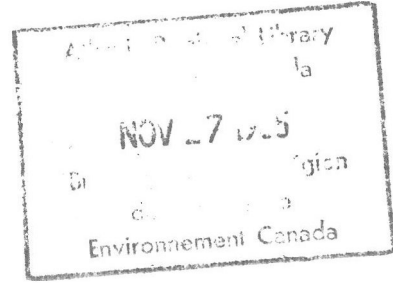


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Ecological Land Classification Fortress of Louisbourg National Historic Park

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Prepared for
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Atlantic Region

Volume 2 Data Bank

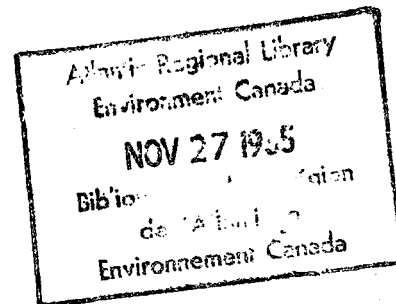
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ECOLOGICAL LAND CLASSIFICATION
OF
LOUISBOURG NATIONAL HISTORIC PARK

by

Harry Hirvonen
Nikita Lopoukhine



Lands Directorate
Atlantic Region
Environment Canada

for

Parks Canada
Atlantic Region
Environment Canada

March 1980

ACKNOWLEDGEMENTS

Andrew Palmer, formerly with the Lands Directorate, assisted in the field operations of the study. His expertise on coastal zone processes was valuable to the description of the Park's coastline found in this report.

Mr. Daniel LeSauteur, Resource Inventory and Research Coordinator, Atlantic Region, arranged for the necessary drafting support to the report. In addition, his advice regarding the report outline was much appreciated.

Mr. Bill O'Shea, Head, Operations, Fortress of Louisbourg National Historic Park, was our contact official on site. He and his staff were readily available to assist us in our field operations. Mr. Ben Roper, Chief Park Warden, in particular was helpful in our day to day logistics.

PREAMBLE

The Ecological Land Classification of Fortress of Louisbourg National Historic Park consists of two volumes. Volume 1 titled Report consists of 90 pages outlining the general description of the Historic Park. As well, ELS procedures are discussed and each of the three ecosections and 21 ecosites within the Park are given a written description. Included in the appendices are a Glossary of Terms and a Plant Species List.

Volume 2 Data Bank lists each of the 21 ecosites in fact sheet form highlighting the more significant ecological characteristics of each ecosite. For identification purposes the separate segments of ecosites 9, 11, and 21 have been given letter designations on the ecosite map of the Park. Each segment has its own data form. The multi-segmented ecosite 8 is lumped under one description and data form because the bogs represented by this ecosite are too small to be identified separately.

Fortress of Loulsbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	1 - Twelve Mile Lake Hill	328 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
Elevations vary between 84 m - 104 m a.s.l.	Hummocky with ridges	Shallow till over bedrock	Sandy loam	Well drained	Ferro-humic podzol

Water Bodies

Ponds	Lakes	Brooks	Lagoons
None	Abuts south shore of Twelve Mile Lake	None	None

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir - Bracken fern	Balsam fir Intolerant hardwood Tolerant hardwood	70 20 10	46-60	15-20 m	41-60 %

Remarks

- Blowdown prevalent.
- Sugar maple and yellow birch are more abundant within this ecosite than in any other one within the park.

Land Use

Infrastructure	Present Land Use	Past Land Use
	None	Logging

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

--

Special Features

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Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
COASTAL	2 - Oceanview	97 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
20 - 30 % Sea level to 45 m a.s.l.	Steep coastal cliffs	Shall till over bedrock	sandy loam	Well drained - moderately well drained	Ferro-humic podzol

Water Bodies

Ponds	Lakes	Brooks	Lagoons
None	None	Small, intermittent	None (abuts Deep Cove)

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir - feather moss	Balsam fir	60	30 - 40	5 - 10 m	60 - 100 % except old fields
Cinquefoil - old fields	White spruce	40			

Remarks

- Local windfall
- White spruce encroachment on old fields

Land Use

Infrastructure	Present Land Use	Past Land Use
<ul style="list-style-type: none">- Temporary mining shed & equipment- Kennington Cove Road	<ul style="list-style-type: none">- Mining exploration activity	<ul style="list-style-type: none">- Farming- Selective logging

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

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Special Features

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Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	3 - Deep Cove Plateau	253 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
20 - 30 % Elevations between 45 m and 114 m a.s. l.	Hummocky	Glacial till	Sandy loam	Well-drained moderately well drained	Ferro-humic podzol with gleyed sub- groups

Water Bodies

Ponds	Lakes	Brooks	Lagoons
Occur within the scattered bogs	None	None	None

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir - wood fern	Balsam fir Larch, others	80 20	approx. 60	Varies, 15 - 20 m average	60 - 100 % with open patches

Remarks

- Blowdown prevalent.
- Bogs in depressions.

Land Use

Infrastructure

Present Land Use

Past Land Use

- Logging

Wildlife

Mammals

Avifauna

Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	4 - Kennington Brook	166 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
5 - 10 % elevations between 54 m and 100 m a.s. l.	Gently sloping	- Glacial till reworked - Local alluv- ial depos- itions	Sandy loam with silt and sand cappings	Imperfect to poorly drained	Gleyed ferro- humic podzol and gleysols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
	Touch on Munroe and Twelve Mile Lakes	Kennington Cove Brook	

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Alder/Meadow rue	Balsam fir	60	45 - 60	5 - 10 m	60 - 100 %
Black spruce/Sheep laurel	Black spruce	30			
	Other	10			

Remarks

- Floodplain of Kennington Cove Brook

Land Use

Infrastructure

Present Land Use

Past Land Use

Logging

Wildlife

Mammals

Avifauna

Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	S-Spectacle Hill	63 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
10-20 % elevations vary between 78 m and 95 m. a.s.l	Hummocky	Glacial till	Sandy loam	Moderately well drained to well drained (seep- age)	Ferro-humic podzol

Water Bodies

Ponds	Lakes	Brooks	Lagoons
-	Borders Spectacle Lakes	-	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir - feather moss	Balsam fir	70	All ages	5 - 15 m	60 - 100 % with open patches
	Larch	10			
	Open	20			

Remarks

- Evidence of fire in soil profile

Land Use

Infrastructure

Present Land Use

Past Land Use

Logging

Wildlife

Mammals

Avifauna

Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
COASTAL	6 - Kennington Cove	558 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
20 - 30 % Elevation rise from sea level to 63 m a.s.l.	Coastal cliffs - gently sloping to hummocky inland	Glacial till	Sandy loam	Moderately well drained to well drained	Ferro-humic podzol

Water Bodies

Ponds	Lakes	Brooks	Lagoons
-	Adjacent coast	Intermittent streams Kennington Cove Brook	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir - feather moss	Balsam fir	80	60 - 80 years	5 - 10 m	60 - 100 %
Crowberry - old fields	White spruce	20			

Remarks

- White spruce encroachment on old fields.

Land Use

Infrastructure	Present Land Use	Past Land Use
- Kennington Cove Road passes through unit	- Kennington Cove Picnic Grounds	- Farming - Logging

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

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Special Features

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Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	7 - Munroe Lake	419 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
20 - 30 % Elevations fall between 54 and 84 m. a.s.l.	Hummocky	Glacial till	Sandy loam	Moderately well-drained (seepage)	Ferro-humic podzol with gleysols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
-	<ul style="list-style-type: none"> - Spectacle Lakes - Munroe Lake 	<ul style="list-style-type: none"> - Kennington Cove Brook 	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir-feather moss	Balsam fir	60	60 - 75 years	15 - 20 m.	60 - 100 %
	Black spruce	30			
Black spruce-sheep laurel	Bog	10	approx 75 yrs (stunted)	Less than 5 m	

Remarks

- Bogs in the many depressions
- Larch is conspicuous although not significant as a separate percentage rating

Land Use

Infrastructure

Present Land Use

Past Land Use

Logging

Wildlife

Mammals

Avifauna

Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
WETLAND	8 - LOUISBOURG BOG	238 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
Flat to 10 %	Flat	Slope bog	H5 - H6 Von Post Scale for peat decomposition	Poorly drained	Missisol

Water Bodies

Ponds	Lakes	Brooks	Lagoons
Generally none Some bogs have local pondings	None	None	None

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Spagnum with ericaceous shrubs	None to minimal				

Remarks

Land Use

Infrastructure	Present Land Use	Past Land Use
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N/A

N/A

N/A

Wildlife

Mammals	Avifauna	Ichthyofauna
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Observations and Updating

Special Features

These bogs may contain relatively rare bog orchids.

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	9A - KENNINGTON HILLS	128 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
20 - 30 % Elevations vary between 85 m and 100 m a.s.l.	Hummocky	Glacial till	Sandy loam	Well-drained	Ferro-humic podzol

Water Bodies

Ponds	Lakes	Brooks	Lagoons
-	-	Kennington Cove Brook	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir-feather moss	Balsam fir	60	40 - 60 yrs	10 - 15 m	40 - 60 %
	Intolerant Hardwood	20			
	Windfall	20			

Remarks

Windfall prevalent.

Land Use

Infrastructure	Present Land Use	Past Land Use
Old French Road traverses the unit		- Logging

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	9B - KENNINGTON HILLS	110 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
20 - 30 % Elevations vary between 67 m and 103 m a.s.l.	Hummocky	Glacial till	Sandy loam	Well-drained	Ferro-humic podzols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
-	-	Kennington Cove Brook	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir - feather moss	Balsam fir	50	40 - 60 yrs	10 - 15 m	41 - 60 %
	Intolerant hardwood	25			
	Windfall	25			

Remarks

- Windfall prevalent.

Land Use

Infrastructure	Present Land Use	Past Land Use
		Logging

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

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Special Features

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Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	9C - KENNINGTON HILLS	11 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
10-20% Elevations vary between 80 and 85 m a.s.l.	Hummocky	Glacial Till	Sandy loam	Well-drained	Ferro-humic podzol

Water Bodies

Ponds	Lakes	Brooks	Lagoons
-	-	- Borders Kennington Cove Brook	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam Fir-Feather Moss	Balsam Fir	60	40 - 60 yrs.	10 - 15 m	40 - 60%
	Intolerant Hardwood	20			
	Windfall	20			

Remarks

- windfall prevalent

Land Use

Infrastructure

Present Land Use

Past Land Use

- logging

Wildlife

Mammals

Avifauna

Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	9D - KENNINGTON HILLS	38 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
20 - 30% Elevations vary between 85 and 100 m a.s.l.	Hummocky	Glacial Till	Sandy loam	Well-drained	Ferro-humic podzol

Water Bodies

Ponds	Lakes	Brooks	Lagoons
-	-	- Borders Kennington Cove Brook	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam Fir-feather moss	Balsam fir	60	40-60 yrs.	10-15 m	60-100%
	Intolerant Hardwood	20			
	Windfall	20			

Remarks

- windfall prevalent

Land Use

Infrastructure	Present Land Use	Past Land Use
- Old French Road Traverses Unit		Logging

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	10 - KELLY LAKE RIDGE	105 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
30 % Elevations range between 69 m and 81 m. a.s.l.	Hilly	Glacial till and glacial till over bedrock	Sandy loam	Well-drained	Ferro-humic podzol

Water Bodies

Ponds	Lakes	Brooks	Lagoons
-	Shores of Kelly and Cavanagh Lakes	Gerard Brook Floodplain borders unit	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir - feather moss	Balsam fir	70	50	15 - 20 m	approx. 60 %
	Intolerant hardwood	20			
Balsam fir - bracken fir	White spruce	10			

Remarks

- Windfall prevalent
- Spruce budworm infestation prevalent

Land Use

Infrastructure	Present Land Use	Past Land Use
Old French Road traverses unit		

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	11A - CAVANAGH LAKE	306 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
Elevations vary between 70 m & 90 m a.s.l.	Hummocky	Glacial till	Fine sandy loam	Moderately well to imperfectly drained	Ferro-humic podzols and humo-ferric podzols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
-	Borders Cavanagh and Kelly Lakes	-	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir-feather moss	Balsam fir	80	All ages	10 -20 m	60 - 100 %
Balsam fir-wood fern	Intolerant hardwood	10			
	Spruce	10			

Remarks

- Prevalent windthrow
- Prevalent spruce budworm damage

Land Use

Infrastructure	Present Land Use	Past Land Use
Old French Road	Fishing at Cavanagh Lake	Logging

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	11B - CAVANAGH LAKE	248 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
20 - 30 % Elevations vary between 70 m & 90 m a.s.l.	Hummocky	Glacial till (local bogs and bedrock outcrops)	Fine sandy loam	Moderately well to imperfectly drained	Gleyed and Orthic ferro- humic podzols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
-	-	- Border Kennington Cove Brook	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir-feather moss	Balsam fir	80	All ages	10 - 20 m	60 - 100 %
	Intolerant hardwoods	10			
Balsam fir/wood fern	Spruce	10			

Remarks

- Prevalent windthrow
- Prevalent spruce budworm damage

Land Use

Infrastructure

Present Land Use

Past Land Use

- Logging

Wildlife

Mammals

Avifauna

Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	11 C - CAVANAGH LAKE	125 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
20 - 30 % Elevations vary between 70 m & 90 m a.s.l.	Hummocky	Glacial till	Sandy loam	Moderately well to imperfectly drained	Gleyed and Orthic ferro- humic podzols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
-	Encompasses Mathieson Lake	-	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir-feather moss	Balsam fir	80	All age	10 - 20 m	60 - 100 %
	Intolerant hardwood	10			
Balsam fir-wood fern	Spruce	10			

Remarks

- Prevalent windthrow

Land Use

Infrastructure	Present Land Use	Past Land Use
Old French Road		Logging

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	12 - LANDING COVE BROOK	300 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
10 - 20 % Elevations vary between 87 m & 48 m a.s.l.	Gently sloping to hummocky	Alluvial deposits over glacial till along floodplain Glacial till elsewhere	Fine sand to sandy loam	Moderately well to poorly drained	Gleyed ferro-humic podzols with gleysols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
- Several ponds occur along the channel of Landing Cove Brook	Borders Cavanagh Lake	Landing Cove Brook	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Alder-Meadow rue	Balsam fir	60	60 - 100 yrs	15 - 20 m	60 - 100 %
Black spruce-Sheep laurel	Black spruce/larch	20			
Balsam fir-feather moss	Intolerant Hardwoods	20			

Remarks

- Floodplain of Landing Cove Brook
- Many bogs present

Land Use

Infrastructure	Present Land Use	Past Land Use
		- Logging

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	13 - GERARD BROOK	242 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
15 - 20 % Elevations vary between 22 m & 66 m a.s.l.	Gently sloping to hummocky	Glacial till	Fine sandy loam	Well-drained	Ferro-humic - Humo-ferric podzols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
-	-	Gerard Brook	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir-Wood fern	Balsam fir	80	40 - 70 yrs	10 - 20 m	61 - 100 %
Balsam fir-Bracken fern	Intolerant hardwoods	20			
Balsam fir-Feather MOSS					

Remarks

- - Prevalent windthrow
- Prevalent spruce budworm damage

Land Use

Infrastructure

Present Land Use

Past Land Use

Old French Road

Logging

Wildlife

Mammals

Avifauna

Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
COASTAL	14 - SIMON WHITE POINT	268 ha

Physiography

Relief	Landform		Soil		
Slope (%)	• Topo	Origin	Texture	Drainage	Type
10 - 20 % Elevations rise from sea level to 36 m a.s.l.	Hummocky	Glacial till	Sandy loam	Well to moder- ately well drained	Ferro-humic podzol

Water Bodies

Ponds	Lakes	Brooks	Lagoons
Several present along coastline	-	Landing Cove Brook	Borders ocean

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir-Feather moss	Balsam fir	70	60 - 100 yrs	3 - 4 m	80 - 100 %
Cinquefoil-Old fields	White spruce	30			
Crowberry heath					

Remarks

- Disturbed by Park operations

Land Use

Infrastructure	Present Land Use	Past Land Use
Kennington Cove Road	Hiking	<ul style="list-style-type: none">- Logging- Farming- British encampments

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

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Special Features

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Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
COASTAL	15 - FORTRESS	115 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
5 - 15 % Elevations rise from sea level to 9 m a.s.l.	Gently sloping	Glacial till	Sandy loam	Well-drained	Ferro-humic podzols (disturbed)

Water Bodies

Ponds	Lakes	Brooks	Lagoons
Coastal ponds	-	-	- At Louisbourg Harbour

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Angelica Old Fields	No forest cover				

Remarks

- Includes Fortress site
- Erosion problems at Rochefort Point and other coastal bluffs

Land Use

Infrastructure	Present Land Use	Past Land Use
Fortress Site	Fortress restoration	<ul style="list-style-type: none">- Fortress- Farming- Logging

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
COASTAL	16 LOUISBOURG HARBOUR	270 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
10 - 15 % Elevations rise from sea level to 50 m a.s.l.	Gently sloping	Glacial till	Sandy loam	Moderately well to poorly drained	Ferro-humic podzols and gleysols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
●			Abuts Louisbourg Harbour

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir-feather moss	Balsam fir	60	40 - 60 yrs	5 - 15 m	60 - 100 %
Angelica-Old fields	White spruce	40			Open fields along coast- line.

Remarks

Land Use

Infrastructure	Present Land Use	Past Land Use
<ul style="list-style-type: none">- Park access road- Town access road	<ul style="list-style-type: none">- Park cutting and excavation	<ul style="list-style-type: none">- Farming- Logging

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

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Special Features

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Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
FOREST	17 - LOUISBOURG	1127 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
15 - 25 % Elevations range between 27 m & 76 m a.s.l.	Gently rolling	Glacial till	Fine sandy loam to sandy loam	Well-drained (seepage)	Ferro-humic podzols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
Local pondings along Landing Cove Brook	-	Landing Cove Brook Kenning Cove Brook	-

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir-feather moss	Balsam fir	70	All ages	To 20 m	Variable
	Intolerant hardwood	20			
Balsam fir-bracken fern	Spruce	10			

Remarks

- Largest ecosite within the Park

Land Use

Infrastructure	Present Land Use	Past Land Use
- Park headquarters - Park access road		Logging

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
COASTAL	18 - LIGHTHOUSE POINT	132 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
15 - 20 % Elevations rise from sea level to 36 m a.s.l.	Undulating	Shallow till over bedrock Bedrock	Sandy loam	Moderately well drained	Ferro-humic and humic podzols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
Minimal	No	No	Barrier Beach ponding

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Crowberry heath	Balsam fir (inland)	90	60 - 100 yrs	5 - 10 m	60 - 100 % (totally absent in barrens)
Balsam fir-feather moss	Intolerant hardwoods and spruce No treed vegetation along Heathlands	10		Less than 5 m along coastal belt	

Remarks

- Crowberry Heath dominates coastline

Land Use

Infrastructure	Present Land Use	Past Land Use
Lighthouse Point	<ul style="list-style-type: none">- Lighthouse + adjacent Park use- Viewing	<ul style="list-style-type: none">- Lighthouse- Railway

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
COASTAL	19 - LORRAINE	154 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
10 - 20 % Elevations range from sea level to 37 m a.s.l.	Rolling to hummocky	Shallow till over bedrock Bedrock out- crops	Sandy loam	Moderately well drained	Ferro-humic podzols with humic podzols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
- Pondings with local bogs			

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Balsam fir-feather moss	Balsam fir	90	60 - 100	5 - 15 m	60 - 100 %
Crowberry heath	White birch/larch (no forest cover along coast)	10			

Remarks

- Coastal heathlands with moss and lichen cover

Land Use

Infrastructure

Present Land Use

Past Land Use

Hicking trail along coast

Logging

Wildlife

Mammals

Avifauna

Ichthyofauna

Observations and Updating

Special Features

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
COASTAL	20 - HAMMER HEAD	144 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
10 - 20 % Elevations rise from sea level to 25 m a.s.l.	Hummocky	Bedrock Shallow till over bedrock	Sandy loam	Moderately well to imperfectly drained	Ferro-humic podzols with humic podzols

Water Bodies

Ponds	Lakes	Brooks	Lagoons
Within the coastal crowberry barrens	One unnamed lake		Abuts the ocean

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Crowberry heath Moss + lichens Balsam fir-Feather moss	Balsam fir (inland only)	100	60 - 100 yrs	5 - 10 m	80 - 100 %

Remarks

- Coastal heathlands with moss and lichen cover

Land Use

Infrastructure	Present Land Use	Past Land Use
	Coastal hiking trail	- Farming at Lorraine

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

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Special Features

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Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
WETLAND	21 A - FORTRESS BOG	24 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
Less than 5 % 0-12m. a.s.l.	Flat to slightly hummocky	Raised bog	H4 - H6 Von Post Scale	Poorly drained	(organic) mesisol

Water Bodies

Ponds	Lakes	Brooks	Lagoons
Yes	No	Drainage to coast	No

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Spagnum - ericaceous shrubs	Not applicable				

Remarks

Land Use

Infrastructure	Present Land Use	Past Land Use
		Old corduroy road uncovered by probes (circa 1750)

Wildlife

Mammals	Avifauna	Ichthyofauna

Observations and Updating

Special Features

- Bog species such as the orchids have aesthetic value.

Fortress of Louisbourg National Historic Park Ecological Data Bank

Ecosection	Ecosite	Unit Area
WETLAND	21 B - FORTRESS BOG	67 ha

Physiography

Relief	Landform		Soil		
Slope (%)	Topo	Origin	Texture	Drainage	Type
Less than 5 % elevation rise 0-12 m. a.s.l	Hummocky	Raised bog	h3 - h6 Von Post Scale	Poorly drained	Mesisol - fibrisol

Water Bodies

Ponds	Lakes	Brooks	Lagoons
Yes (except for largest, dry in summer)	No.	Drainage to coast	No

Vegetation Description

Vegetation Type	Forest Cover	%	Age	Height	Density
Sphagnum -ericaceous shrubs	Not applicable				

Remarks

Immediately adjacent Fortress

Land Use

Infrastructure

Present Land Use

Past Land Use

Wildlife

Mammals

Avifauna

Ichthyofauna

Foxholes prevalent in peat
above high water line

Observations and Updating

Special Features

