

AN IDENTIFICATION AND EVALUATION OF
LIFE SCIENCE CANDIDATE NATURE RESERVES
IN SITE DISTRICT 7-2
WEST OF THE HALDIMAND CLAY PLAIN

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PARKS AND RECREATION SECTION
ONTARIO MINISTRY OF NATURAL RESOURCES
CENTRAL REGION, RICHMOND HILL
SOUTHWESTERN REGION, LONDON

JULY 1981

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 valley with adjoining uplands -dry, open, oak plains -shoreline environments	-Springwater Forest (401/11 980320) -Backus Woods (401/9 420230) -South Walsingham Sand Ridges (401/10 360200) -Big Otter Creek (401/15 195405) -Big Creek Flood- plain (401/10 380210) -Delhi Big Creek Valley (401/15 400400) -Spooky Hollow (401/9 555305)
		clay plain	5	-a few woodlots and stream valleys remain -also an area along Big Otter Creek	-	-	-	-	-

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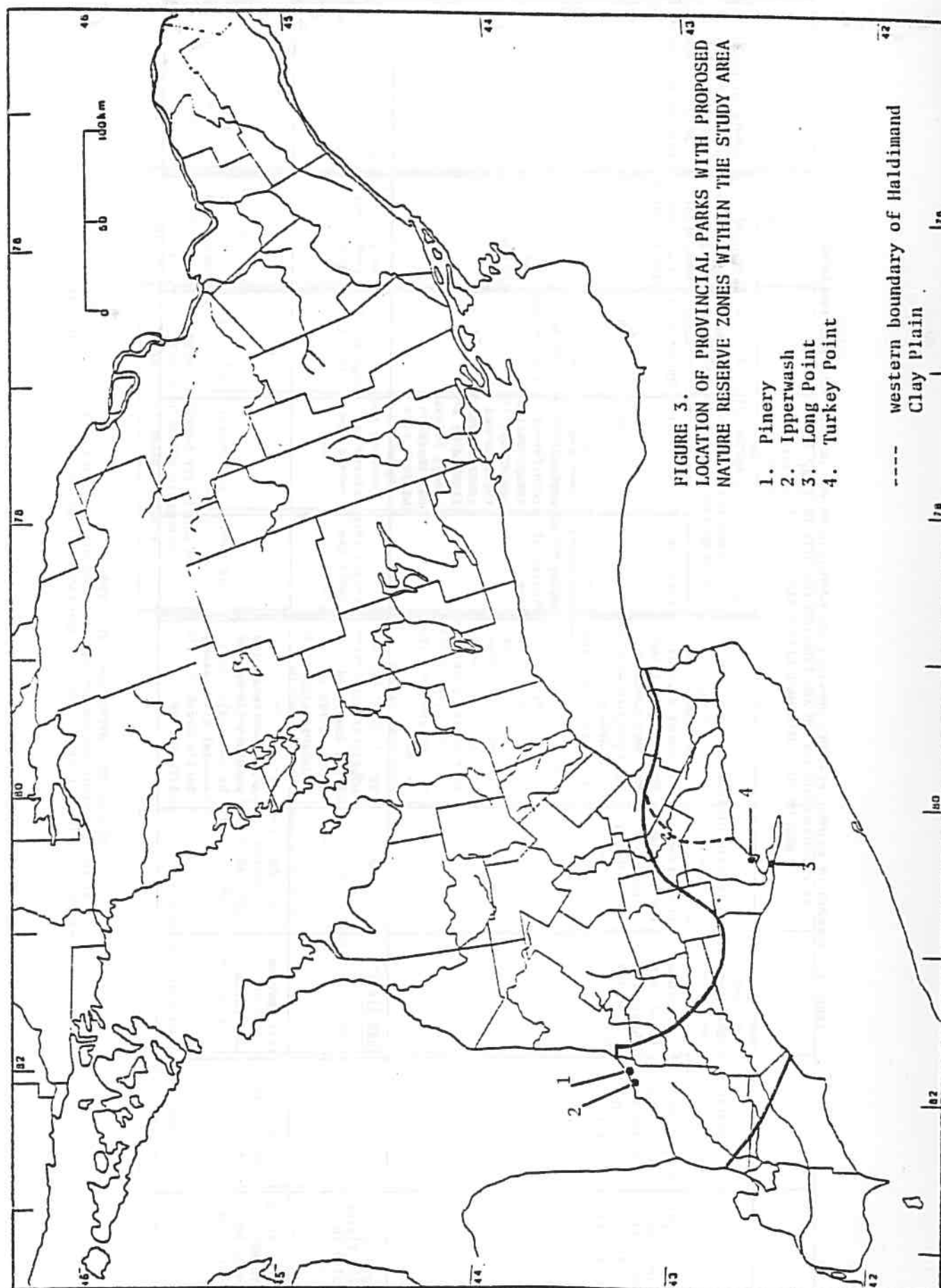
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St. Clair Clay Plains (also in 7-1)	13	bevelled till plain	95	-about 10% left in natural condition -the woodlots at the back of farms are frequently linked, forming larger natur- al areas from 50 to 300 ha in size -natural areas also remain along creek 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 valley -clay plain woodlots	-Thames River Flood- plain (401/12 550315) -Talbot Creek (401/11 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 Pro- vincial 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 system 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	Upperwash 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	100 ha (250 acres)	-a major Great Lakes sandspit and marsh (wet- lands system	-Long Point and Turkey Point (401/9 600110)

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Erie Spits cont'd					Turkey Point Provincial Park	-wetlands (coniferous swamp, decidu- ous swamp, thickets and cattail marsh) flanked by a steep, forest- ed, shore- bluff	40 ha (100 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	-	-	-	-	-



2. METHODOLOGY

This section outlines the four steps taken during an analysis of natural features found within Site District 7-2 west of the Haldimand Clay Plain, and in the identification and evaluation of candidate nature reserves. The limitations of the approach are also discussed.

(i) Natural Features Analysis

The Protection Objective of Ontario's Provincial Parks Policy (1976) is "to protect provincially significant elements of the natural and cultural landscape of Ontario". Life science resources are the living part of the natural landscape, for example, forests, marshes, plants, animals and their supporting environments. A preliminary life science assessment of provincial parks and park reserves in Central and Southwestern Regions, which identified significant life science features and proposed Nature Reserves, was completed in 1980 (Lindsay and Hanna, 1980). This life science evaluation of Site District 7-2 is one part of a study of all site districts in southern Ontario, initiated in April, 1980. The goal of both these assessments is to identify areas that best illustrate the natural features and landscapes of Ontario, for inclusion in the park system as Nature Reserves or Nature Reserve zones in parks, and protection through other means such as Conservation Authorities and Municipal Official Plans.

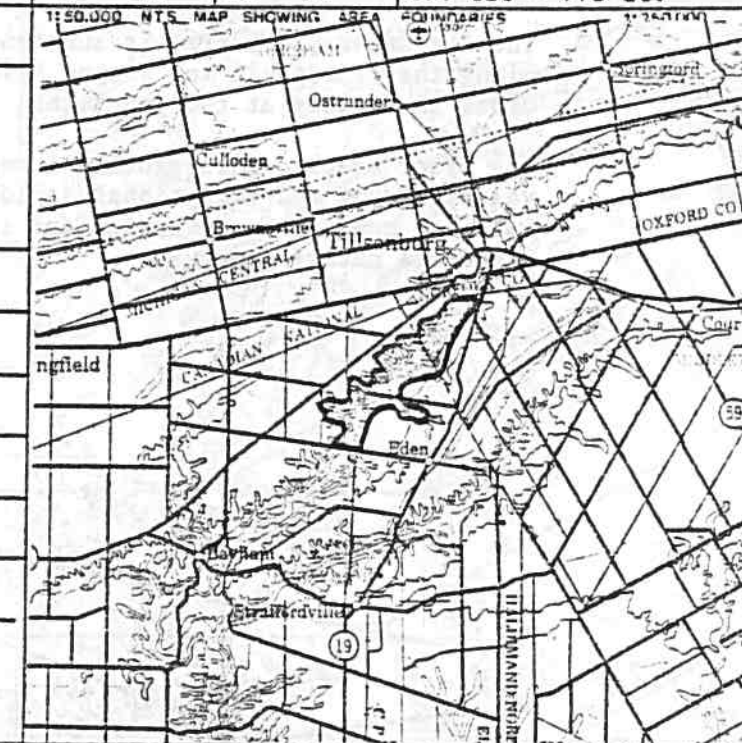
Following the assessment of life science features represented in the provincial parks system, it was necessary to determine the natural features and landscapes that were not included in the parks system. Site districts, as defined by Hills (1959), served as an ecological framework for the analysis of the diversity of natural landscapes found in southern Ontario. Initially, an overview of the natural features characteristic of each site district was undertaken. This overview of Site District 7-2 west of the Haldimand Clay Plain is summarized on Table 1.

The minor physiographic regions of Chapman and Putnam (1973) were used to segregate the site district into distinctive landform complexes. The proportion of the site district covered by each physiographic region was estimated. For each physiographic region, physiography maps (Chapman and Putnam, 1972; 1:253,440) were used to tabulate landforms and derive their importance in terms of relative area covered. After scanning 1:50,000 topographic maps, the prominent natural features associated with various landform types were recorded, along with an estimate of the percentage of natural area remaining in a relatively undisturbed condition. The features represented within proposed Nature Reserves in provincial parks and park reserves located within the study area were also summarized on the chart. The final statement about features typical of the site district, but missing from the provincial parks system, was the end result of the natural features analysis.

The remainder of the study focussed on selecting and documenting the best examples of the dominant vegetation-landform features of the site district; in other words, choosing candidate nature reserves to represent the missing features identified through the natural features analysis. Sections (ii) to (iv) of the Methodology describe the steps followed. Table 2 tabulates the time spent on each step.

SITE DISTRICT 7-2: NORFOLK SAND PLAIN - River Valleys with adjoining Uplands
ONTARIO NATURE RESERVES PROGRAM - LIFE SCIENCE INVENTORY CHECK-SHEET

NAME Big Otter Creek		MAP NAME Tillsonburg	MAP NUMBER 401/15	UTM REF. 195405
COUNTY, DISTRICT OR REGIONAL MUNICIPALITY Elgin and Haldimand-Norfolk		LAT. 42° 49' N	LONG. 80° 46' W	ALT. MIN. MAX. ca. 650 - 775 ft.
LOCALITY along Big Otter Creek, about 1.5 km south of Tillsonburg		1:50,000 NTS MAP SHOWING AREA		
TOWNSHIP Bayham Middleton		CONCESSIONS		
AREA approx. 1400 acres approx. 647 ha		OWNERSHIP		
ADMINISTRATION				
FOREST REGION AND DISTRICT D-1		SITE REGION AND DISTRICT 7-2		
MNR REGION AND DISTRICT SW-Aylmer		CONSERVATION AUTHORITY 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	



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		SUMMARY SPECIES LISTS		MAJOR INFORMATION SOURCES	
PHYSICAL DESCRIPTION	<input type="checkbox"/>	PHYSICAL FEATURES MAP	<input type="checkbox"/>	Lindsay, September, October, 1976, Brief field notes; 1981, Airphoto Interpretation; Oxford County ESA, 1976; Sensitive Areas Report, 1976; IBP, 1971.	
VEGETATION SUMMARY	<input type="checkbox"/>	VEGETATION MAP	<input type="checkbox"/>		
EVALUATION SHEET	<input type="checkbox"/>	BIBLIOGRAPHY	<input type="checkbox"/>		
COMMUNITY DESCRS.	<input type="checkbox"/>	PHOTOGRAPHS	<input type="checkbox"/>		
COMMUNITY COMP. LISTS	<input type="checkbox"/>				

EVALUATION AND PRIORITIES

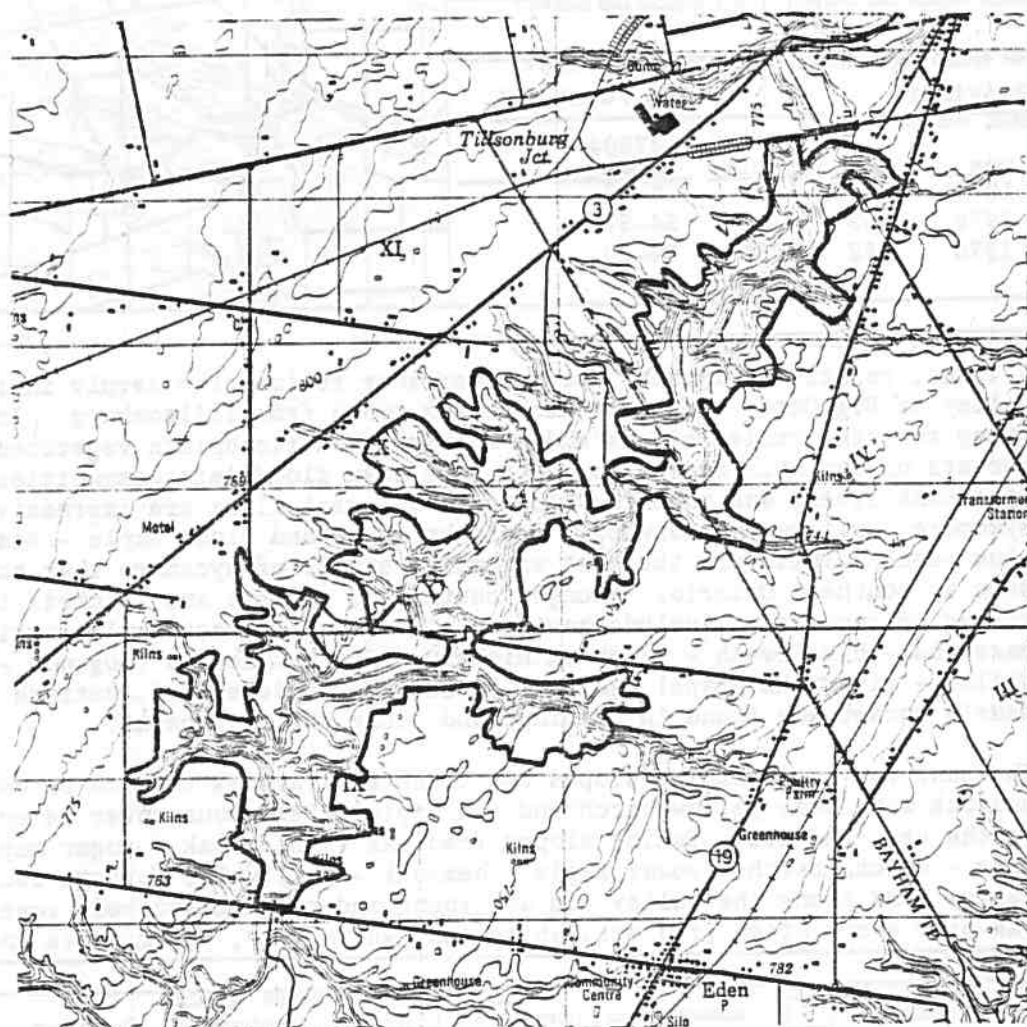
A relatively intact, forested river valley section with exceptional deciduous bottomland stands.

DATE COMPILED 13 May 1981	COMPILED BY K. M. Lindsay
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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	LAT.	LONG.	ALT. MIN. MAX.
Haldimand - Norfolk	42° 39' N	80° 32' W	ca. 600-650 ft.
LOCALITY	NTS MAP SHOWING AREA		
on Big Creek, 3 km SSW of Walsingham			
TOWNSHIP	LOTS	CONCESSIONS	
South Walsingham			
AREA	OWNERSHIP		
approx. 455 acres	approx. 210 ha		
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

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).

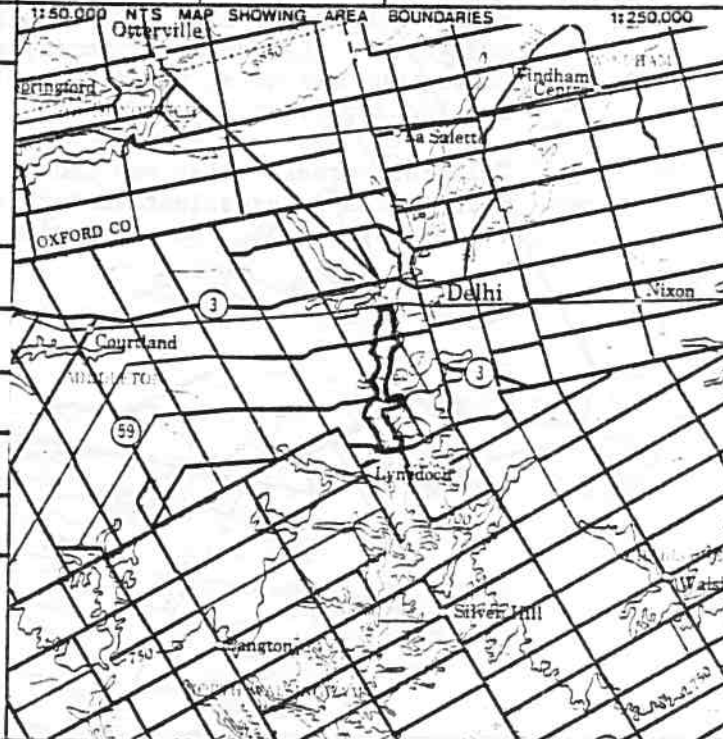
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PHYSICAL DESCRIPTION <input type="checkbox"/>	PHYSICAL FEATURES MAP <input type="checkbox"/>	Lindsay, August, 1976, Brief field notes;
VEGETATION SUMMARY <input type="checkbox"/>	VEGETATION MAP <input type="checkbox"/>	1981, Airphoto Interpretation.
EVALUATION SHEET <input type="checkbox"/>	BIBLIOGRAPHY <input type="checkbox"/>	
COMMUNITY DESCRS. <input type="checkbox"/>	PHOTOGRAPHS <input type="checkbox"/>	
COMMUNITY COMP. LISTS <input type="checkbox"/>		

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

SITE DISTRICT 7-2: NORFOLK SAND PLAIN - River Valleys with adjoining Uplands
ONTARIO NATURE RESERVES PROGRAM - LIFE SCIENCE INVENTORY CHECK-SHEET

NAME Delhi Big Creek Valley		MAP NAME Tillsonburg	MAP NUMBER 401/15	UTM REF. 400400
COUNTY, DISTRICT or REGIONAL MUNICIPALITY Haldimand - Norfolk		LAT. 42 ° 49' N	LONG. 80 ° 31' W	ALT. MIN. MAX. ca. 650 - 775 ft.
LOCALITY along Big Creek between Delhi and Lynedoch		1:50,000 NTS MAP SHOWING AREA BOUNDARIES 1:250,000		
TOWNSHIP LOTS CONCESSIONS Middleton Charlotteville				
AREA approx. 715 acres approx. 330 ha				
OWNERSHIP				
ADMINISTRATION				
FOREST REGION AND DISTRICT D-1		SITE REGION AND DISTRICT 7-2		
MNR REGION AND DISTRICT SW-Simcoe		CONSERVATION AUTHORITY 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.

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EVALUATION SHEET	<input type="checkbox"/>	BIBLIOGRAPHY	<input type="checkbox"/>		
COMMUNITY DESCRS.	<input type="checkbox"/>	PHOTOGRAPHS	<input type="checkbox"/>		
COMMUNITY COMP. LISTS	<input type="checkbox"/>				

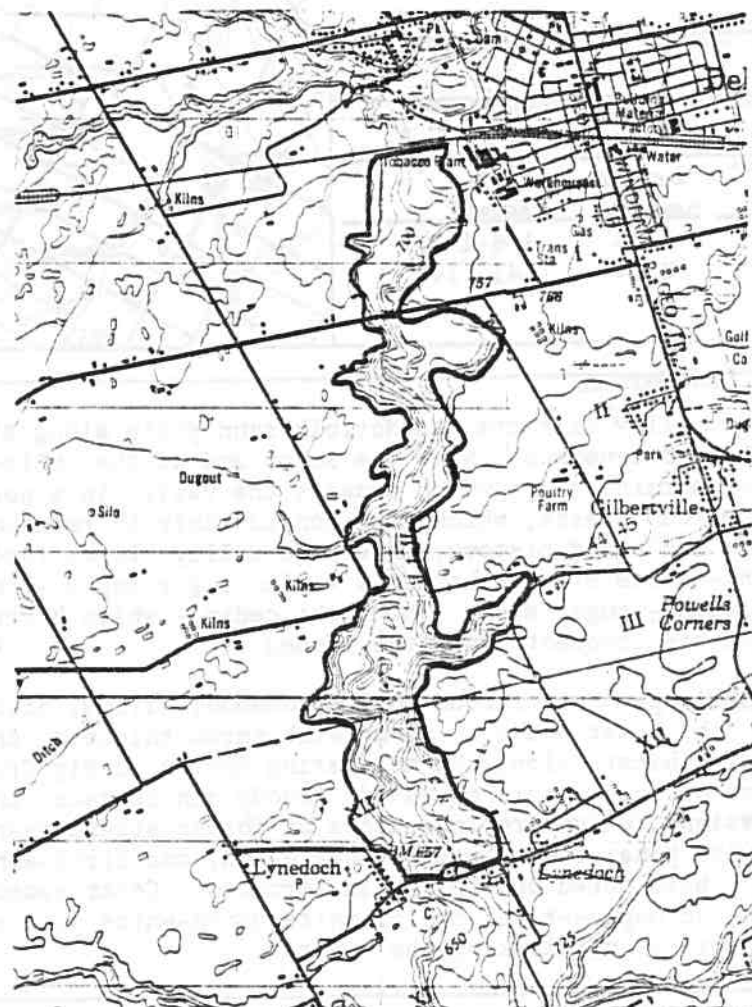
EVALUATION AND PRIORITIES

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

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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 (*Lespedeza 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 Spooky Hollow		MAP NAME Long Point	MAP NUMBER 401/9	UTM REF. 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		MAP SHOWING AREA		
TOWNSHIP LOTS CONCESSIONS				
AREA approx. 631 acres approx. 290 ha		OWNERSHIP		
ADMINISTRATION		FOREST REGION AND DISTRICT D-1		
MNR REGION AND DISTRICT SW-Simcoe		SITE REGION AND DISTRICT 7-2		
AERIAL PHOTOGRAPHS		CONSERVATION AUTHORITY Long Point C.A.		
BASE MAP: 426802		NUMBERS		
YEAR	ROLL	FLIGHT LINE		
1978	254	4251	16-20	
1978	202	4250	115-119	

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*),

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PHYSICAL DESCRIPTION	<input type="checkbox"/>	PHYSICAL FEATURES MAP	<input type="checkbox"/>	Lindsay, August, 1976, Brief Field visit; 1981, Airphoto Interpretation; Shivas, 1972, Spooky Hollow Sanctuary Plant List; IBP, 1970; Argus and White, 1977.	
VEGETATION SUMMARY	<input type="checkbox"/>	VEGETATION MAP	<input type="checkbox"/>		
EVALUATION SHEET	<input type="checkbox"/>	BIBLIOGRAPHY	<input type="checkbox"/>		
COMMUNITY DESCRS.	<input type="checkbox"/>	PHOTOGRAPHS	<input type="checkbox"/>		
COMMUNITY COMR. LISTS	<input type="checkbox"/>				

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 26 May 1981	COMPILED K. M. Lindsay

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 flood-plain 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	
ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD			ONTARIO MINISTRY OF NATURAL RESOURCES PARK PLANNING BRANCH 3RD FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3	

EARTH	LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
	X	Big Otter Creek south of Bayham	40I/10	110320
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	
ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD			ONTARIO MINISTRY OF NATURAL RESOURCES PARK PLANNING BRANCH 3RD FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3	

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	
ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD			ONTARIO MINISTRY OF NATURAL RESOURCES PARK PLANNING BRANCH 3RD FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3	

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

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
X	Big Otter Creek	40I/15	195405
<p>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.</p> <p>SOURCES Lindsay, 1976, 1981, Airphoto Interpretation; Oxford E.S.A., 1976; Sensitive Areas Report, 1976; IBP, 1971.</p> <p>FIELD SURVEY (DATE) Lindsay, Sept. Oct., 1976</p> <p>EARTH SCIENCE CHECK SHEET</p> <p>LIFE SCIENCE CHECK SHEET</p> <p>DATA CARD COMPILED Lindsay, 1981</p> <p>ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD</p> <p>ONTARIO MINISTRY OF NATURAL RESOURCES PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION 3rd FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3</p>			

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
X	Little Otter Creek Valley	40I/15	250380
<p>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 (<i>Athyrium pycnocarpon</i>) is reported.</p> <p>SOURCES Lindsay, 1981, Airphoto Interpretation; IBP, 1971.</p> <p>FIELD SURVEY (DATE)</p> <p>EARTH SCIENCE CHECK SHEET</p> <p>LIFE SCIENCE CHECK SHEET</p> <p>DATA CARD COMPILED Lindsay, 1981</p> <p>ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD</p> <p>ONTARIO MINISTRY OF NATURAL RESOURCES PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION 3rd FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3</p>			

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
X	Big Creek Floodplain	40I/10	380210
<p>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.</p> <p>SOURCES Lindsay, 1976, 1981 Airphoto Interpretation.</p> <p>FIELD SURVEY (DATE) Lindsay August 1976</p> <p>EARTH SCIENCE CHECK SHEET</p> <p>LIFE SCIENCE CHECK SHEET</p> <p>DATA CARD COMPILED Lindsay, 1981</p> <p>ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD</p> <p>ONTARIO MINISTRY OF NATURAL RESOURCES PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION 3rd FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3</p>			

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

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
X	Delhi Big Creek Valley	40I/15	400400
<p>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.</p> <p>SOURCES Lindsay, 1976, 1981, Airphoto Interpretation.</p> <p>FIELD SURVEY (DATE) Lindsay, Sept. Oct. 1976</p> <p>EARTH SCIENCE CHECK SHEET</p> <p>LIFE SCIENCE CHECK SHEET</p> <p>DATA CARD COMPILED Lindsay, 1981</p> <p>ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD</p> <p>ONTARIO MINISTRY OF NATURAL RESOURCES PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION 3rd FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3</p>			

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
X	Spooky Hollow	40I/9	555305
<p>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.</p> <p>SOURCES Lindsay, 1976, 1981, Airphoto Interpretation; Shivas, 1972; IBP, 1970; Argus and White, 1977.</p> <p>FIELD SURVEY (DATE) Lindsay August 1976</p> <p>EARTH SCIENCE CHECK SHEET</p> <p>LIFE SCIENCE CHECK SHEET</p> <p>DATA CARD COMPILED Lindsay, 1981</p> <p>ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD</p> <p>ONTARIO MINISTRY OF NATURAL RESOURCES PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION 3rd FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3</p>			

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
<p>BRIEF DESCRIPTION</p> <p>SOURCES</p> <p>FIELD SURVEY (DATE)</p> <p>EARTH SCIENCE CHECK SHEET</p> <p>LIFE SCIENCE CHECK SHEET</p> <p>DATA CARD COMPILED</p> <p>ONTARIO NATURE RESERVES PROGRAM ENVIRONMENTAL DATA CARD</p> <p>ONTARIO MINISTRY OF NATURAL RESOURCES PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION 3rd FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3</p>			

SITE DISTRICT 7-2: NORFOLK SAND PLAIN - Dry, open, oak plains

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
X	St. Williams Forestry Station	40I/9	440280
<p>BRIEF DESCRIPTION</p> <p>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 <i>Quercus prinoides</i> and the Frosted Elfin and Karner Blue butterflies. This is the sole location for the Frosted Elfin in Ontario. Further study required.</p>			
<p>SOURCES Cruise and Catling, 1969; Lindsay, 1981, Airphoto Interpretation; Hess, 1980; Argus and White, 1977.</p>			
FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
Lindsay October 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	

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
X	Turkey Pt. Nat. Environ. Zone	40I/9	545280
<p>BRIEF DESCRIPTION</p> <p>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 <i>Phlox subulata</i>, <i>Tephrosia virginiana</i> and <i>Viola pedata</i>, 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.</p>			
<p>SOURCES Lindsay, 1979; Lindsay, 1981, Airphoto Interpretation; IBP, 1970; Harvev, et al, 1971; Argus and White, 1977.</p>			
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		ONTARIO MINISTRY OF NATURAL RESOURCES PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION 3RD FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3	

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
<p>BRIEF DESCRIPTION</p>			
<p>SOURCES</p>			
FIELD SURVEY (DATE)	EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET	DATA CARD COMPILED
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	

SITE DISTRICT 7-2: NORFOLK SAND PLAIN - Shoreline Environments (Bluffs, Beaches)

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
X	Hawk Cliff	40I/11	855235
<p>BRIEF DESCRIPTION</p> <p>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.</p>			
<p>SOURCES Lindsay, 1981, Airphoto Interpretation; Sensitive Areas Report, 1976.</p>			
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		ONTARIO MINISTRY OF NATURAL RESOURCES PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION 3RD FLOOR, WHITNEY BLOCK, QUEEN'S PARK, TORONTO, M7A 1W3	

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
X	Lakeview South	40I/10	095230
<p>BRIEF DESCRIPTION</p> <p>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.</p>			
<p>SOURCES Lindsay, 1976, 1981, Airphoto Interpretation.</p>			
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	

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
X	Iroquois Beach Provincial Park	40I/10	150210
<p>BRIEF DESCRIPTION</p> <p>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 (<i>Hibiscus palustris</i>), Loesel's tway blade orchid (<i>Liparis loeselii</i>), grass-of-parnassus (<i>Parnassia glauca</i>) and spikemoss (<i>Selaginella apoda</i>).</p>			
<p>SOURCES Lindsay and Hanna, 1980; Lindsay, 1981, Airphoto Interpretation; IBP, 1970; Macdonald and Beechey, 1970.</p>			
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	

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

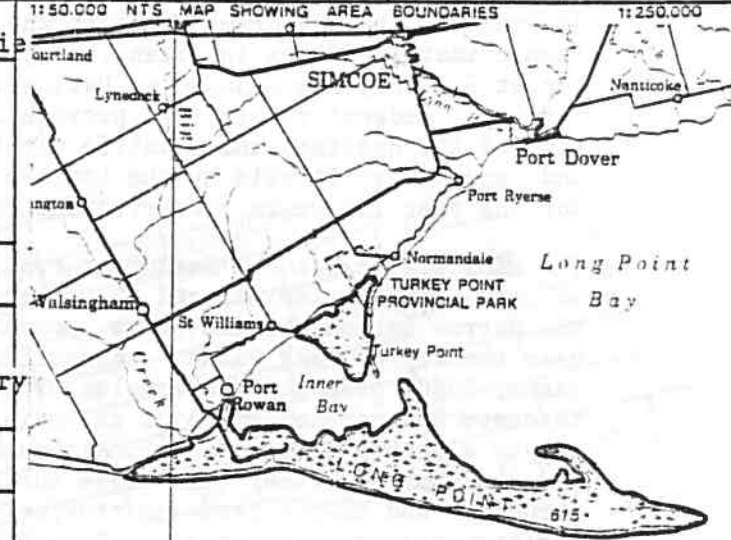
EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
X	Ippeewash Military Reserve	40P/4	240845
<p>BRIEF DESCRIPTION</p> <p>A complete cross-section of sand dune and sand plain habitats, ranging from unforested shoredunes along Lake Huron to a large expanse of forested low dune ridges and wet swales inland, 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 Ippeewash Provincial Park.</p> <p>SOURCES</p> <p>Lindsay, 1979, 1981, Airphoto Interpretation; Gaiser, 1966.</p> <p>FIELD SURVEY DATE: EARTH SCIENCE CHECK SHEET: LIFE SCIENCE CHECK SHEET: DATA CARD COMPLETED:</p> <p>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</p> <p>Lindsay, 1981</p>			

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
X	Port Franks Wetlands & Dunes	40P/4	265855
<p>BRIEF DESCRIPTION</p> <p>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.</p> <p>SOURCES</p> <p>Lindsay, 1980-81, Airphoto Interpretation; Lambton ESA, 1980; Sensitive Areas Report, 1977; Gaiser, 1966.</p> <p>FIELD SURVEY DATE: EARTH SCIENCE CHECK SHEET: LIFE SCIENCE CHECK SHEET: DATA CARD COMPLETED:</p> <p>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</p> <p>Lindsay, 1981</p>			

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
<p>BRIEF DESCRIPTION</p> <p></p> <p>SOURCES</p> <p></p> <p>FIELD SURVEY DATE: EARTH SCIENCE CHECK SHEET: LIFE SCIENCE CHECK SHEET: DATA CARD COMPLETED:</p> <p>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</p> <p>1981</p>			

SITE DISTRICT 7-2: ERIE SPITS
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	LAT.	LONG.	ALT. MIN. MAX.
Haldimand-Norfolk	42° 34' N	80° 18' W	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



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	SUMMARY SPECIES LISTS	MAJOR INFORMATION SOURCES
PHYSICAL DESCRIPTION	<input type="checkbox"/>	Lindsay, 1976, 1977, 1978, Brief field notes;
VEGETATION SUMMARY	<input type="checkbox"/>	Lindsay, 1979; 1981, Airphoto Interpretation;
EVALUATION SHEET	<input type="checkbox"/>	Seasons, Spring, 1981; Adams and Clarke, 1958;
COMMUNITY DESCS.	<input type="checkbox"/>	Bayly, 1979; Dennis and Chandler, 1974; Evans,
COMMUNITY COMR. LISTS	<input type="checkbox"/>	1973; Heffernan, 1978; Heffernan and Nelson,
	<input type="checkbox"/>	1979; Johnston and Fearis, 1973; Klinkenberg,
	<input type="checkbox"/>	1980; Miller, 1974; Snyder and Lovier, 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	COMPILED	
25 May 1981	K. M. Lindsay	

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 100 ha) as a Nature Reserve Zone. Although the area is small, these wet meadows and wetlands are older than those further east on 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.

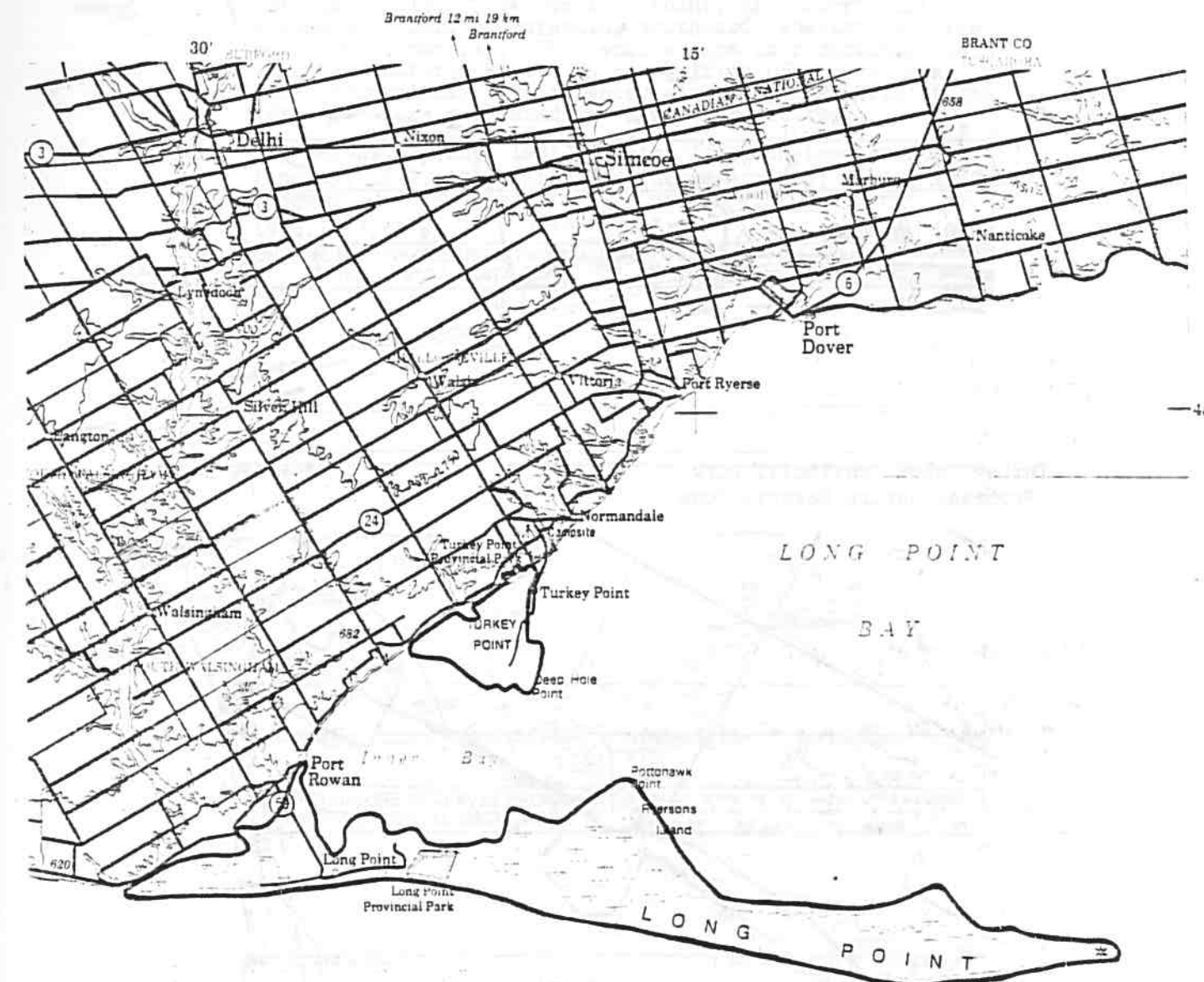
The management of Long Point should be coordinated with that for the Turkey Point Marsh and Sandspit and the rest of the Inner Bay.

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 ponds 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 40 ha of coniferous swamp (cedar, larch, birch, black spruce), 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.

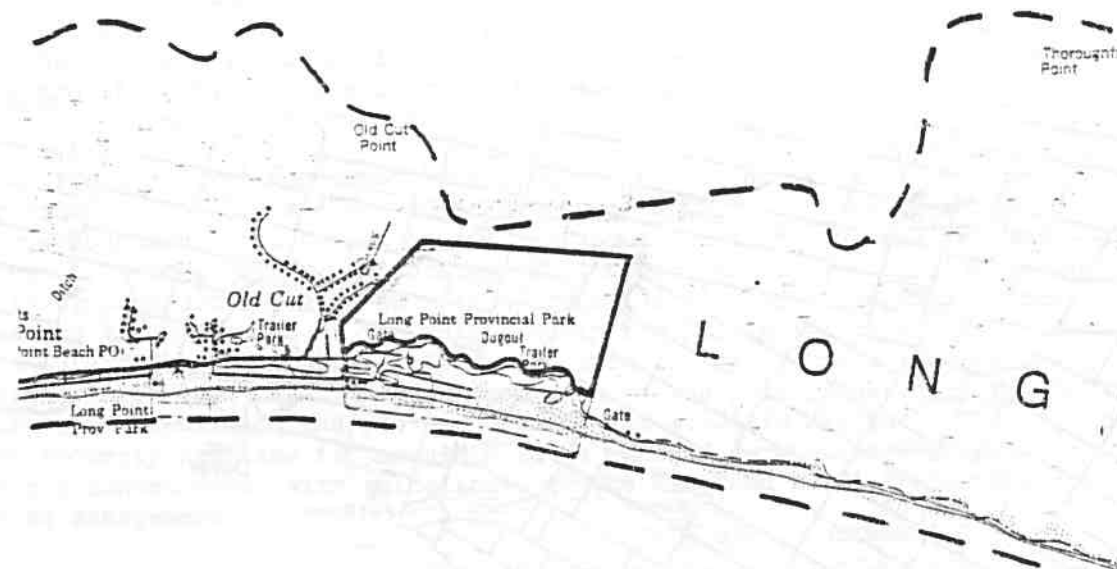
¹ Recent searches for *Cypripedium candidum* at Turkey Point have not found any plants (Klinkenberg, 1980, personal communication with Lindsay; Brownell, 1981, personal communication with Lindsay).



1:250,000 scale

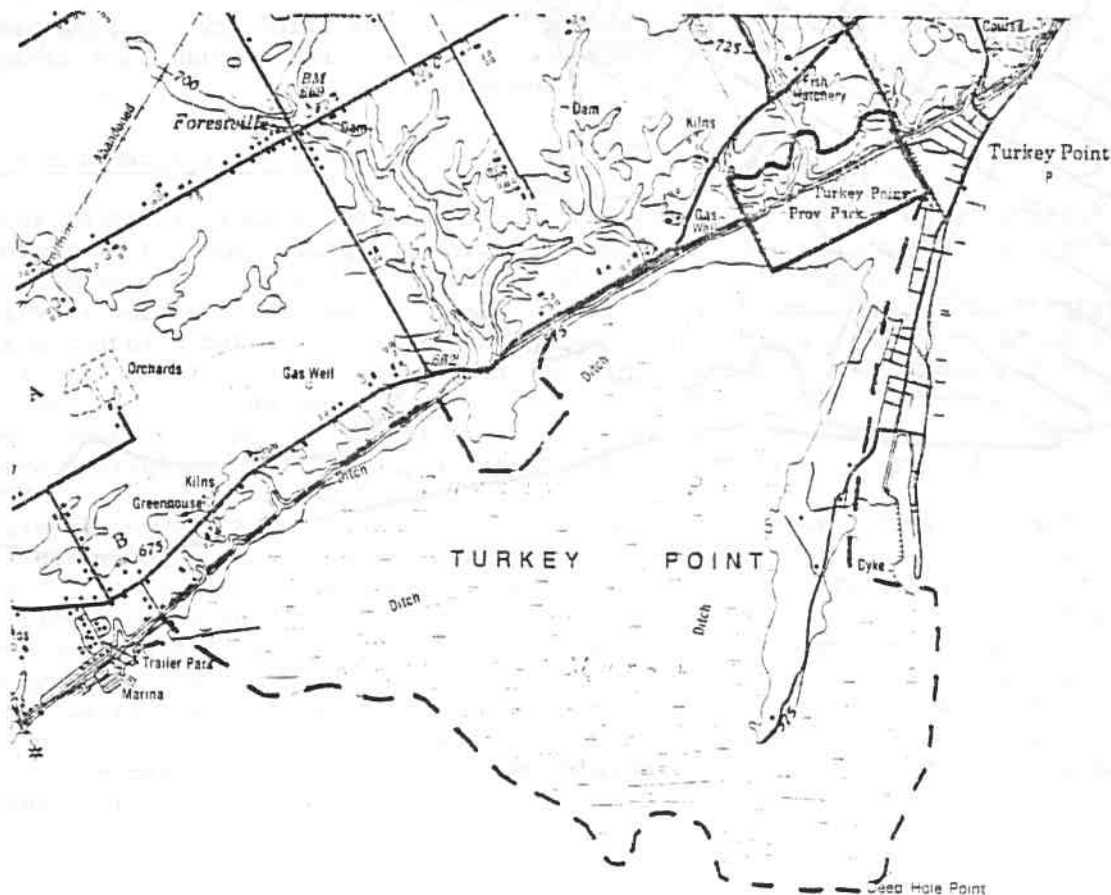
Long Point Provincial Park:
Proposed Nature Reserve Zone

(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.			
FIELD SURVEY DATE		EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET
Lindsay 1976, 1977, 1978			Lindsay, 1981
ONTARIO NATURE RESERVES PROGRAM		ONTARIO MINISTRY OF NATURAL RESOURCES	
ENVIRONMENTAL DATA CARD		PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION 3RD FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO, M7A 1W3	

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
BRIEF DESCRIPTION			
SOURCES			
FIELD SURVEY DATE		EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET
ONTARIO NATURE RESERVES PROGRAM		ONTARIO MINISTRY OF NATURAL RESOURCES	
ENVIRONMENTAL DATA CARD		PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION 3RD FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO, M7A 1W3	

EARTH LIFE	NAME OF AREA	MAP SHEET	UTM REFERENCE
BRIEF DESCRIPTION			
SOURCES			
FIELD SURVEY DATE		EARTH SCIENCE CHECK SHEET	LIFE SCIENCE CHECK SHEET
ONTARIO NATURE RESERVES PROGRAM		ONTARIO MINISTRY OF NATURAL RESOURCES	
ENVIRONMENTAL DATA CARD		PARK PLANNING BRANCH ENVIRONMENTAL PLANNING SECTION 3RD FLOOR WHITNEY BLOCK QUEEN'S PARK TORONTO, M7A 1W3	