DiFazio -

LIFE SCIENCE AREAS OF NATURAL AND SCIENTIFIC INTEREST IN SITE DISTRICT 7-2 WEST OF THE HALDIMAND CLAY PLAIN

A Review and Assessment of Significant
Natural Areas in Site District 7-2
West of the Haldimand Clay Plain

September 1984

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Ontario Ministry of Natural Resources

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A Review and Assessment of Significant
Natural Areas in Site District 7-2
West of the Haldimand Clay Plain

September 1984

K. M. Lindsay

Parks and Recreational Areas Section
Central Region, Richmond Hill
Southwestern Region, London

Ontario Ministry of Natural Resources

Hon. Alan W. Pope
Minister

John R. Sloan
Deputy Minister

TABLE 1. SUMMARY OF NATURAL FEATURES ANALYSIS AND CANDIDATE NATURE RESERVE SELECTION PROCEDURE
BY PHYSIOGRAPHIC REGION AND LANDFORM FOR SITE DISTRICT 7-2
WEST OF THE HALDIMAND CLAY PLAIN

ANALYSIS OF NATURAL FEATURES OF SITE DISTRICT					FEATURES REPRESENTED BY CANDIDATE NATURE RESERVES IN PROVINCIAL PARKS/RESERVES			FEATURES MISSING FROM PROVINCIAL PARKS AND PARK RESERVES	CANDIDATE NATURE RESERVES SELECTED TO REPRESENT THE MISSING FEATURES
Physiographic Regions Wholly or partly within Site District	Proportion of Site District covered by Physiographic Region	Landforms found within Physiographic Region	Proportion of Physiographic Region occupied by each Landform	Types of Natural Features remaining on these Landforms and proportion remaining in a Natural Condition	Park Name	Feature(s)	Approx.Area		
Norfolk Sand Plain (a small part extends into 7-6)	25	sand plain	95	-about 15 to 25% left in forest and wetland greatest amount in the south -the remaining natural areas range from about 25 to 500 ha in size -the larger areas are associated with: -river valleys;sites along the 4 major streams dissecting the sand plain - Kettle, Catfish, Otter and Big Creeks -wetter, lowlying parts of the sand plain (interdunal and intermorainal areas) -very dry sand plain sites -shorebluffs and beaches along Lake Erie shoreline	-	-	-	-upland forests -upland/low-land forests -river valleys with adjoining uplands -dry, open, oak plains -shoreline environments	-Springwater Forest (40I/11 980320) -Backus Woods (40I/9 420230) -South Walsingham Sand Ridges (40I/10 360200) -Big Otter Creek (40I/15 195405) -Big Creek Flood-plain (40I/10 380210) -Delhi Big Creek Valley (40I/15 400400) -Spooky Hollow (40I/9 555305)
		clay plain	5	-a few woodlots and stream valleys remain -also an area along Big Otter Creek	-	-	-	-	-

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St. Clair Clay Plains (also in 7-1)	13	bevelled till plain	95	-about 10% left in natural condition -the woodlots at the back of farms are frequently linked, forming larger natural areas from 50 to 300 ha in size -natural areas also remain along creek valleys (Bear Creek, Black Creek)	-	-	-	-upland/low-land forests -valleys with adjoining uplands	-Plum Creek Upland Woodlots (40J/16 960365) -Bear Creek Flood-plain and Table-land Woods (40J/9 900330)
		till moraine	4	-1%; a very few small woodlots and wetlands	-	-	-	-	-
		clay plain	1	-10% -forests and shrub-lands along Clear Creek	-	-	-	-	-
Ekfrid Clay Plain	9	clay plain (the Thames River flood-plains are mapped as sand plain)	100	-mostly cleared; about 5% or less forested -a few scattered small woodlots from 30 to 80 ha in size -also forested corri-dors along the major rivers, their tribu-taries and smaller	-	-	-	-river valleys -clay plain woodlots	-Thames River Flood-plain (40I/12 550315) -Talbot Creek (40I/11 695200)

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Huron Fringe (also in 6-2 and 6-3)	3	sand plain with sand dunes and sand ridges	85	-about 50 to 60% -consists of forested dune ridges, often separated by wet swales -much of the shoreline built up with cottages -more of the backshore dune ridge and swale systems undeveloped -one small shoreline marsh south of the Kettle Point Indian Reserve	Pinery Provincial Park	-coastal dune system of forested and unforested dunes, with river flood-plain and important wet meadow and open dune savanna sites as well	1200 ha (3000 acres)	-sand dune/ ridge, wet swale systems and wetlands	-Port Franks Wetland lands and Forested Dunes (40P/4 265855)
		clay plain and muck	15	-2% -small sections of shorebluff undeveloped -most of shoreline built up with cottages	Ipperwash Provincial Park	-small wooded dune and interdunal, calcareous, wet meadow complex	4 ha (10 acres)		
Erie Spits (also in 7-1)	3	sand dunes and ridges, wet-lands and open water	1000	-70 to 80% left in natural condition; the rest is built up with cottages	Long Point Provincial Park	-wetlands (wet meadow, shrub thick-ets and marsh), north of main park road	110 ha (275 acres)	-a major Great Lakes sandspit and marsh (wet-lands system)	-Long Point and Turkey Point (401/9 600110)

TABLE 1: SUMMARY OF NATURAL FEATURES ANALYSIS AND CANDIDATE NATURE RESERVE SELECTION PROCEDURE
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Erie Spits cont'd					Turkey Point Provincial Park	-wetlands (coniferous swamp, deciduous swamp, thickets and cattail marsh) flanked by a steep, forested, shore-bluff	60 ha (150 acres)		
Caradoc Sand Plains (also in 7-6)	3	sand plain	100	-3% -mostly cleared -a few scattered woodlots (20 to 100 ha in size)	-	-	-	-	-
Mount Elgin Ridges (also in 7-6)	3	till moraine clay plain	60 40	-3% -a few scattered woodlots (20 to 100 ha in size) -several sites along Kettle Creek and its tributaries	-	-	-	-	-

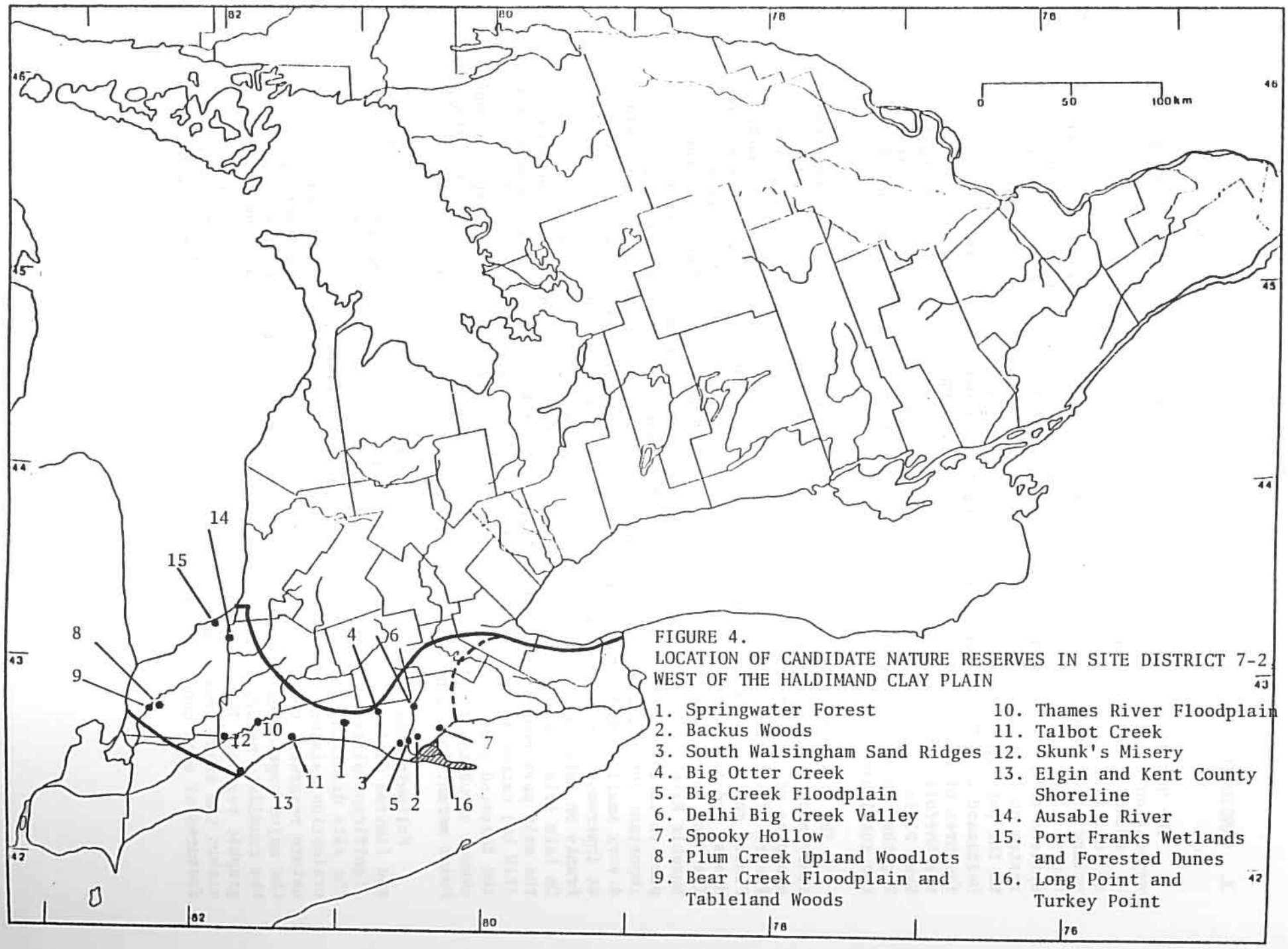

FIGURE 4.
LOCATION OF CANDIDATE NATURE RESERVES IN SITE DISTRICT 7-2, WEST OF THE HALDIMAND CLAY PLAIN

1. Springwater Forest
2. Backus Woods
3. South Walsingham Sand Ridges
4. Big Otter Creek
5. Big Creek Floodplain
6. Delhi Big Creek Valley
7. Spooky Hollow
8. Plum Creek Upland Woodlots
9. Bear Creek Floodplain and Tableland Woods
10. Thames River Floodplain
11. Talbot Creek
12. Skunk's Misery
13. Elgin and Kent County Shoreline
14. Ausable River
15. Port Franks Wetlands and Forested Dunes
16. Long Point and Turkey Point

TABLE 3. SUMMARY OF THE MAJOR FEATURES REPRESENTED IN CANDIDATE NATURE RESERVES IN SITE DISTRICT 7-2, WEST OF THE HALDIMAND CLAY PLAIN

CANDIDATE NATURE RESERVE	MAJOR VEGETATION-LANDFORM FEATURES REPRESENTED	VERY APPROXIMATE SIZE (ha)
NORFOLK SAND PLAIN Springwater Forest (40I/11 980320)	An exceptionally mature deciduous forest (beech-maple-oak) growing on a loamy sand plain upland. A mixed stand dominated by white pine prevails in the northeast corner of the tract. Springwater Forest is a headwater source for Bradley's Creek, a tributary of Catfish Creek.	185
Backus Woods (40I/9 420230)	Backus Woods is an outstanding example of Carolinian forest, flora and fauna. Sand ridge uplands (oak-red maple-white pine; beech-sugar maple) are separated by wetter, lowlying swamps. A headwater source for Dedrick Creek.	420
South Walsingham Sand Ridges (40I/10 360200)	South Walsingham Sand Ridges is characterized by undulating sand ridges which alternate with wetter lowlying swamps. A headwater source for Big Creek.	420
Big Otter Creek (40I/15 195405)	A 7 km corridor of forested valley rim, slope and floodplain habitats along the deeply incised valley of Big Otter Creek. This site features impressive floodplain stands of sycamore.	500
Big Creek Floodplain (40I/10 380210)	A river valley complex with excellent examples of open floodplain communities - wet meadows, marshes, shrub thickets and oxbow ponds filled with aquatic vegetation.	185

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CANDIDATE NATURE RESERVE	MAJOR VEGETATION-LANDFORM FEATURES REPRESENTED	VERY APPROXIMATE SIZE (ha)
Delhi-Big Creek Valley (40I/15 400400)	A 5 km, steeply-cut, section along the valley of Big Creek with an excellent variety of vegetation - deciduous floodplains, mixed and deciduous floodplain terraces, cedar swamp, mixed slope forests, oak parklands at the valley rim with small prairie remnants.	250
Spooky Hollow (40I/9 555305)	Includes the valley of Fischer's Creek (with oak-beech-sugar maple slopes, deciduous bottomlands and tamarack-white pine swamp) and sand plain uplands extending west to Crane's Creek (with a mix of young oak woodland, red cedar-sassafras-oak savanna and pine plantation). Part is preserved by the Hamilton Field Naturalists Club.	240
ST. CLAIR CLAY PLAINS		
Plum Creek Upland Woodlots	Two upland (oak-hickory) woodlots situated on bevelled till plain. A small amount of silver maple swamp is present. A headwater source for Plum Creek, a tributary to Black Creek.	210
Bear Creek Floodplain and Tableland Woods (40J/9 900330)	Stream bottomland habitats and an adjoining oak-hickory upland forest.	70
EKFRID CLAY PLAIN		
Thames River Floodplain (40I/12 550315)	This 8 km stretch along the Thames River contains rich, mature floodplain forests composed of black walnut, black maple and hackberry.	240
Talbot Creek (40I/11 695200)	A large river valley complex with high quality, representative upland sugar maple forests growing on a clay plain site.	400

TABLE 3. SUMMARY OF THE MAJOR FEATURES REPRESENTED IN CANDIDATE NATURE RESERVES IN SITE DISTRICT 7-2, WEST OF THE HALDIMAND CLAY PLAIN

CANDIDATE NATURE RESERVE	MAJOR VEGETATION-LANDFORM FEATURES REPRESENTED	VERY APPROXIMATE SIZE (ha)
BOTHWELL SAND PLAIN		
Skunk's Misery (40I/12 340230)	An extensive tract of deciduous upland forest and deciduous swamp. A headwater source for the Thames and Sydenham Rivers.	1100
Elgin and Kent County Shoreline (40I/5 440015)	The largest stretch of steep bluff shoreline remaining in natural habitat (wet woods, shrub thickets and old fields) along the north shore of Lake Erie.	520
HORSESHOE MORAINES AND HURON SLOPE		
Ausable River (40P/4 345740)	An extensive, deep gorge and river valley cut through till moraine and sand plain deposits into bedrock by the Ausable River. This is one of the largest river valley corridors left in a natural condition in Site Region 7.	1400
HURON FRINGE		
Port Franks Wetlands and Forested Dunes (40P/4 265855)	A coastal sand dune, ridge and swale sequence along the Lake Huron coast. Features a rich assemblage of wetlands (shallow pond, marsh, wet meadow, shrub thickets, swamp, bog and fen elements) in an interdunal lowland, lying just south of the cottage area at Port Franks. A succession of wooded dunes continues south almost to Hwy. 21.	480
ERIE SPITS		
Long Point and Turkey Point (40I/9 600110)	A major Great Lakes sand spit and shoreline marsh/wetland system. Much of Long Point is protected by the major landholders - the Long Point Company, the Canadian Wildlife Service and the Long Point Region Conservation Authority.	10270

SITE DISTRICT 7-2: NORFOLK SAND PLAIN - Upland/Lowland Forests

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Backus Woods	Long Point	40I/9	420230
		Also on 40I/10	

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Haldimand - Norfolk

LAT. 44° 40'N | LONG. 80° 29'W | ALT. MIN. MAX. ca. 650-700 ft.

LOCALITY: 5 km northwest of Port Rowan, west of Dedrick Creek

TOWNSHIP / LOTS / CONCESSIONS: South Walsingham

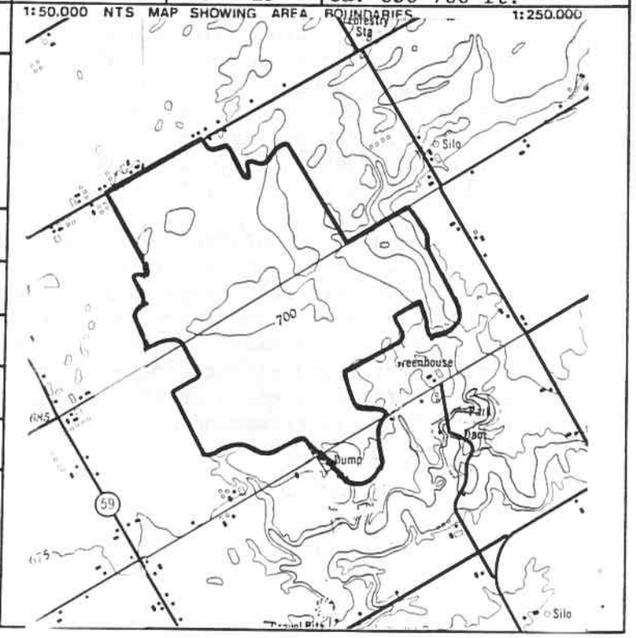
AREA: approx. 1040 acres approx. 420 ha

OWNERSHIP:

ADMINISTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-2
MNR REGION AND DISTRICT	CONSERVATION AUTHORITY
SW-Simcoe	Long Point C.A.

1:50,000 NTS MAP SHOWING AREA BOUNDARIES — 1:250,000



AERIAL PHOTOGRAPHS — BASE MAP: 426802

YEAR	ROLL	FLIGHT LINE	NUMBERS
1978	214	4247	101-104
1978	214	4246	81-84

PHYSICAL AND BIOLOGICAL FEATURES

Backus Woods lies near the southern limit of the Norfolk sand plain, on gently undulating terrain composed of low ridges separated by lowlying, wetter, plains. This large forest tract is well known throughout southern Ontario to biologists and naturalists alike, for its excellent examples of Carolinian forest, flora and fauna. Stands of oak, red maple and white pine characterize the driest sandy ridges; flowering dogwood (*Cornus florida*) is a frequent understory shrub. Forests of beech and sugar maple with occasional red maple, red oak, yellow birch, white ash, basswood and tulip-tree dominate other upland sites. Between the ridges, where drainage is imperfect, are deciduous lowlands or spring swamps of silver maple-yellow birch-white elm; black gum-red maple-ash; swamp white oak-silver maple, etc. A few of the wettest depressions hold small, shallow pools ringed by shrub thickets of buttonbush (*Cephalanthus occidentalis*), winterberry (*Ilex verticillata*) and dogwood (*Cornus obliqua*).

The stream habitats found along Dedrick Creek, at the east edge of the forest where clay soils are exposed, add to the diversity of the Backus tract. Along the meandering stream course are wet sedge and herbaceous meadows, alder-dogwood thickets, ash swamp, and mixed hemlock-red maple-yellow birch-beech forest. Slopes covered with hemlock and sugar maple-beech-hemlock rise from the floodplain. Past selective

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Lindsay, August 1976, Brief field notes; 1981 Airphoto Interpretation; IBP, 1971; Argus and White, 1977; Catling and Whiting, 1976; Cruise and Catling, 1969; Cruise, 1969; Speirs, 1971, 1977; Whiting, 1981, personal communication with Lindsay.

EVALUATION AND PRIORITIES

Backus Woods is the best example of an upland/lowland forest complex on the Norfolk Sand Plain. A very high priority for protection.

DATE COMPILED	COMPILER
6 May 1981	K. M. Lindsay

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

logging and access trails are some of the impacts that have effected this forest tract.

A number of rare Carolinian species - stands of black gum (*Nyssa sylvatica*), tulip-tree (*Liriodendron tulipifera*), swamp white oak (*Quercus bicolor*) and flowering dogwood (*Cornus florida*) - flourish at Backus Woods. This is the only extant site for the whorled pogonia orchid (*Isotria verticillata*) in Canada. A breeding bird census in part of the forest recorded such Carolinian species as Cerulean Warbler, Yellow-throated Vireo and Yellow-billed Cuckoo (Speirs, 1977).

Backus Woods should be given a very high priority for protection. It provides an excellent example of the natural forests of the Deciduous Forest Region which are fast disappearing. The combination of sand ridge uplands, wet lowland plains and a stream valley produces a high diversity of habitats. The large size of Backus Woods relative to other forest tracts in this site idstrict and site region adds to its value as a natural benchmark area. Further research on the phytosociology, ecology, flora and fauna of Backus Woods is recommended.

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
South Walsingham Sand Ridges	Port Burwell	40I/10	360200

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Haldimand - Norfolk

LAT. 42° 38'N | LONG. 80° 34'W | ALT. MIN. MAX. ca. 625 - 675 ft.

LOCALITY: 5 km southwest of Walsingham; immediately west of Big Creek

TOWNSHIP LOTS CONCESSIONS: South Walsingham

AREA: approx. 1040 acres approx. 420 ha

OWNERSHIP:

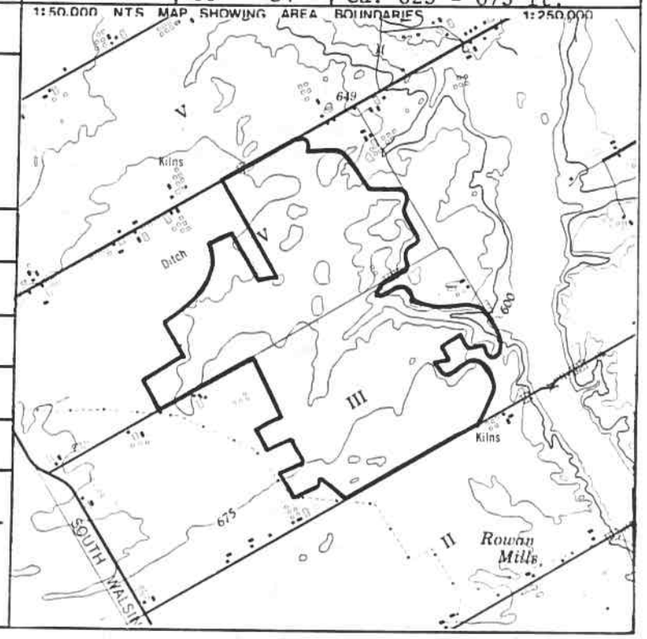
ADMINISTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-2
MNR REGION AND DISTRICT	**CONSERVATION AUTHORITY**
SW-Simcoe	Long Point C.A.

AERIAL PHOTOGRAPHS — BASE MAP: 426803

YEAR	ROLL	FLIGHT LINE	NUMBERS
1978	214	4245	226-228
1978	282	4244	19-22

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

Within the South Walsingham Sand Ridges area, a combination of undulating sand ridges (from 3 to 7 m in height) and wetter, lowlying plains creates a varied landscape. The dry to dry mesic slopes and crests of the ridges are wooded with oak and white pine. Deciduous lowlands and swamps (silver maple, red maple, yellow birch, ash, bitternut and tulip-tree) stretch between the ridges. Carolinian species such as sassafras, black oak, tulip-tree and flowering dogwood (*Cornus florida*) are well represented. Poke milkweed (*Asclepias exaltata*) and the Black Rat Snake have been reported. A few plots of coniferous reforestation are scattered through the forest. Parts of this site are variously disturbed by selective cutting, forest management and forest access roads.

The South Walsingham Sand Ridges is a large, diverse area offering representation of a sand ridge and lowland forest tract typical of the Norfolk sand plain. The vegetation-landform features found here are similar in some ways to those at Backus Woods (40I/9 420230). The South Walsingham Sand Ridges adjoins another candidate nature reserve, Big Creek Floodplain (40I/10 380215).

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Lindsay, August 1976, Brief field notes; 1981, Airphoto Interpretation; IBP, 1970; Argus and White, 1977; Fox and Soper, 1952, 1953, 1954; Soper, 1955, 1962 .

EVALUATION AND PRIORITIES

Another good example of an upland/lowland forest complex typical of the Norfolk Sand Plain.

DATE COMPILED	COMPILER
5 May 1981	K. M. Lindsay

1979 rev 1978

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

SITE DISTRICT 7-2: NORFOLK SAND PLAIN - Upland/Lowland Forests

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Mount Salem Forest	40I/10	070295

BRIEF DESCRIPTION

North and east of Mount Salem is a ca. 240 ha block of forest on gently undulating sand plain. Sugar maple,beech, hemlock and yellow birch grow on the low ridges. Linear-shaped swamps of silver maple with some ash and elm lie between the ridges. The tract is variously disturbed and includes some plantation. This is the only location known in Canada for the smaller whorled pogonia orchid (*Isotria medeoloides*), one of Ontario's endangered species.

SOURCES Macdonald, 1981, personal communication with Lindsay; Lindsay, 1981, Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
			Lindsay, 1981

ONTARIO NATURE RESERVES PROGRAM
ENVIRONMENTAL DATA CARD

ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	South Walsingham Sand Ridges	40I/10	360200

BRIEF DESCRIPTION

Lying immediately west of Big Creek, 5 km southwest of Walsingham is approximately 420 ha of forest on undulating sand ridges rising above wetter, low-lying plains. The ridges are wooded with oak and pine; the lowlands contain deciduous forest and swamp (silver maple, red maple, yellow birch, ash, bitternut hickory and tulip-tree). Carolinian species and rare species such as Black Rat Snake and poke milkweed (*Ascelpias exaltata*) are present. A candidate nature reserve.

SOURCES Lindsay, 1976, Airphoto Interpretation; IBP, 1970; Argus and White, 1977

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay August 1976			Lindsay, 1981

ONTARIO NATURE RESERVES PROGRAM
ENVIRONMENTAL DATA CARD

ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Backus Woods	40I/9	420230

BRIEF DESCRIPTION

Extends onto 40I/10. This large forest tract (approx. 400 ha) located 5 km northwest of Port Rowan is an outstanding example of Carolinian forest, flora and fauna. Low sand ridges separated by wetter, low-lying plains form a varied landscape. Woods of oak-maple-pine and beech-sugar maple grow on the ridges and upland sites. Spring swamps, deciduous lowlands, small pools and wet thickets occupy the plains. Backus is the only extant site for *Isotria verticillata* in Canada. A candidate nature reserve.

SOURCES Lindsay, 1976, 1981, Airphoto Interpretation; IBP,1971, Cruise & Catling, 1969; Speirs, 1971, 1977.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay August 1976			Lindsay, 1981

ONTARIO NATURE RESERVES PROGRAM
ENVIRONMENTAL DATA CARD

ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3

1981

SITE DISTRICT 7-2: NORFOLK SAND PLAIN - River Valleys with adjoining Uplands

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Big Otter Creek	Tillsonburg	40I/15	195405

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Elgin and Haldimand-Norfolk

LOCALITY: along Big Otter Creek, about 1.5 km south of Tillsonburg

TOWNSHIP	LOTS	CONCESSIONS
Bayham		
Middleton		

AREA: approx.1400 acres approx. 647 ha

OWNERSHIP:

ADMINISTRATION:

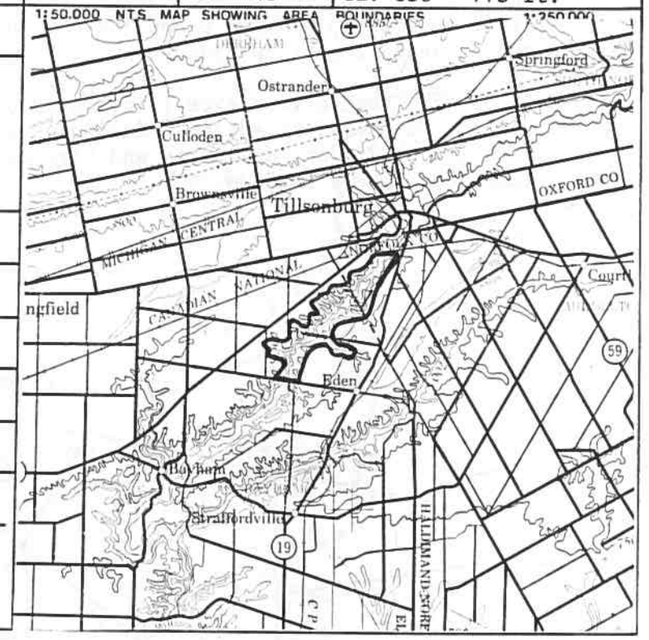
FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-2
MNR REGION AND DISTRICT	**CONSERVATION AUTHORITY**
SW-Aylmer	Long Point C.A.

AERIAL PHOTOGRAPHS — BASE MAP: 427804

YEAR	ROLL	FLIGHT LINE	NUMBERS
1978	252	4258	78-82
1978	205	4257	54-57
1978	252	4256	94-98

LAT.	LONG.	ALT. MIN. MAX.
42 ° 49 ′N	80 ° 46 ′W	ca. 650 - 775 ft.

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

A large, relatively intact, natural corridor follows the deeply incised, meandering valley of Big Otter Creek for about 7 km south from Tillsonburg. It encompasses steep forested valley slopes and a rather broad floodplain vegetated with deciduous forests of variable ages along with some open floodplain communities. Lining the riverbank levees and reaching back onto alluvial flats are impressive stands of sycamore - willow- cottonwood - manitoba maple and black maple - basswood - ash - blue beech. These are the most extensive stands of sycamore that the author has seen in southern Ontario. Younger bottomland forests and thickets in various stages of succession include hawthorn - basswood - black maple - white elm; ash - basswood - blue beech - shagbark hickory. Shrub thickets (dogwood - ninebark - willow - riverbank grape) and tall herbs such as jewelweed, ostrich fern and dame's rocket are found in openings and along the riverbanks.

The east and north-facing slopes and tributary ravines tend to be dominated by hemlock with some yellow birch and red maple. Deciduous cover is more prevalent on the west and south-facing slopes (red oak - white oak - sugar maple - white pine - beech; beech - sugar maple - hemlock - oak). The forests located in a narrow band along the valley rim are young and quite disturbed, generally a mixed oak-pine association (red oak, white oak, white pine, sugar maple and large-toothed

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Lindsay, September, October, 1976, Brief field notes; 1981, Airphoto Interpretation; Oxford County ESA, 1976; Sensitive Areas Report, 1976; IBP, 1971.

EVALUATION AND PRIORITIES

A relatively intact, forested river valley section with exceptional deciduous bottomland stands.

DATE COMPILED	COMPILER
13 May 1981	K. M. Lindsay

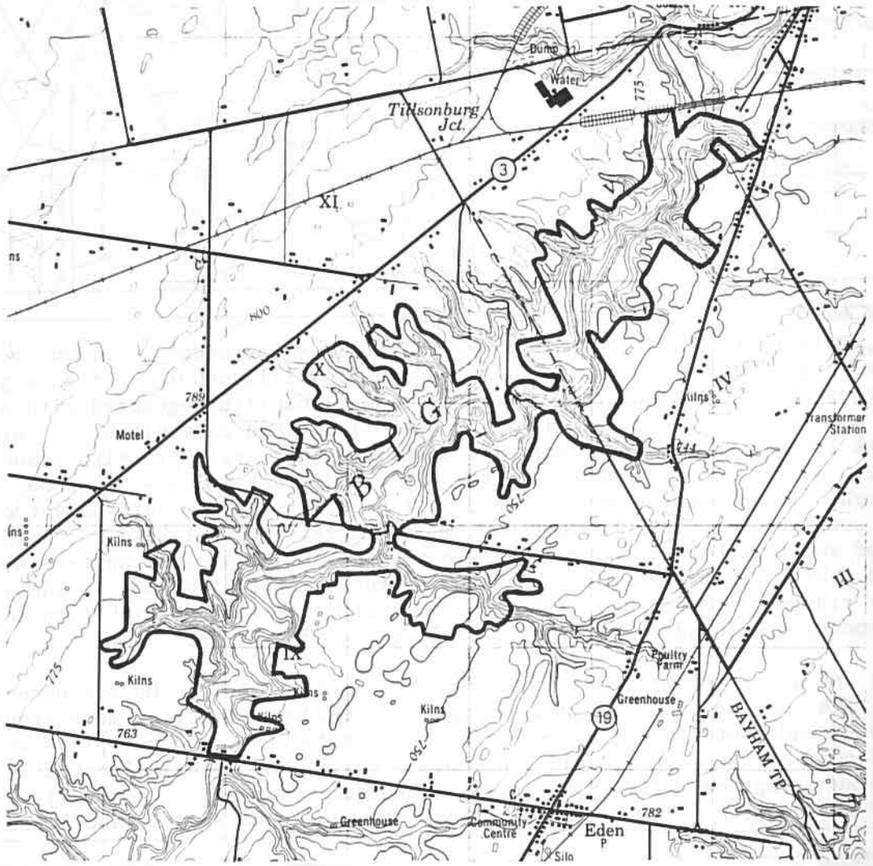
1991/rev 1975

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

aspen).

The Big Otter Creek area is surrounded by agricultural land. A few sections along the floodplain and slopes have been cleared. Gravel concession roads cross the valley at two junctures.

Big Otter Creek offers excellent representation of a relatively intact, river valley system and exceptional deciduous bottomlands. This, in combination with its condition, diversity and size make Big Otter Creek a high-ranking candidate nature reserve.



SITE DISTRICT 7-2: NORFOLK SAND PLAIN - River Valleys with adjoining Uplands

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Big Creek Floodplain	Port Burwell	40I/10	380210

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Haldimand - Norfolk

LAT. 42° 39'N | LONG. 80° 32'W | ALT. MIN. MAX. ca. 600-650 ft.

LOCALITY: on Big Creek, 3 km SSW of Walsingham

TOWNSHIP / LOTS / CONCESSIONS: South Walsingham

AREA: approx. 455 acres approx. 210 ha

OWNERSHIP:

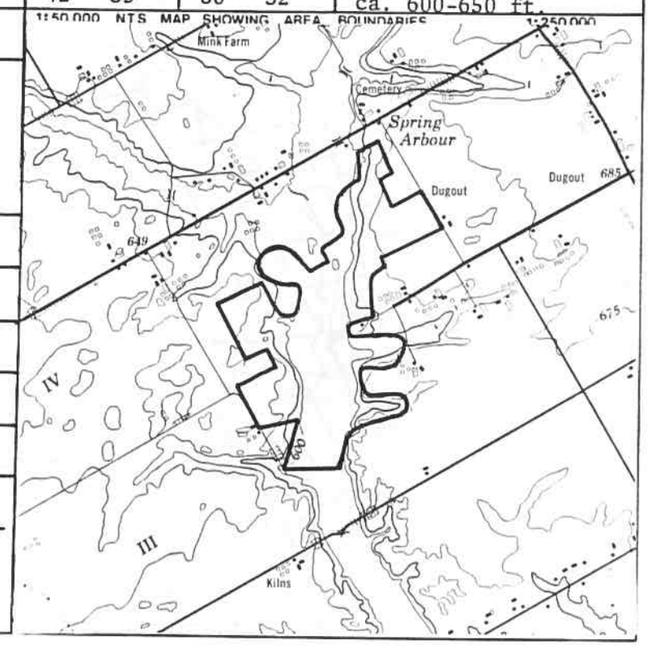
ADMINISTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-2
MNR REGION AND DISTRICT	CONSERVATION AUTHORITY
SW-Simcoe	Long Point C.A.

AERIAL PHOTOGRAPHS — BASE MAP: 422803

YEAR	ROLL	FLIGHT LINE	NUMBERS
1978	214	4245	228-230
1978	282	4244	22, 23

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



PHYSICAL AND BIOLOGICAL FEATURES

Excellent examples of open floodplain communities remain along Big Creek at this location. The rather broad floodplain holds stranded meander pools with submerged, floating and emergent aquatic vegetation, wet forb and shrub meadows, cattail swards, buttonbush - willow - dogwood thickets, and seasonally inundated groves of deciduous floodplain forest (willow, sycamore, black walnut) situated on riverbank levees or raised portions of the floodplain. The north-facing valley slopes and tributary ravines support mixed forests of hemlock with white pine, yellow birch, red maple and beech in good condition. The south and east-facing slopes are wooded with sugar maple and some beech and hemlock. Portions of these slopes have been recently disturbed by selective logging. Dry oak-pine sandland forests occur along the valley rim. Only a small part of the floodplain has been cleared for cultivation.

The Big Creek Floodplain candidate nature reserve was chosen to represent the open floodplain communities of river valley systems; habitats which are disappearing rapidly throughout the Norfolk sand plain region as drainage projects facilitate the conversion of floodplains to agricultural land. It is a large natural unit with a diversity of habitats and wildlife. On the south it connects with another candidate nature reserve, the South Walsingham Sand Ridges (40I/10 360200).

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Lindsay, August, 1976, Brief field notes;
1981, Airphoto Interpretation.

EVALUATION AND PRIORITIES

A river valley complex with the best examples of open floodplain communities (wet meadows, marshes, shrub carr, oxbow ponds) seen by the author in Site District 7-2.

DATE COMPILED	COMPILER
13 May 1981	K. M. Lindsay

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

SITE DISTRICT 7-2: NORFOLK SAND PLAIN - River Valleys with adjoining Uplands

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Delhi Big Creek Valley	Tillsonburg	40I/15	400400

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Haldimand - Norfolk

LOCALITY: along Big Creek between Delhi and Lynedoch

TOWNSHIP	LOTS	CONCESSIONS
Middleton		
Charlotteville		

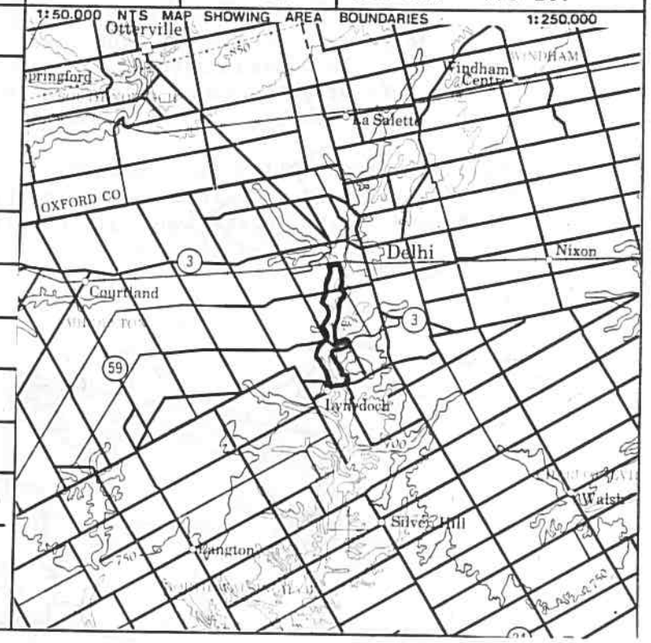
AREA: approx. 715 acres approx. 330 ha

OWNERSHIP:

ADMINISTRATION:

LAT.	LONG.	ALT. MIN. MAX.
42 ° 49 'N	80 ° 31 'W	ca. 650 - 775 ft.

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000



FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-2
MNR REGION AND DISTRICT	CONSERVATION AUTHORITY
SW-Simcoe	Long Point C.A.

AERIAL PHOTOGRAPHS — BASE MAP: 427803

YEAR	ROLL	FLIGHT LINE	NUMBERS
1972	23	4235	106-108
1972	8	4234	141, 142

PHYSICAL AND BIOLOGICAL FEATURES

A steep-sided valley dissects the Norfolk sand plain along Big Creek for about 5 km between Delhi and Lynedoch. Near the south end of the valley, the river also cuts through a low moraine ridge which crosses the valley in a northeast-southwest direction. Mixed forests, which vary considerably in relation to slope exposure, soil moisture and stand history, cover the valley slopes (cedar - hemlock - ash - yellow birch - white birch - basswood - elm; sugar maple - beech - ash - hemlock; oak - white pine - sugar maple - hemlock; cedar - white birch - hemlock, etc.). Seepage areas are frequent along the slopes.

Closed and semi-open associations of cottonwood, willow, black walnut, manitoba maple, blue beech, ash, cedar and elm, along with shrub thickets, characterize floodplain and riverbank habitats along the meandering course of Big Creek. Other bottomland sites consist of drier, more elevated, floodplain terraces and wetter, lower, floodplain depressions (which are indicators of former stream meanders and channels). Stands of white pine; cedar-ironwood-beech-ash; and birch-ash-black maple-poplar-beech-hemlock were noted on floodplain terraces. Cedar swamp composed of cedar-yellow birch-red maple-willow-poplar-white birch-white pine occurs in one floodplain depression, flanking the river.

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES: Lindsay, September - October, 1976, Brief field notes; 1981, Airphoto Interpretation.

EVALUATION AND PRIORITIES: A relatively intact, river valley corridor illustrating an excellent variety of typical valley rim, slope and bottomland types.

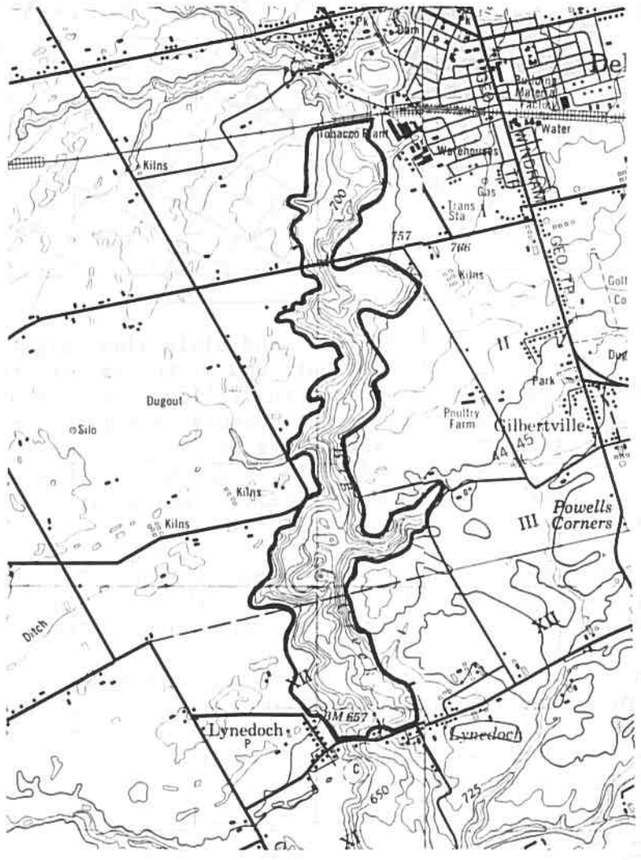
DATE COMPILED	COMPILER
14 May 1981	K. M. Lindsay

1991/rev 1975

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

Edging the rim of the valley are young dry oak parklands (oak - pine - large-toothed aspen) and occasional small prairie remnants with beardgrass (*Andropogon scoparius*), butterfly milkweed (*Asclepias tuberosa*), flowering spurge (*Euphorbia corollata*), sunflower (*Helianthus strumosus*), roundhead bush-clover (*Lezpedeza capitata*) and seneca snakeroot (*Polygala senega*). Other plants of note, found in the valley, are white camass (*Zigadenus elegans*) and *Viola triloba*.

Delhi Big Creek Valley was chosen as a candidate nature reserve because it illustrates an excellent variety of typical valley rim, slope and bottomland valley vegetation. Its condition overall is very good.



SITE DISTRICT 7-2: NORFOLK SAND PLAIN - River Valleys with adjoining Uplands

ONTARIO NATURE RESERVES PROGRAM – LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Spooky Hollow	Long Point	40I/9	555305

COUNTY, DISTRICT or REGIONAL MUNICIPALITY: Haldimand - Norfolk

LAT.: 42° 44'N — LONG.: 80° 19'W — ALT. MIN. MAX.: ca. 625 - 725 ft.

LOCALITY: 4 km northeast of Turkey Pt. along Fischers Creek, just north of Lake Erie

TOWNSHIP / LOTS / CONCESSIONS: Charlotteville

AREA: approx. 631 acres approx. 290 ha

OWNERSHIP:

ADMINISTRATION:

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-2
MNR REGION AND DISTRICT	CONSERVATION AUTHORITY
SW-Simcoe	Long Point C.A.

AERIAL PHOTOGRAPHS

YEAR	ROLL	BASE MAP: FLIGHT LINE	NUMBERS
1978	254	4251	16-20
1978	202	4250	115-119

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000

PHYSICAL AND BIOLOGICAL FEATURES

The Spooky Hollow candidate nature reserve extends along Fischers Creek for 2.5 km north of Fischers Glen on the Lake Erie shoreline and takes in adjacent uplands west to Cranes Creek. Fischers Creek has cut a narrow, steep-sided valley into a clay plain lying along the southern edge of the Norfolk sand plain. However, the soils of the uplands and valley slopes are sandy because a shallow sand deposit overlies the clay plain. Young deciduous woods (red oak - beech - sugar maple) cover the sandy valley slopes. The narrow, valley bottomland supports wet mesic mixed forest (hemlock, yellow birch, white oak, red maple, red oak, white pine), wet deciduous forest (white elm, yellow birch, white ash, black ash , white cedar) and a small tamarack - white pine swamp.

A mixture of young oak woodland (red oak - black oak - white oak), red cedar - sassafras and red cedar - bur oak savanna, combined with pine reforestation plots grows on the adjoining, gently rolling, sandy, uplands. On the west, the upland connects the Spooky Hollow ravine to adjacent forestland at Turkey Point Provincial Park, the Provincial Forestry Station and Provincial Fish Hatchery lands.

White milkweed (*Asclepias verticillata*), green milkweed (*Asclepias viridiflora*), autumn coralroot orchid (*Corallorhiza odontorhiza*), bayberry (*Myrica pensylvanica*),

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES

Lindsay, August, 1976, Brief Field visit; 1981, Airphoto Interpretation; Shivas, 1972, Spooky Hollow Sanctuary Plant List; IBP, 1970; Argus and White, 1977.

EVALUATION AND PRIORITIES

A large, diverse natural area featuring river valley habitats, sand plain uplands and many rare and unusual species. Part already protected by the Hamilton Naturalist Club

DATE COMPILED	COMPILER
26 May 1981	K. M. Lindsay

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

moss pink (*Phlox subulata*), early buttercup (*Ranunculus fascicularis*), goat's rue (*Tephrosia virginiana*) and birdsfoot violet (*Viola pedata*) are among the many provincially rare plants reported. Two IBP sites are incorporated within this approximately 240 ha area. One of these, the Spooky Hollow Sanctuary, is owned and preserved by the Hamilton Field Naturalists Club. A recent trailer park development threatens the integrity of this otherwise well preserved, candidate nature reserve. The headwaters of Fischers Creek, which rise only 1.5 km to the north, should also be protected.

SITE DISTRICT 7-2: NORFOLK SAND PLAIN - River Valleys with adjoining Uplands

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Catfish Creek Slope and Floodplain	40I/11	980255

BRIEF DESCRIPTION: Approx. 170 ha. of forested rim, slope and floodplain habitats along the meandering, broad valley of Catfish Creek. This area incorporates several tributary streams. Selected from airphoto analysis as the largest and best-preserved section along Catfish Creek. No field data available. About 3 km. north of Lake Erie and Port Bruce.

SOURCES: Lindsay, 1976, 1981, Airphoto Interpretation

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
			Lindsay, 1981

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Big Otter Creek south of Bayham	40I/10	110320
			Also on 40I/15	

BRIEF DESCRIPTION: A large block (ca. 300 ha. in size) of forested valley slopes, floodplains and terraces extends along the deeply incised valley of Big Otter Creek for about 4 km. south from Bayham. The valleys of two tributaries - South Creek and Moore's Creek-are included. Hemlock slopes which contain some sugar maple, beech and yellow birch; mixed deciduous-hemlock forests, and sycamore-willow-aspen floodplains are examples of the vegetation.

SOURCES: Lindsay, 1976, 1981, Airphoto Interpretation; Sensitive Area Report, 1976.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
			Lindsay, 1981

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Little Jerry Creek	40I/15	130350

BRIEF DESCRIPTION: Immediately north of Bayham, this area features about 130 ha. of a river valley habitats with natural vegetation intact. Little Jerry Creek empties in Big Otter Creek near Bayham. Mixed woods of sugar maple, basswood, ironwood, blue beech, black maple, hemlock, hawthorn and red oak cover the steep valley slopes and adjacent uplands. Floodplains support willow, black walnut, oak and aspen.

SOURCES: Lindsay, 1976, 1981, Airphoto Interpretation; Sensitive Area Report, 1976.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
			Lindsay, 1981

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Big Otter Creek	40I/15	195405

BRIEF DESCRIPTION: A large (approx. 500 ha.) relatively intact, natural corridor follows the deeply incised, meandering valley of Big Otter Creek for about 7 km south from Tillsonburg. Impressive forests of sycamore-willow-cottonwood-manitoba maple & black maple-basswood-ash-blue beech grow on the broad floodplains, along with, younger bottomland forests (hawthorn-basswood-black maple-white elm; ash-basswood-blue beech-shagbark hickory), shrub thickets & tall forb meadows. Hemlock, sugar maple, oak, beech and white pine line the steep valley slopes & tributary ravines. Two gravel roads divide valley into 3 sections. A candidate nature reserve.

SOURCES: Lindsay, 1976, 1981, Airphoto Interpretation; Oxford E.S.A., 1976; Sensitive Areas Report, 1976; IBP, 1971.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay, Sept. Oct., 1976			Lindsay, 1981

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Little Otter Creek Valley	40I/15	230380

BRIEF DESCRIPTION: Lying 7 km south of Tillsonburg, this ca. 100 ha. site includes a cross-section of upland and valley bottomland habitats along Little Otter Creek. Representative deciduous sandland forest (beech-sugar maple-white oak; beech-red oak-white ash) enclose valley bottomlands which contain white ash-basswood-black maple forest and semi-open scrubland (ironwood-balsam poplar-beech-white elm). Glade fern *(Athyrium pycnocarpon.)* is reported.

SOURCES: Lindsay, 1981, Airphoto Interpretation; IBP, 1971.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
			Lindsay, 1981

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Big Creek Floodplain	40I/10	380210

BRIEF DESCRIPTION: Excellent examples of open floodplain communities remain along Big Creek, 3 km. SSW of Walsingham. The rather broad floodplain holds stranded meander pools with submerged, floating and emergent aquatic vegetation, wet forb and shrub meadows, cattail swards, buttonbush-willow-dogwood thickets, and groves of deciduous floodplain forest (willow, sycamore, black walnut). The valley slopes and tributary ravines support hemlock, mixed, and deciduous forests, while oak-pine woods grow at the valley rim. Portions of slopes have been logged. A candidate nature reserve.

SOURCES: Lindsay, 1976, 1981 Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay August 1976			Lindsay, 1981

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Delhi Big Creek Valley	40I/15	400400

BRIEF DESCRIPTION: For about 5 km. between Delhi and Lynedoch along Big Creek, a steep-sided valley dissects the Norfolk Sand Plain. An excellent variety of vegetation types cover the rim, slopes and bottomlands of this ca. 250 ha. site. Closed and semi-open associations of cottonwood, willow, black walnut, manitoba maple, blue beech, ash, cedar and elm, along with shrub thickets, characterize floodplain & riverbank habitats along Big Creek. Drier floodplain terraces and wetter floodplain depressions containing swamps also occur. Edging the valley rim are young oak parklands and prairie remnants. A candidate nature reserve.

SOURCES: Lindsay, 1976, 1981, Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay, Sept. Oct. 1976			Lindsay, 1981

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Spooky Hollow	40I/9	555305

BRIEF DESCRIPTION: Spooky Hollow includes the valley of Fischer Creek, for 2.5 km north of Fischer's Glen on Lake Erie, and sandplain uplands extending west to Cranes Creek. A mix of young oak woodland, red cedar-sassafras-oak savanna and pine representation blankets the upland. Along the valley are young oak-beech-sugar maple slope forests, wet deciduous bottomlands and tamarack-pine swamp. Many rare plants reported. Part owned by Hamilton Naturalists Club; part threatened. A candidate nature reserve.

SOURCES: Lindsay, 1976, 1981, Airphoto Interpretation; Shivas, 1972; IBP, 1970; Argus and White, 1977.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay August 1976			Lindsay, 1981

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	St. Williams Forestry Station	40I/9	440280

BRIEF DESCRIPTION

Oak forests intermixed with conifer plantations and tree nursery fields predominate in the station and on adjoining sand plain. Of note are several small areas of dry, open, oak parkland and prairie which remain (centred at 423628, 438274, 444268 and 445279). These support rare species such as *Quercus prinoides* and the Frosted Elfin and Karner Blue butterflies. This is the sole location for the Frosted Elfin in Ontario. Further study required.

SOURCES Cruise and Catling, 1969; Lindsay, 1981, Airphoto Interpretation; Hess, 1980; Argus and White, 1977.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay October 1976			Lindsay 1981

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Turkey Pt. Nat. Environ. Zone	40I/9	545280

BRIEF DESCRIPTION

Within the park, much of the sand plain above the Turkey Point bluff is forested with semi-open oak-pine woods. Many prairie and southern species are found in the grassy understory. Populations of *Phlox subulata, Tephrosia virginiana* and *Viola pedata*, rare plants known only from Norfolk in Ontario, persist. These dry, open, oak plains are remnants of a vegetation type that was once more common on the Norfolk Sand Plain. Park facilities, mown clearings and plantations are interspersed.

SOURCES Lindsay, 1979; Lindsay, 1981, Airphoto Interpretation; IBP, 1970; Harvey, et al, 1971; Argus and White, 1977.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay June 1978			Lindsay 1981

ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD

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3rd FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Hawk Cliff	40I/11	855235

BRIEF DESCRIPTION

Wooded tablelands back 30 to 40 m high shore bluffs along this 2 km section of the Lake Erie shoreline just east of Port Stanley. Deciduous woods (maple-beech) shrubby old fields, a small creek valley and actively eroding bluffs comprise the major habitats of this ca. 130 ha site. In the fall, this is an excellent location for viewing hawk migration. Large flocks of hawks travel southwesterly along the north shore of Lake Erie.

SOURCES Lindsay, 1981, Airphoto Interpretation; Sensitive Areas Report, 1976.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay September 1976			Lindsay 1981

ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Lakeview South	40I/10	095230

BRIEF DESCRIPTION

An 80 ha woodlot of beech, sugar maple, elm, ash and basswood which extends south to an erosional shoreline bluff. The bluff descends abruptly 30 m or more to Lake Erie. Soils are imperfectly drained, Beverley silt loam. A small stream runs through the middle out to Lake Erie. Agricultural fields surround the woodlot.

SOURCES

Lindsay, 1976, 1981, Airphoto Interpretation.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
			Lindsay 1981

ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD

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3rd FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3

1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Iroquois Beach Provincial Park	40I/10	150210

BRIEF DESCRIPTION

Within the park, the sandy beach plain along Lake Erie can be considered of local and possibly regional significance. Lowlying wet strands vegetated with wet sedge meadows, marshes and shrub thickets are separated by drier, sandy meadows on low ridges. Plants of interest include: marsh mallow (*Hibiscus palustris*), Loesel's twayblade orchid (*Liparis loeselii*), grass-of-parnassus (*Parnassia glauca*) and spikemoss (*Selaginella apoda*).

SOURCES Lindsay and Hanna, 1980; Lindsay, 1981, Airphoto Interpretation; IBP, 1970; Macdonald and Beechey, 1970.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay October 1977			Lindsay 1981

ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD

ONTARIO MINISTRY OF NATURAL RESOURCES
PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION
3rd FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3

1981

SITE DISTRICT 7-2: HURON FRINGE - Sand Dune Ridge and Swale Systems; Wetlands

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Ipperwash Military Reserve	40P/4	240845

BRIEF DESCRIPTION
A complete cross-section of sand dune and sand plain habitats, ranging from unforested shoredunes along Lake Huron to a large expanse of forested low dune ridges and wet swales inland, are found within the reserve. Around Bio and Moon Lakes, interdunal wetlands (wet meadows, marsh, shrub carr, swamp and some bog or fen elements) are well-developed. Significant plants are reported. Portions of the reserve especially the sensitive shoredunes, are marred by numerous trails. This site extends into the southern part of Ipperwash Provincial Park.

SOURCES
Lindsay, 1979, 1981, Airphoto Interpretation; Gaiser, 1966.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
			Lindsay, 1981

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1981

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Port Franks Wetlands & Dunes	40P/4	265855

BRIEF DESCRIPTION
Just south of the cottage area at Port Franks, an interdunal lowland holds a rich assemblage of wetlands. Bulrush marsh merges with cattail marsh, wet meadow, wet shrub thickets and swamp around a shallow, linear-shaped, pond and a small stream. Bog and/or fen elements are reported. A succession of wooded dunes continues south almost to Hwy. 21. A road divides this ca. 480 ha site in two. This area appears threatened by development.

SOURCES
Lindsay, 1980-81, Airphoto Interpretation; Lambton ESA, 1980; Sensitive Areas Report, 1977; Gaiser, 1966.

FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay Terpstra 2 Oct. 1980			Lindsay, 1981

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1981

ONTARIO NATURE RESERVES PROGRAM - LIFE SCIENCE INVENTORY CHECK-SHEET

NAME	MAP NAME	MAP NUMBER	UTM REF.
Long Point and Turkey Point	Long Point	40I/9	580130

COUNTY, DISTRICT or REGIONAL MUNICIPALITY
Haldimand-Norfolk

LAT. 42° 34'N | LONG. 80° 18'W | ALT. MIN. MAX. ca. 575 ft.

LOCALITY
about 25 km southwest of Port Dover along the north shore of Lake Erie

TOWNSHIP | LOTS | CONCESSIONS
South Walsingham

AREA
22,200 acres 10,270 ha

OWNERSHIP
Canadian Wildlife Service; Long Point Company; Long Point Region Conservation Authority; Ontario Ministry of Natural Resources; private.

FOREST REGION AND DISTRICT	SITE REGION AND DISTRICT
D-1	7-2
MNR REGION AND DISTRICT	CONSERVATION AUTHORITY
SW-Simcoe	Long Point C.A.

AERIAL PHOTOGRAPHS
BASE MAP: 425801/425802/425803
YEAR | ROLL | FLIGHT LINE | NUMBERS

1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000

PHYSICAL AND BIOLOGICAL FEATURES
A major part of Long Point, the longest of the three major peninsulas on the north shore of Lake Erie, remains a vast and wild natural area. This sandspit, built of low sand ridges separated by extensive marshes, reaches 32 km into Lake Erie from its base at Big Creek near Port Royal. Long Point's great biological diversity derives from the variety of habitats developed along its length, combined with the minimal human disturbance over much of its expanse. Wetlands, marshes, shallow and deep water ponds, shrub carrs, and sloughs with tamarack and cedar alternate with sand environments - beaches, grassy shoredunes, dune savannas dotted with cottonwoods or junipers, rolling sandhills cloaked in grassy meadows, and woods of white pine - cedar and oak - maple parklands on the oldest ridges. The dunes increase in age westwards from the tip towards the base and inland from the south beach. The succession of plant communities found across this sequence reflects their increasing age.

Renowned for its wildlife, Long Point is a key resting and feeding area for waterfowl such as Redhead and Canvasback during migration, as well as many songbirds, shorebirds, hawks, bats and Monarch Butterflies. The herpetofauna is very rich. Significant concentrations of at least five species which have declined over their range - Spotted Turtle, Eastern Spiny Softshell, Eastern Hognose Snake, Eastern Fox Snake and Fowler's Toad - inhabit the point. Two endangered birds, the Piping Plover and the Bald Eagle, nested until recently. As well, Long Point protects over 60 species

DATA SHEETS ATTACHED

PHYSICAL DESCRIPTION	☐	SUMMARY SPECIES LISTS	☐
VEGETATION SUMMARY	☐	PHYSICAL FEATURES MAP	☐
EVALUATION SHEET	☐	VEGETATION MAP	☐
COMMUNITY DESCRS.	☐	BIBLIOGRAPHY	☐
COMMUNITY COMP. LISTS	☐	PHOTOGRAPHS	☐

MAJOR INFORMATION SOURCES
Lindsay, 1976, 1977, 1978, Brief field notes; Lindsay, 1979; 1981, Airphoto Interpretation; Seasons, Spring, 1981; Adams and Clarke, 1958; Bayly, 1979; Dennis and Chandler, 1974; Evans, 1973; Heffernan, 1978; Heffernan and Nelson, 1979; Johnston and Fearis, 1973; Klinkenberg, 1980; Miller, 1974; Snyder and Logier, 1931.

EVALUATION AND PRIORITIES
Long Point is a natural heritage area of national and international significance. The Turkey Point marsh and sandspit are part of the same Great Lakes sandspit/shoreline marsh system.

DATE COMPILED	COMPILER
25 May 1981	K. M. Lindsay

1981/rev 1985

Ontario Ministry of Natural Resources, Division of Parks, Park Planning Branch, Queen's Park, Toronto, Ontario, M7A 1W3

of rare plants, some of which grow nowhere else in Canada.

At present, the Big Creek Marsh at the base of Long Point near Port Royal (approximately 800 ha in extent), and the peninsula east of Courtright Ridge (about 3200 ha) are managed as National Wildlife Areas by the Canadian Wildlife Service. Federal regulations provide for the strict protection and conservation of the habitats and wildlife within these sites. About 3200 ha of marsh and land are still held by the Long Point Company whose far-sighted stewardship for the past 100 years preserved much of the point intact.

The Ministry of Natural Resources owns Long Point Provincial Park (an area of approximately 160 ha) and the adjacent Crown Marsh, which are situated on the narrow isthmus of the point, as well as about 60 ha of dune and wetland near the tip of Long Point. An earlier assessment (Lindsay, 1979; Lindsay and Hanna, 1980) proposed the complex of wet sedge and wildflower meadows, shrub thickets and marshes north of the main road in the provincial park (about 110 ha) as a Nature Reserve Zone. Although the area is small, these wet meadows and wetlands are older than those further east of the point, they differ in structure and composition and provide significant wildlife habitat. The Ministry property near the tip should also be managed as a Nature Reserve, or possibly handed over, with guidelines, to the Canadian Wildlife Service for protective management.

Other landowners at Long Point include the Nature Conservancy, the Long Point Region Conservation Authority and private individuals who hold cottage lots on the isthmus.

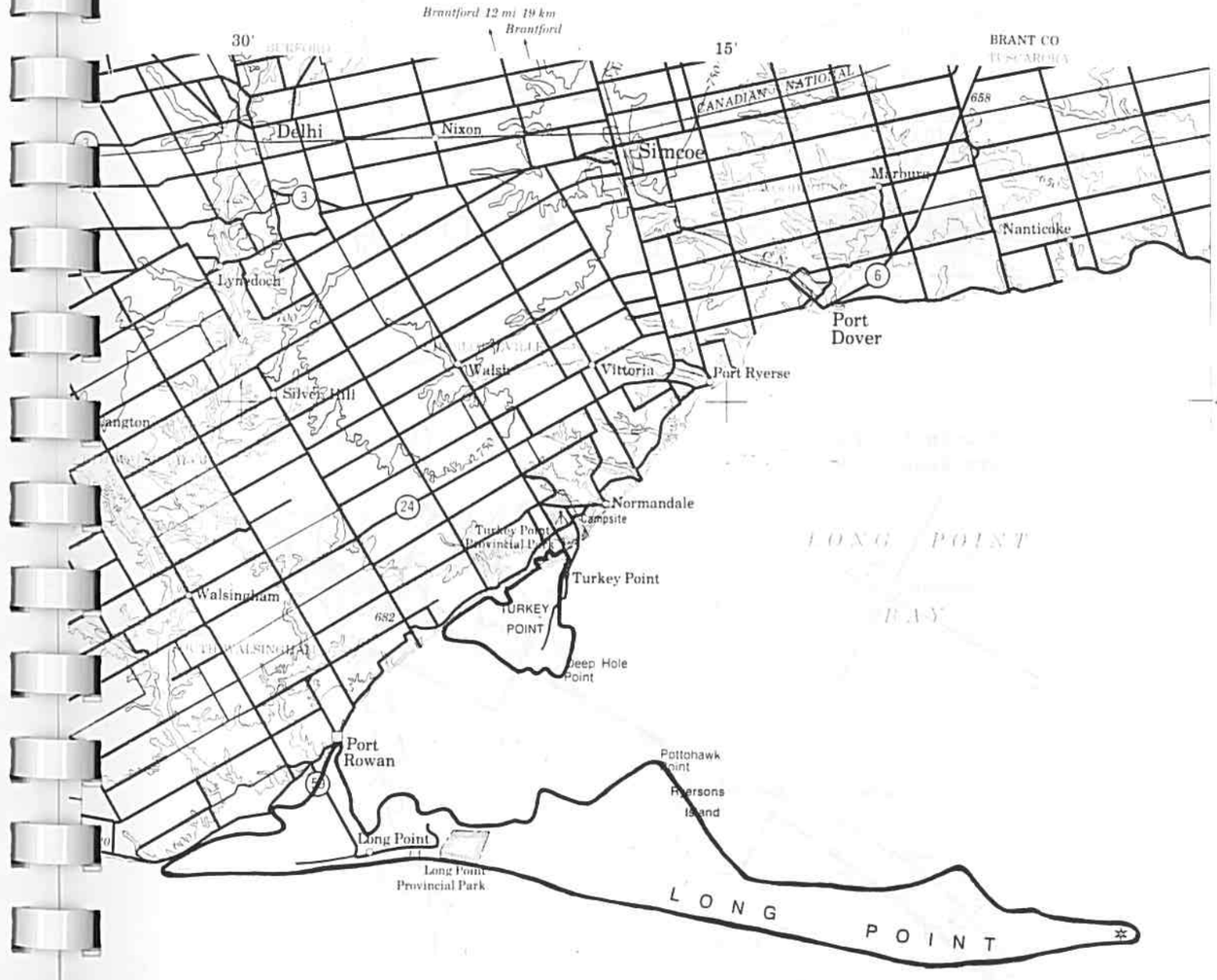
The management of Long Point should be coordinated with that for the Turkey Point Marsh and Sandspit and the rest of the Inner Bay.

Turkey Point Marsh and Sandspit

At Turkey Point, a sandspit barrier built of sediment carried by lake currents from points to the east along the shore of Lake Erie, protects a large shoreline marsh. The beach ridges and intervening wet swales lying behind the resort community of Turkey Point remain largely vegetated with woods and shrub thickets. The marsh contains cattail - reedgrass - blue joint - bulrush marsh, open water sections filled with aquatic vegetation and shrub thickets, and harbours rare plants such as yellow nelumbo (*Nelumbo lutea*). Channels and poinds have been dredged through this marsh complex. As well, part of the marsh next to the abandoned shorebluff has been diked, drained and converted to farmland.

The Turkey Point marsh and sandspit adjoins the Nature Reserve Zone proposed within Turkey Point Provincial Park (centred at 540262) by Lindsay, 1979 and Lindsay and Hanna, 1980. Here approximately 60 ha of coniferous swamp (cedar, larch, birch, black spruc), deciduous swamp (ash, silver maple, white birch), thickets and cattails are flanked by a steep, forested shorebluff. Black spruce grows at its southern limit in Ontario, along with rare plants such as the small white lady's slipper orchid (*Cypripedium candidum*[1]) and bayberry (*Myrica pensylvanica*). The special features of this wetland were recognized in 1959, when part of it was declared a Wilderness Area under Ontario's Wilderness Areas Act.

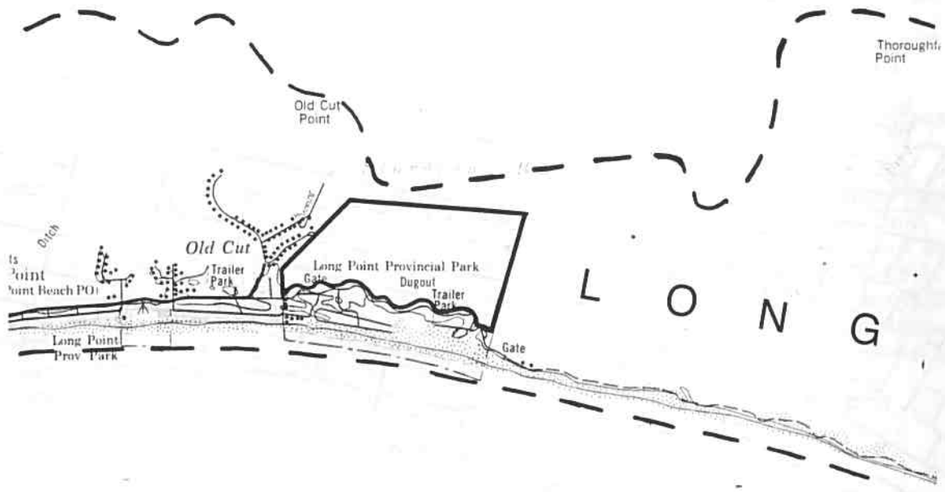
[1] Recent searches for *Cypripedium candidum* at Turkey Point have not found any plants (Klinkenberg, 1980, personal communication with Lindsay; Brownell, 1981, personal communication with Lindsay)



1:250,000 scale

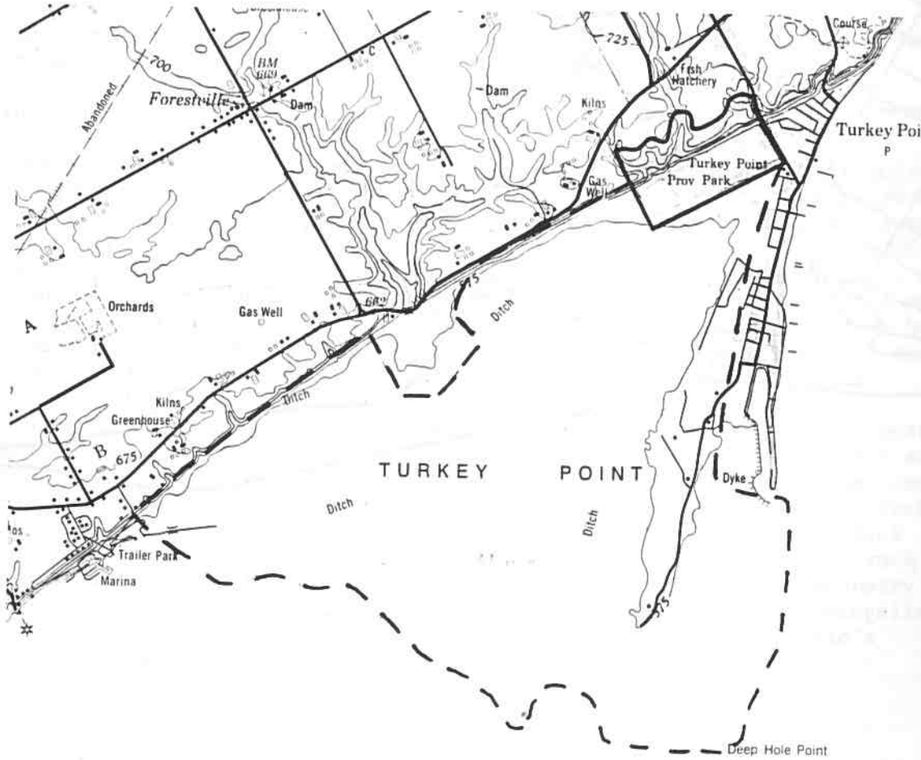
Long Point Provincial Park:
Proposed Nature Reserve Zone

(40I/9 505145)



Turkey Point Provincial Park:
Proposed Nature Reserve Zone

(40I/9 540262)



—— Proposed Nature Reserve Zone in Park
--- Remainder of Long Point and Turkey Point candidate nature reserve

SITE DISTRICT 7-2: ERIE SPITS

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Long Point & Turkey Point	40I/9	660110

BRIEF DESCRIPTION
A major part of Long Point remains a vast natural area with minimal human disturbance. This sand spit built of low sand ridges separated by extensive marshes reaches 32 km into Lake Erie. North of Long Point, at Turkey Point, a sand spit barrier extending southwards shelters a large marsh and Inner Bay. This entire area is recommended as a candidate nature reserve in recognition of its national and international significance, although only parts of the total area are suggested for strict protection.

SOURCES Seasons, Spring, 1981, Special Issue on Long Point, Lindsay, 1979, 1981, Airphoto Interpretation; Bayly, 1979.

EARTH SCIENCE	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay 1976,1977,1978			Lindsay, 1981

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1981