

# Mount Erskine Provincial Park Management Plan



July 2012

**Photo Credits:** Peggy Burfield, Charles Kahn, Jim Morris, Mel Turner, and the Salt Spring Island Conservancy

## Mount Erskine Provincial Park Management Plan

Approved by:

July 6, 2012

Date

Date

Don Cadden Regional Director, West Coast Region BC Parks

Bri Bthis

July 12, 2012

Brian Bawtinheimer Executive Director, Parks Planning and Management BC Parks

### Acceptance and Approval of the Management Plan by Partners

Pursuant to section 11 of the Lot 29 Lease Agreement between the Salt Spring Island Conservancy, the Nature Conservancy of Canada, and the Province, the lease partners accept and approve the Mount Erskine Provincial Park Management Plan as signed below:

Approved by:

Ashley Hilliard President Salt Spring Island Conservancy

26 Jhly 2011 Date

#### Acceptance and Approval of the Management Plan by Partners

Pursuant to section 11 of the Lot 29 Lease Agreement between the Salt Spring Island Conservancy, the Nature Conservancy of Canada, and the Province, the lease partners accept and approve the Mount Erskine Provincial Park Management Plan as signed below:

Approved by:

Tim Ennis Director of Land Stewardship Nature Conservancy of Canada

Sept. 29/2011

## Acknowledgements

The Mount Erskine Provincial Park Management Plan was a joint initiative between BC Parks, the Salt Spring Island Conservancy, and The Nature Conservancy of Canada. Peggy Burfield coordinated the management planning process with the assistance of the management planning team of Sharon Erickson, Brett Hudson, Jaime Hilbert, Joe Benning, Ron Quilter, and Andy Macdonald from the Ministry of Environment. Marlene Caskey from the Ministry of Forests, Lands, and Natural Resource Operations, Karen Hudson and Bob Wedden from the Salt Spring Island Conservancy, and Tim Ennis from The Nature Conservancy of Canada also assisted. All members of the management planning team contributed in the development of this management plan and assisted in the community consultation process.

Mel Turner and Jim Morris of PRK Services gathered background information and wrote the initial draft management plan. Harry Parsons and Shannon Macey-Carroll of Bufo Incorporated assisted in the stakeholder and community consultation process and revised the initial draft management plan based on direction from the management planning team. Peggy Burfield wrote the final version of the management plan. Doug Fetherston with BC Ministry of Forests, Lands, and Natural Resource Operations produced the zoning map for this management plan.

Numerous other people provided input and information for this management plan as members of the Salt Spring Island Management Planning Project Technical Advisory Committee. The advisory committee members contributed their local knowledge, expertise, and information. In addition, local and regional stakeholders and community members provided valuable input and comments in the development of this management plan.

## Table of Contents

Acknowledgements
Table of Contentsii
1.0 Introduction
1.1 Management Plan Purpose
1.2 Planning Area
1.3 Legislative Framework
1.4 Management Commitment/Agreements
1.5 Relationship with First Nations
1.6 Relationship with Communities and Stakeholders
1.7 Adjacent Patterns of Land Use
1.8 The Planning Process
2.0 Values and Roles of the Park10
2.1 Significance in the Parks and Protected Areas System10
2.2 Natural Heritage10
2.3 Cultural Heritage15
2.4 Recreation
2.5 Other Park Attributes
3.0 Management Direction
3.0 Management Direction18
3.0 Management Direction       18         3.1 Vision       18
<b>3.0 Management Direction</b> 18         3.1 Vision       18         3.2 Management Objectives, Issues, and Strategies       19
<b>3.0 Management Direction</b> 18         3.1 Vision       18         3.2 Management Objectives, Issues, and Strategies       19         3.3 Zoning       21
3.0 Management Direction       18         3.1 Vision       18         3.2 Management Objectives, Issues, and Strategies       19         3.3 Zoning       21         4.0 Plan Implementation       24
3.0 Management Direction       18         3.1 Vision       18         3.2 Management Objectives, Issues, and Strategies       19         3.3 Zoning       21         4.0 Plan Implementation       24         4.1 Policy Context       24
<b>3.0 Management Direction</b> 18         3.1 Vision       18         3.2 Management Objectives, Issues, and Strategies       19         3.3 Zoning       21 <b>4.0 Plan Implementation</b> 24         4.1 Policy Context.       24         4.2 Implementation       24
3.0 Management Direction183.1 Vision183.2 Management Objectives, Issues, and Strategies193.3 Zoning214.0 Plan Implementation244.1 Policy Context244.2 Implementation244.3 Adaptive Management24
3.0 Management Direction       18         3.1 Vision       18         3.2 Management Objectives, Issues, and Strategies       19         3.3 Zoning       21         4.0 Plan Implementation       24         4.1 Policy Context       24         4.2 Implementation       24         4.3 Adaptive Management       24         5.0 References       26
3.0 Management Direction       18         3.1 Vision       18         3.2 Management Objectives, Issues, and Strategies       19         3.3 Zoning       21         4.0 Plan Implementation       24         4.1 Policy Context       24         4.2 Implementation       24         4.3 Adaptive Management       24         6.0 Glossary       25
3.0 Management Direction       18         3.1 Vision       18         3.2 Management Objectives, Issues, and Strategies       19         3.3 Zoning       21         4.0 Plan Implementation       24         4.1 Policy Context       24         4.2 Implementation       24         4.3 Adaptive Management       24         5.0 References       26         6.0 Glossary       27         Appendix I: Mount Erskine Provincial Park Summary of Public Consultation       30
3.0 Management Direction       18         3.1 Vision       18         3.2 Management Objectives, Issues, and Strategies       19         3.3 Zoning       21         4.0 Plan Implementation       24         4.1 Policy Context       24         4.2 Implementation       24         4.3 Adaptive Management       24         5.0 References       26         6.0 Glossary       27         Appendix I: Mount Erskine Provincial Park Summary of Public Consultation       30         3.1 Vision       31

## List of Figures

Figure 1: View West From Mount Erskine Summit	1
Figure 2: Salt Spring Island Protected Areas Context Map (2010)	3
Figure 3: Mount Erskine Provincial Park	4
Figure 4: Salt Spring Island Management Planning Project Open House	9
Figure 5: Stuart Channel from Mount Erskine Summit	15
Figure 6: Mount Erskine Summit Memorial Bench	17
Figure 7: Hairy Manzanita	18
Figure 8: Mount Erskine Zoning Map	21
Figure 9: Mount Erskine View	25

## List of Tables

Table 1: Ecosystem Representation1	1
Table 2: Management Objectives, Issues, and Strategies1	
Table 3: Appropriate Use Table	2

## **1.0 Introduction**

## **1.1 Management Plan Purpose**

The purpose of this management plan is to provide strategic management direction for Mount Erskine Provincial Park in keeping with the *Park Act and* a lease agreement between BC Parks, the Salt Spring Island Conservancy, and The Nature Conservancy of Canada.

The primary objectives of the management plan are to:

- outline the role the park plays in British Columbia's (B.C.) protected areas system;
- identify management objectives and strategies for the protection of natural values, cultural values and outdoor recreation values;
- present a zoning plan; and,
- identify the role of First Nations, the local community and others in implementing the management plan.



Figure 1: View West From Mount Erskine Summit

### **1.2 Planning Area**

Mount Erskine Provincial Park is located on the west side of Salt Spring Island in the southern Gulf Islands off the east coast of Vancouver Island, about half way between Nanaimo and Victoria. The park contains a variety of features including the summit of Mount Erskine, Douglas-fir forests, moss covered rocky outcrops and bluffs, several species-at-risk, and numerous ecosystems-at-risk.

Hikers can access the park using one of two trails, each of which traverse private protected areas before entering the park. Hikers using these trails pass through mature Douglas-fir forests to a rocky summit where they are rewarded with wonderful views of Booth Bay, Stuart Channel, and Sansum Narrows.

The park is one of a group of provincial parks, provincial ecological reserves, regional parks, and private protected areas on Salt Spring Island. These protected areas include Ruckle Provincial Park, Mount Tuam Ecological Reserve, Mill Farm Regional Park Reserve, Burgoyne Bay Provincial Park, Mount Maxwell Ecological Reserve, Mount Maxwell Provincial Park, Manzanita Ridge Nature Reserve, Lower Mount Erskine Nature Reserve, and several community parks (Figure 2).

The campaign to establish Mount Erskine Provincial Park, led by the Salt Spring Island Conservancy, was supported by many individuals, local businesses, government agencies, and non-government organizations. These included the Islands Trust Fund, the Georgia Basin Action Plan, the Salt Spring Island Foundation, the Capital Regional District, the Salt Spring Island Park and Recreation Commission, The Nature Conservancy of Canada, The Land Conservancy of British Columbia, the Habitat Acquisition Trust, and the Friends of Saltspring Parks Society.



Figure 2: Salt Spring Island Protected Areas Context Map (2010)

Mount Erskine Provincial Park Management Plan July 2012

### **1.3 Legislative Framework**

The 107-hectare Mount Erskine Provincial Park was established as a Class A park on December 1, 2006 by an Order in Council under the *Park Act* (Figure 3). On December 20, 2006, the park was recognized as a Category 1 Class A park under Section 12(1) of the *Park Act* and in the spring of 2007, the park was legislated.

The main purpose of a Category 1 park is to ensure the preservation of the park's environment and ecology. Therefore, any development in the park is limited to what is necessary to ensure the preservation, for public enjoyment, of the atmosphere, environment, and ecology of the park.

Class A provincial parks are dedicated to the preservation of their natural environments for the inspiration, use, and enjoyment of the public.



Figure 3: Mount Erskine Provincial Park

## **1.4 Management Commitment/Agreements**

The park consists of the former private land (Lot 29) and two adjacent Crown land parcels (Lot 28 and the western half of Lot 27).

Prior to the establishment of Mount Erskine Provincial Park, the private land parcel (Lot 29) was purchased through a partnership between the Salt Spring Island Conservancy (60%), The Nature Conservancy of Canada (20%) with funding from the British Columbia Trust for Public Lands, and the provincial government (20%). The Salt Spring Island community, at large, supported the purchase of Lot 29 and was instrumental in helping to raise funds to acquire and protect this property.

The Salt Spring Island Conservancy and The Nature Conservancy of Canada have leased their interests in Lot 29 to the Government of British Columbia for 99 years commencing October 1, 2005. The lease states that the land must be established as a Class A Category 1 provincial park.

The Salt Spring Island Conservancy and The Nature Conservancy of Canada have the exclusive option to terminate the lease in the event of a material breach of the lease conditions by the Province.

Some of the lease agreement obligations respecting Lot 29 that the Province must abide by are:

#### The Province must:

• Maintain the land as a Category 1, Class A provincial park.

#### The Province must not:

- assign rights without permission;
- cut down any trees or other vegetation on the land except in conformity with the lease and the approved management plan and except as may be required to eliminate immediate hazards to public health and safety;
- commit or cause or allow to be committed any wilful or voluntary waste, spoil or destruction on the land or do on the land anything that may be or become a nuisance or annoyance to any owner or occupier of land in the vicinity of the land;
- permit any camping on the land;
- permit any campfires, recreational fires, fire pits or woodstoves;
- layout or construct any roads on the land;
- erect any buildings, fixtures or improvements of any kind that would be inconsistent with the use of the land as a Category 1, Class A provincial park;
- permit the possession or discharge of any weapon or firearm on the land;

- permit any motorized vehicles, including all-terrain vehicles, except in cases of emergency;
- permit any hunting, fishing, gathering or grazing of domestic animals but for the exercise of traditional activities of First Nations;
- erect or permit the erection of any sign on the land containing Salt Spring Island Conservancy and/or Nature Conservancy of Canada names without prior written approval. The Province must remove any signs not conforming to this section at Salt Spring Island Conservancy and/or Nature Conservancy of Canada direction and at their sole cost;
- permit under the *Park Act*, including without limitation under section 9.1, any resort or tourism development (other than viewing or hiking trails) on the land; or;
- permit under the *Park Act*, including without limitation under section 33, any resource extraction from, on, or under the land.

### **1.5 Relationship with First Nations**

The Province and First Nations' governments are working towards a new relationship based on respect, recognition, and accommodation of aboriginal title and rights. In addition, the Government of Canada and the Province are in treaty negotiations with the Hul'qumi'num Treaty Group, whose member nations have interests in the management of Mount Erskine Provincial Park. As such, any future formal agreement reached with First Nations with respect to the management of the park may require changes to this management plan.

## **1.6 Relationship with Communities and Stakeholders**

In addition to BC Parks, several other agencies have interests in and around the park including:

- BC Ministry responsible for archaeology has interest in cultural heritage and archaeological sites found in the park.
- BC Ministry responsible for wildfire management has interest in wildfire management and response on Salt Spring Island.
- Capital Regional District Parks Department and the Capital Regional District Salt Spring Island Recreation Commission manage a number of community and regional parks and reserves on Salt Spring Island, and have developed a regional park strategy. Adjacent to Mount Erskine Provincial Park there are three community reserves, which have potential to provide trail staging areas, trail access, park information, and parking. The Mount Erskine Upper Access Park Reserve, on the east side of the park, provides an access trail into the park.
- Fisheries and Oceans Canada has interest on the anadromous fish habitat found in the 100 metres of Maxwell Creek that traverse the southwest corner of the park.

- Ganges Fire/Rescue Department has interest in fire response on Salt Spring Island as well as public safety.
- Islands Trust Fund owns and manages the 22-hectare Lower Mount Erskine Nature Reserve adjacent to the northern boundary of Mount Erskine Provincial Park. A trail through this reserve provides access into the park from the north.
- Islands Trust is the managing government body responsible for land use planning, policy development, and the overall protection of the Gulf Islands, including Salt Spring Island. Zoning, regulations, and other land-related issues are also part of their mandate and are discussed in the Salt Spring Island Official Community Plan. The Salt Spring Island Official Community Plan has established policies on community well capture zones, unstable slopes, and soil erosion hazards. These policies reference the Mount Erskine area as a substantial portion of the western portion of the park has been identified as having high instability and slope erosion areas.
- The Nature Conservancy of Canada is a partner in the purchase of Lot 29 within the park, and along with the Salt Spring Island Conservancy, has a lease agreement with the Province.
- The Salt Spring Island Conservancy is a partner in the purchase of Lot 29 within the park, and along with The Nature Conservancy of Canada, has a lease agreement with the Province. In addition, the Salt Spring Island Conservancy owns and manages the Manzanita Ridge Nature Reserve adjacent to the south boundary of the park.

Several other key stakeholder groups have an interest in the park including:

- Private Land Owners have interest in any impacts to their property from park visitors, forest fires, and park development.
- Friends of Saltspring Parks Society (FOSP) has interest in ensuring the protection of the park's natural values and the continuance of low impact recreational activities.
- Salt Spring Island Trail and Nature Club has interest in providing trails for walkers and hikers on Salt Spring Island, including trails in the park.

## **1.7 Adjacent Patterns of Land Use**

Mount Erskine Provincial Park is surrounded by privately owned lands and protected areas managed by other agencies including the Islands Trust Fund, Capital Regional District, and Salt Spring Island Conservancy (Figure 2).

The northern park boundary borders on the 22-hectare Lower Mount Erskine Nature Reserve owned by the Islands Trust Fund (covenanted by The Nature Conservancy of Canada). The Jack Fisher Trail from Collins Road goes through the reserve into the park. In addition, four parcels of private land border the northern boundary of the park. The southern boundary of the park borders the 20-hectare Manzanita Ridge Nature Reserve owned by the Salt Spring Island Conservancy. A BC Hydro right-of-way runs through the reserve close to the southern boundary of the park. Private property also borders the southern boundary.

The western boundary borders the 0.75 hectare Mount Erskine Drive Linear Park Reserve owned by the Capital Regional District. This long thin park extends from Collins Road to the northern boundary of the park. From Collins Road south, two privately owned properties border the park.

The eastern boundary borders the Rainbow Grove subdivision Phase II. This land has been logged, however as of 2011 there has been no residential development close to the park. In addition, the 0.06 hectare Mount Erskine Upper Access Park Reserve borders the park's eastern boundary and includes a short trail, which is used as access into the park.

## 1.8 The Planning Process

This management plan was developed between the summer of 2006 and spring 2012. It was developed concurrently with the management plans for the five other provincial protected areas on Salt Spring Island: Burgoyne Bay, Mount Maxwell, and Ruckle provincial parks, and Mount Maxwell and Mount Tuam ecological reserves. Each provincial protected area on Salt Spring Island has its own special features, values, and roles; however, they all share common characteristics and management needs. A combined management planning process provided BC Parks with the benefit of effectively understanding Salt Spring Island's unique characteristics and efficiently provided opportunities for public involvement in the management planning process.

In the winter of 2007, a technical advisory committee was formed to assist BC Parks with the Salt Spring Island Protected Areas Management Planning project. The technical advisory committee included representatives from the Salt Spring Island Conservancy, The Nature Conservancy of Canada, BC Parks, the Islands Trust, the Capital Regional District, The Land Conservancy of British Columbia, The Nature Trust of British Columbia, the Friends of Saltspring Island Parks Society and the planning consultants working on the project. To assist BC Parks in preparing the management planning documents, a series of technical advisory committee meetings were held.

A series of meetings, focus group discussions, and field trips with partners, stakeholders, and individuals expressing an interest in Salt Spring Island's provincial parks and ecological reserves and the BC Parks' management planning process occurred during the summer and fall of 2007. Open houses and public meetings were held on Salt Spring Island in July 2007 and January 2008. In addition, information on the protected areas was posted on the BC Parks website. The information gathered from the public consultation was used in the development of the draft management plans. Appendix I provides a summary of what the public identified as Mount Erskine Provincial Park's key values, activities, and management issues.

In June 2009, the draft Mount Erskine Provincial Park Management Plan was given to the partner groups, the Salt Spring Island Conservancy and The Nature Conservancy of Canada, for their review, comment, and discussion. Upon completion of revisions, the draft Mount Erskine Provincial Park Management Plan, along with the five other Salt Spring Island protected area draft management plans, was posted on the BC Parks website for public review and comment. In addition, public meetings took place on Salt Spring Island in October 2009. These meetings included an open house and a public forum where the public had the opportunity to discuss the draft management plans and provide comments. The information from this stage of the public process was considered in the development of the final management plans.

In spring 2011, the final draft of the Mount Erskine Provincial Park Management Plan was given to the partner groups for their acceptance and approval.

The park is within the traditional territory of the Chemainus First Nation, Cowichan Tribes, Halalt First Nation, Lake Cowichan First Nation, Lyackson First Nation, and Penelakut First Nation (all members of the Hul'qumi'num Treaty Group) and the Tsawwassen First Nation. BC Parks invited all the First Nations to participate in the Salt Spring Island management planning process.



Figure 4: Salt Spring Island Management Planning Project Open House

## 2.0 Values and Roles of the Park

## 2.1 Significance in the Parks and Protected Areas System

Mount Erskine Provincial Park is significant to B.C.'s parks and protected areas system because:

- it protects a series of coastal ecosystems, which have very low representation in the system;
- it provides a critical contribution to the protection of seven red-listed (70% of the park area) and three blue-listed ecosystems and the park provides habitat for several ecosystems-at-risk and species-at-risk, including nesting habitat for the red-listed peregrine falcon; and,
- it protects public recreation values in a region where the majority of the land is privately owned.

The group of provincial parks and protected areas on Salt Spring Island is important because as a group they protect 17.2% of the provincially protected red-listed Coastal Douglas-fir moist maritime biogeoclimatic subzone (CDFmm), protect twelve red-listed ecosystems, and provide habitat for several species-at-risk. In addition, they provide protection and interpretation of the island's cultural values, including First Nations and farming history; and the provincial parks provide low-impact recreational opportunities for Salt Spring Island residents and visitors.

## 2.2 Natural Heritage

The information in this section comes primarily from the *Salt Spring Island Parks and Ecological Reserves – Terrestrial Ecosystem Mapping and Conservation Assessment* completed by Madrone Environmental Services in 2007. Definitions for technical terms are summarized in the glossary in Section 6.0.

### **Ecosystem Representation**

As a group, the provincial protected areas on Salt Spring Island, including Mount Erskine Provincial Park, play an important role in protecting significant representative ecosystems in the Southern Gulf Island Ecosection. The provincial protected areas on Salt Spring Island protect 1,678 hectares of the Coastal Douglas-fir moist maritime (CDFmm) biogeoclimatic subzone, representing 17.2% of the total CDFmm protected provincially. In addition, they also protect 487 hectares of the Coastal Western Hemlock, very dry maritime subzone, eastern variant (CWHxm1) representing 4.89% of the total CWHxm1 protected provincially (see Table 1).

The most prominent biogeoclimatic subzone found in Mount Erskine Provincial Park is the Coastal Western Hemlock, very dry maritime subzone, eastern variant. All but the western most side of the park is within the CWHxm1 biogeoclimatic subzone. It is significant that the park protects 93 hectares of the CWHxm1 since only 2.29% of this biogeoclimatic subzone has been protected provincially in BC Parks and National Parks of Canada.

#### Table 1: Ecosystem Representation

Ecoprovinco	Coorgia Depression		
Ecoprovince	Georgia Depression		
Ecoregion	Georgia Puget Basin		
Ecosection	Southern Gulf Islands		
Biogeoclimatic Subzone	Coastal Douglas-Fir moist maritime	(CDFmm)	
	Coastal Western Hemlock xeric ver subzone eastern variant (CWHxm1)		me
Representation: Area (hectares)		CDFmm	CWHxm1
Total biogeoclimatic subzone area wi	ithin B.C.	245,313	435,310
Total biogeoclimatic subzone area in B.C. protected within the parks and protected areas system (including BC Parks and National Parks of Canada)		9,783	9,985
Total biogeoclimatic subzone area protected within the six Salt Spring Island provincial parks and ecological reserves		1,678	487
Total biogeoclimatic subzone area protected within Mount Erskine Provincial Park		14	93
Representation: Proportion (%) of area		CDFmm	CWHxm1
% of total biogeoclimatic subzone area protected within B.C. (including BC Parks and Parks Canada)		4.0%	2.29%
% of B.C.'s total biogeoclimatic subzone area protected within the six Salt Spring Island provincial parks and ecological reserves		0.7%	0.16%
% of B.C.'s total protected biogeoclimatic subzone area within the six Salt Spring Island provincial parks and ecological reserves		17.2%	4.89%
% of B.C.'s total biogeoclimatic subzone area protected within Mount Erskine Provincial Park		0.006%	0.02%
% of B.C.'s total protected biogeoclimatic subzone area within Mount Erskine Provincial Park		0.14%	0.93%
% of Salt Spring Island provincial parks and ecological reserves total biogeoclimatic subzone area protected with Mount Erskine Provincial Park		0.8%	19%

#### **Ecosystems and Vegetation**

Mount Erskine Provincial Park supports a series of ecosystems that have very restricted distribution provincially. With a Mediterranean type climate and a long growing season, the southern Gulf Islands and the south-eastern part of Vancouver Island form a unique ecological region in Canada. This ecological region supports many rare ecosystems, which are at risk because of intense human pressure.

The predominant ecosystems found and mapped in the park are the red-listed CWHxm1 western hemlock - Douglas-fir / Oregon beaked-moss and the blue-listed CWHxm1 Douglas-fir – western hemlock / salal Dry Maritime.

At the summit and on steep, rocky south aspects and very shallow soils the rare arbutus / hairy manzanita ecosystem is found. This ecosystem has a high likelihood of containing rare vascular and non-vascular plant species as well as rare invertebrates and vertebrates. Stonecrop, various drought-tolerant mosses, and lichens are common ground cover. Shore pine, a coastal variety of lodgepole pine, is found on the highest extremely dry sites typically in combination with Douglas-fir. In addition, these dry sites contain drought tolerant species including kinnickinnick, various moss and lichen species, and bare rock outcrops.

Below the summit and the upper slopes, where the soil depth increases and the vegetation cover is denser, higher productive ecosystems are found. Most of the ecosystems, particularly along the transition between the two-biogeoclimatic subzones, support similar flora, with Douglas-fir dominating the canopy and salal (typically on well-drained sites) and oceanspray in the understory along with step moss. Other common understory species include sword fern, salmonberry (in riparian sites), and tall Oregon grape. The area in the park associated with Maxwell Creek supports western redcedar, with some grand fir, along with mixed red alder and bigleaf maples.

All ecosystems found in the park are shown on the map in Appendix II along with a list of each polygon and its conservation information (Appendix III). Appendix IV provides a description of each ecosystem found in the Salt Spring Island Parks and Ecological Reserves – Terrestrial Ecosystem Mapping and Conservation Assessment and its status according to the British Columbia Conservation Data Centre (2009).

The park's ecosystems have all been assigned a conservation ranking (see Appendix II). The conservation ranking provides objective and quantitative rankings of the park's ecosystems with respect to:

- their rarity;
- the occurrence of rare elements;
- their sensitivity to disturbance;
- their resilience;
- the level of fragmentation;
- the age of the stand; and,
- the presence of invasive species.

The ecosystems found in the park given a high to very high conservation ranking are:

- the older undisturbed age class forests;
- the sites supporting communities of arbutus trees and hairy manzanita plants;
- the steep cliffs;
- the ecosystems supported by very shallow soils;
- the ecosystems supported by herbaceous meadows; and,
- the ecosystems supported by rock outcrops.

The remaining younger forest ecosystems are rated as moderate. These young forested areas are examples of ecosystems-at-risk, and, as they mature and recover from disturbance and logging, their conservation ranking will increase since mature forests are more ecologically diverse than younger forests. In addition, the harvested areas included in and bordering the eastern section of the park reduces the rankings for these areas due to the effects of disturbance and fragmentation.

In 2005, Dr. Adolph Ceska and Oluna Ceska completed a plant survey in the park, a list of the plants they recorded is found in Appendix V. The Ceskas did not record any red-listed or blue-listed species at that time. The Conservation Data Centre has records of two patches of 40 seedlings of the red-listed California hedge-parsley on Mount Erskine located on open rock outcrops on the steep slopes above the ocean. In June 2009, a British Columbia Conservation Data Centre sponsored survey team identified a small population of small-flowered tonella in the park.

Relatively few invasive plant species have been observed in the park. The rugged terrain and typically low productivity forests minimize the introduction of invasive species. Invasive grasses were observed on grassy rock outcrops and on very small areas in the meadows to the northeast of the summit. Nearer to the road and at the lower elevations, invasive species were more abundant.

#### Wildlife Species and Habitats

The ecosystems that exist in the park provide potential habitat for many species-at-risk. In particular, the rocky slopes and open meadows provide habitat for the red-listed Sharp-tailed Snake and riparian areas for the Northern Red-legged Frog. Maxwell Creek is habitat for the blue-listed Cutthroat Trout and the red-listed Peregrine Falcon was recorded successfully nesting on the cliffs of Mount Erskine in 2009.

Much of the park supports adequate browse species for deer. Indications of birds feeding on insects and other invertebrates are also widespread on dry sites and grouse sign was noted in the areas where shore pine is the dominant species. There is moderate bat roosting potential in the park. Snags and a moderate amount of small-sized coarse woody debris were found in the Douglas-fir - shore pine forest along the undulating ridge top. The woody debris could provide habitat for several species of invertebrates and insects. The mature forest along the northern slopes of the park has previously been noted as having an active Northern Flicker cavity, and has high potential for wildlife use.

#### Level of Human Disturbances

Development adjacent to the park has disturbed some of the ecosystems along the western flank of the property by eliminating buffer areas that would reduce potential impact on the park. To the east, within the park boundary, there are relatively large logged areas, which may increase invasive species distribution. To the south, developed areas are several hundred metres away from the park boundary, providing some buffering from disturbance. Some historic fire scars are evident on mature Douglas-fir trees in the forest below the rocky crest.

The steep terrain of the park influences the level of recreational disturbance. The challenging access and lack of facilities also limits the number of visitors and limits their activities to wildlife watching and hiking. Park trails constitute the main anthropogenic feature within the park. Some trails are showing signs of heavy erosion as people widen the trail to avoid wet or muddy spots.



#### Figure 5: Stuart Channel from Mount Erskine Summit

#### 2.3 Cultural Heritage

#### **First Nations**

The park is within the traditional territory of the Chemainus First Nation, Cowichan Tribes, the Halalt First Nation, the Lake Cowichan First Nation, the Lyackson First Nation, and the Penelakut First Nation (all members of the Hul'qumi'num Treaty Group) and the Tsawwassen First Nation. The west side of Salt Spring Island, from Burgoyne Bay to Vesuvius Bay, was part of the traditional summer gathering area for the Cowichan Tribes. There are no recorded archaeological sites in the park.

#### **European Settlers**

Europeans first settled the area in the mid-1800s. Mount Erskine was named around 1859 by Captain George Richards of the British Royal Navy and labelled as such on British Admiralty Chart 2840, 1861. The name honours Admiral Elphinstone Erskine, who was then Commanderin-Chief of the North American Squadron. Captain Richards named several of the mountains in the area while conducting surveys for the British Admiralty along the west coast of Canada from 1858 – 1860. Early recorded settlers to this isolated part of Salt Spring Island included many such as Charlie and Albert Toynbee, uncles of well-known islanders Dick, Manson, and Tom Toynbee. Charlie and Albert are thought to have lived in a cabin on the southeast edge of the park, not far from the end of present-day Toynbee Road.

### 2.4 Recreation

The park is relatively isolated, and due to its rugged terrain, lack of road access and surrounding private lands. The amount of recreational use currently in the park is not known as there are no accurate recreation use counts existing beyond a written log at the summit of Mount Erskine.

Tourism is a major industry on Salt Spring Island and there is a desire by the local government and Chamber of Commerce to offer a variety of recreational opportunities to island residents and visitors. The park is advertised as one of the many hiking areas on Salt Spring Island. Although the park's economic contribution is limited, it does support the Salt Spring Island local tourism economy by providing a destination point for island visitors and enhancing the environmental quality of the island.

It is known that the park is popular with a few local hikers along with island conservation and nature groups. Open wildflower meadows, old growth stands, rocky slopes, riparian areas, and a panoramic summit offer excellent photography, nature appreciation, and wildlife viewing opportunities.

Horseback riding, mountain biking, dirt bike riding, and ATV riding have occurred in the Mount Erskine area, however, are prohibited on the adjacent protected lands. These activities are not consistent with the conservation vision of Mount Erskine Provincial Park and its adjacent protected lands, as these types of activities on trails not designed for them endanger the natural values and sensitive ecosystems.

There may be a low level of fishing activity on Maxwell Creek. This activity is not considered to be consistent with the conservation vision for the park.

Access to Mount Erskine Provincial Park is currently on several trails. These trails were not constructed to BC Parks standards and they all pass through other government jurisdiction or non-government land. The local hiking group has erected some signs, which includes trail names (named by local recreationists) and directional arrows.

 North Access: Collins Road provides access to a trail to enter the park from the north. On Collins Road, a small parking area lies within the road's right-of-way. A signed trailhead leads hikers to the steep Jack Fisher Trail, which runs through Islands Trust Fund's Lower Mount Erskine Nature Reserve. At the boundary of the park, the Jack Fisher Trail becomes the Mount Erskine Trail. This trail has several steep sections, which are experiencing heavy erosion. Lassies Trail leads off the Mount Erskine Trail at the north boundary of the park and provides an alternate route to the Mount Erskine summit. • East Access: Dodd's Trail provides access to the park from the east side through the Capital Regional District's Mount Erskine Upper Access Park Reserve, which can be found at the end of Trustees Trail off Rainbow Road in the Rainbow Grove subdivision.

Two trail accessible natural viewpoints are located in the park – one at the summit and another at a lower elevation off the Mount Erskine Trail. Both viewpoints offer outstanding views down to Sansum Narrows, over to Vancouver Island and north towards Nanaimo.

Other facilities in the park include the following:

- A wooden memorial bench constructed and installed at the summit of Mount Erskine by a group of local residents to thank the many people who contributed to the campaign to acquire the land;
- A concrete water bowl at the summit of Mount Erskine constructed by a local resident as a tribute to his pet dog, Rosie; and,
- A capsule containing a logbook and pen is located under a rock near the water bowl where visitors can write their thoughts and comments.



Figure 6: Mount Erskine Summit Memorial Bench

### 2.5 Other Park Attributes

There is potential for long-term scientific research associated with the park's unique ecosystems and the effects of climate change on these ecosystems. These studies could include projects such as the monitoring of the park's relatively undisturbed natural environment, and monitoring of the impacts to the park's values from trail presence and use.

## 3.0 Management Direction

Management direction for Mount Erskine Provincial Park is guided by the park's status as a Category 1, Class A park and the lease agreement for Lot 29.

## 3.1 Vision

Mount Erskine Provincial Park conserves and protects part of the southern Gulf Island's unique natural environment and the associated ecosystems and speciesat-risk. It supports research on the best park management practices to assist in the preservation of ecosystems both within and adjacent to the park. In addition, it provides low-impact recreation activities, including hiking and nature viewing, which are compatible with ecosystem protection.



Figure 7: Hairy Manzanita

## 3.2 Management Objectives, Issues, and Strategies

Table 2 outlines the management objectives, issues, and strategies to address them.

#### Table 2: Management Objectives, Issues, and Strategies

Objectives	lssues	Strategies		
CONSERVE AND PROTECT NATURAL ECOLOGICAL VALUES				
To maintain the natural diversity of ecosystems in the park, and to protect the natural values.	Some types of recreational use are negatively impacting the sensitive ecosystems through trail erosion, braiding of trails and off-trail use.	<ul> <li>Conduct an impact assessment on selected park trails identified in the public safety assessment. If unacceptable impacts are identified, implement actions to mitigate those impacts (e.g., repair, relocate, or close trails).</li> <li>Increase monitoring to limit inappropriate impacts on natural values.</li> <li>Do not allow horseback riding, mountain biking, cycling and motorized vehicle use (dirt bike and ATVs).</li> <li>Do not allow hunting.</li> </ul>		
		<ul> <li>Recommend a regulatory change to close the park to fishing.</li> </ul>		
	Unrecorded species-at-risk are likely found in the park but there is a lack of information about the presence and location of these species.	<ul> <li>Encourage local groups, colleges, and universities to participate in species-at-risk research and vegetation management initiatives.</li> </ul>		
	Sensitive ecosystems are threatened by the introduction and impacts of invasive species.	<ul> <li>Assess the presence of invasive plant species.</li> <li>Collaborate with Invasive Species Council of BC, other agencies, stakeholders and the public on reduction and/or irradiation of invasive species.</li> <li>Monitor the impacts and the results of management</li> </ul>		
	There is a threat of a severe forest fire from unnatural forest fuel loads in the park and in adjacent properties.	<ul> <li>controls.</li> <li>Develop a fuel management plan that defines long-term fuel management objections and actions.</li> </ul>		
	CLIMATE CHANGE			
To gain a better understanding of the effects of climate change on the park's natural values.	Species-at-risk and ecosystems-at-risk may be negatively impacted by climate change related variations to precipitation and temperature.	• Encourage ongoing research on species and ecosystems to get a better understanding of the effects of climate change on these sensitive ecosystems.		

Objectives	Issues	Strategies
CONSERVE. PROT	ECT AND RESPECT CULTUR	AL HERITAGE VALUES
To conserve, protect, and respect cultural values and to maintain First Nation's social, ceremonial, and cultural uses. <b>RECREATION</b> To provide for safe and low-impact recreational activities.	Limited knowledge of the park's cultural values, including archaeological sites and First Nations' cultural uses, makes it difficult to protect these values. The location of trails and the standard of trail construction is reducing the quality of the visitor experience and negatively affecting the	<ul> <li>Continue building relationships with First Nations to assist in the protection of archaeological sites and their cultural use of the park.</li> <li>Ensue management direction is developed for any new archaeological sites or cultural values identified.</li> <li>Conduct a public safety assessment on existing trails. If required, implement actions to mitigate risk (e.g., repair, relocate, or close trails).</li> <li>Construct any relocated trails in a manner that discourages horse, bicycle and motorized vehicle use.</li> </ul>
	park's values (e.g., trail braiding and erosion). In consideration of the steep and rocky terrain, the lack of public safety information along trails and at viewpoints may pose a risk to park visitors. Unsecure public access into the park from neighbouring reserve and private land properties limits the recreational opportunities available in the park.	<ul> <li>Install signs to provide public safety awareness along trails and at viewpoints.</li> <li>Work closely with local agencies and stakeholder groups to determine trail maintenance regime.</li> <li>Establish a trail access agreement with the owners of adjacent protected lands, the Salt Spring Island Conservancy, Capital Regional District Parks, and the Islands Trust Fund.</li> <li>Secure access into the park from Manzanita Ridge Nature Reserve at the southeast corner of the park by either: <ul> <li>relocating the trail onto Manzanita Ridge and/or Mount Erskine Provincial Park;</li> <li>negotiating a Statutory Right-of-Way agreement with the owner of the east half of Lot 27 respecting trail access; or,</li> <li>at the time of subdivision of Lot 27, encouraging park dedication of the lands containing the trail.</li> </ul> </li> <li>Evaluate future commercial recreation proposals (e.g., guided hikes) to ensure they will have minimal impacts on park values and other users.</li> <li>Prohibit camping and accommodation buildings or huts.</li> </ul>
RELATIONSHIP WI	TH PARTNERS, STAKEHOLI	
To maintain a relationship with partners, stakeholders and neighbours	Collaboration with partner groups (e.g. Salt Spring Island Conservancy and The Nature Conservancy of Canada) will improve the protection of the park's values. Collaboration with other agencies and groups for the management of the park and surrounding properties will improve the protection of the park's values.	<ul> <li>Meet annually with the Salt Spring Island Conservancy and The Nature Conservancy of Canada to discuss the management of the park.</li> <li>Establish a protocol with the Salt Spring Island Conservancy and The Nature Conservancy of Canada for their review and comment on any park use permit applications regarding Lot 29 to ensure the lease agreement provisions are met.</li> <li>Work collaboratively with other agencies and stakeholders to manage provincial and other protected lands in the area.</li> </ul>

### 3.3 Zoning

BC Parks uses zoning to assist in the management of protected areas. Zoning divides a park into logical units to apply consistent management for conservation, recreation, and cultural values. The zones reflect the intended land use, existing patterns of use, the degree of human use desired, and the level of management and development required. Mount Erskine Provincial Park is zoned entirely as a **Special Feature Zone.** This zone is 107 hectares or 100% of the park (Figure 8).

The objective of this Special Feature Zone is to conserve and protect several species-at-risk, ecosystems-at-risk, and the summit of Mount Erskine with its sensitive moss covered rocky outcrops and bluffs. Management direction will ensure that any recreational activities do not adversely affect the natural values in this zone. Recreational activities will be restricted to hiking and nature viewing from a few designated trails. Table 3 lists existing and potential future uses in Mount Erskine Provincial Park. However, this is not an exhaustive list of uses that may be considered in this protected area.



Figure 8: Mount Erskine Zoning Map

Table 3 is provided to summarize the uses, which the management planning process has confirmed are appropriate, and those, which are <u>not</u> appropriate in Mount Erskine Provincial Park. The table must be reviewed in conjunction with the other sections of the management plan.

Activities	Appropriate in Mount Erskine Provincial Park	Comments
Camping	N	
Commercial Recreation Opportunities (facilities based)	Ν	
Commercial Recreation Opportunities (no facilities)	Y	BC Parks' authorization required Guided hiking only
Exotic and/or Non Exotic Pack Animal Use	N	
Filming (commercial)	Y	BC Parks' authorization required
Fishing	N	
Fish Stocking and Enhancement	N	
Hang gliding or Paragliding	N	
Heli-hiking	N	
Horseback Riding	N	
Hunting or Guide outfitting	N	
Invasive Species Control	Y	BC Parks' authorization required
Mechanized Off-road and Trail Access non-motorized (e.g., mountain biking)	N	
Motorized Off-road and Trail Access (including snowmobiles, ATVs and dirt bikes)	Ν	
Rock Climbing	N	
Scientific Research (manipulative activities)	Y	BC Parks' authorization required
Scientific Research (specimen collection)	Y	BC Parks' authorization required

#### Table 3: Appropriate Use Table

Facilities	Appropriate in Mount Erskine Provincial Park	Comments
Administrative Buildings and Compounds	N	
Backcountry Huts and Shelters	N	
Campsites (other)	N	
Picnic Areas	N	
Communication Sites	N	
Fixed Roof Accommodation	N	
Interpretation and Information Buildings	N	
Roads and Parking Lots	N	
Utility Corridors (power/transmission lines and other rights-of-way)	Ν	
Water Control Structures	N	

	Legend			
N	Not an appropriate use in this zone	<ul> <li>It has been confirmed during the management planning process that this use is not appropriate in this zone.</li> <li>This may be an existing use, which the management planning process has determined is no longer an appropriate use in this zone. The management plan details strategies for addressing this inappropriate use (e.g., phasing out, closing).</li> </ul>		
Y	<u>May be</u> an appropriate use in this zone	<ul> <li>This indicates that some degree or scale of this use may be appropriate.</li> <li>For existing uses, the management plan will provide guidance on the appropriate level or scale of this use (e.g., direction to reduce, restrict or increase the current level of this activity) and may address specific restrictions or enhancements (e.g., capacity, appropriate sites, designated trails, purposes, party size, time of year, etc.).</li> <li>For new or expanded uses, this does not constitute approval. This indicates that the use may be considered for further evaluation and possible approval (e.g., park use permit adjudication, completion of a review as part of the BC Parks' Impact Assessment Process). In some cases, the appropriateness may not be confirmed until further assessments are completed.</li> </ul>		
Definition of BC Parks' authorizations• Park Use Permit • Contract • Volunteer Agreement • Stewardship Agreement				

## 4.0 Plan Implementation

## **4.1 Policy Context**

In addition to any protected area specific policies highlighted in the management plan, there are numerous other provincial/regional policies and guidelines that will be considered during management plan implementation. This includes items such as BC Parks' policies on conservation, permitting, and impact assessment processes.

## **4.2 Implementation**

The management of Mount Erskine Provincial Park will conform to the directions set forth in this management plan and the lease agreement with the Salt Spring Island Conservancy and The Nature Conservancy of Canada. The implementation of the outlined management strategies is subject to the availability of resources. As capacity allows, BC Parks will facilitate discussions with First Nations and stakeholders to identify and determine how to implement management strategies. Trail repair, monitoring of recreational use, and development and installation of signage, will require close cooperation and involvement with the community, First Nations, partner groups, and stakeholders to ensure that the park is well managed, and the park's values are maintained and protected.

BC Parks will continue to coordinate the management of Mount Erskine Provincial Park with the Salt Spring Island Conservancy, The Nature Conservancy of Canada, The Land Conservancy of B.C., The Nature Trust of B.C., Islands Trust, the Capital Regional District, First Nations and other stakeholders.

## 4.3 Adaptive Management

In order to ensure the management of Mount Erskine Provincial Park remains relevant and effective, an adaptive management approach will be used. Adaptive management involves a five-step process of planning, action, monitoring, evaluation, and revision of the management plan to reflect lessons learned, changing circumstances, and/or objectives achieved. Adaptive management is flexible, collaborative, and responsive to public input.

The management plan will be reviewed as required by BC Parks, the Salt Spring Island Conservancy, and The Nature Conservancy of Canada. A review of the management plan may be triggered by a significant change in circumstances (e.g., a natural disaster, major environmental change, emerging management issues, or discovery of a major new archaeological site), and not by a specific time period. A management plan review identifies any necessary updates to the management plan that are required to keep management direction current and relevant; correct the intent of a policy statement; address some error or omission; and/or, address a new proposal. Any updates or changes to the content of the management plan will be addressed through a formal management plan amendment process. The amendment process will include an opportunity for public input.



Figure 9: Mount Erskine View

## 5.0 References

British Columbia Conservation Data Centre (BC CDC). 2009. Retrieved April 2009, from <u>http://www.env.gov.bc.ca/cdc/</u>.

Madrone Environmental Services Ltd. 2007. Salt Spring Island Parks and Ecological Reserves – Terrestrial Ecosystem Mapping and Conservation Assessment. Unpublished contract report to BC Ministry of Environment, Environmental Stewardship Division, Vancouver Island Region, Nanaimo, B.C. pp. 63 – 66.
# 6.0 Glossary

Blue List	List of ecosystems, and indigenous species and subspecies of special concern (formerly vulnerable) in British Columbia.				
COSEWIC	Committee on the Status of Endangered Wildlife in Canada is a committee of experts that assesses and designates which wildlife species are in some danger of disappearing from Canada.				
Ecological Community	The BC Conservation Data Centre and NatureServe use this term to include natural plan communities and plant associations and the full range of ecosystems that occur in British Columbia. These may represent ecosystems as small as a vernal pool, or as large as an entire river basin, an Ecoregion or a Biogeoclimatic Zone.				
Ecoregion	marine ecosystem con highest levels, Ecodon globally. The three low progressively more de one another. They des hydrology, vegetation zones occur where spe develop because of th materials. These zones system. For a complet	The Ecoregion Classification system is used to stratify British Columbia's terrestrial and marine ecosystem complexity into discrete geographical units at five levels. The two highest levels, Ecodomains and Ecodivisions, are very broad and place British Columbia globally. The three lowest levels, Ecoprovinces, Ecoregions, and Ecosections are progressively more detailed and narrow in scope and relate segments of the province to one another. They describe areas of similar climate, physiography, oceanography, hydrology, vegetation, and wildlife potential. Within each terrestrial ecoregion, climatic zones occur where specific soils, plant and animal communities and aquatic systems develop because of the interaction of climate with the land surface and surficial materials. These zones are defined within the <u>Biogeoclimatic Ecosystem Classification system</u> , visit <u>http://www.env.gov.bc.ca/ecology/ecoregions/index.html/</u>			
Ecosystem	An ecosystem is a dynamic complex of plant, animal, and microorganism communities and the nonliving environment interacting as a functional unit. Ecosystems vary enormously in size: a temporary pond in a tree hollow and an ocean basin can both be ecosystems.				
Ecosystem-at-Risk	An extirpated, endang concern (formerly call	ered, or threatened ecosystem or an ecosystem of special ed vulnerable).			
Endangered	Facing imminent extir	pation or extinction.			
Extinct	Species that no longer	Species that no longer exist.			
Extirpated	A species or an ecosystem that no longer exist in the wild in an area but does occur elsewhere.				
Forest	An ecosystem group in BC Species and Ecosystems Explorer: ecosystems with greater than 10% tree cover including coniferous, deciduous, and mixed forests with more-or-less continuous canopies and trees not clumped.				
Forest Structure	Pole/Sapling Trees Young Forest Mature Forest Old Growth Forest	less than 40 years old 40 - 80 years old 80 - 250 years old 250 years or older			

Herbaceous	An ecosystem group in BC Species and Ecosystems Explorer: ecosystems dominated by herbaceous vegetation. Shrubs generally account for less than 20% of vegetation cover, and tree cover is generally less than 10%.
Invasive Species	Species those are not native to an area and whose introduction causes or is likely to cause economic or environmental harm or harm to human health.
Polygons	In mapping, any multi-sided area that shares the same characteristics; commonly used to map ecosystems.

Conservation status rank for an element occurring or formerly occurring in B.C.

Provincial
<b>Conservation Status</b>
Ranking

Status	Definition
SX	Presumed Extirpated—Species or community is believed to be extirpated from the province. Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered
SH	Possibly Extirpated (Historical)—Species or community occurred historically in the nation or state/province, and there is some possibility that it may be rediscovered. Its presence may not have been verified in the past 20-40 years. A species or community could become SH without such a 20-40 year delay if the only known occurrences in a nation or state/province were destroyed or if it had been extensively and unsuccessfully looked for. The SH rank is reserved for species or communities for which some effort has been made to relocate occurrences, rather than simply using this status for all elements not known from verified extant occurrences.
S1	Critically Imperilled—Critically imperilled in the province because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the province.
S2	Imperilled—Imperilled in the province because of rarity due to very restricted range, very few populations (often 20 or fewer), steep declines, or other factors making it very vulnerable to extirpation from the province.
S3	Vulnerable—Vulnerable in the province due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.
S4	Apparently Secure—Uncommon but not rare; some cause for long-term concern due to declines or other factors.
S5	Secure—Common, widespread, and abundant in the nation or state/province.
SNR	Unranked—Nation or state/province conservation status not yet assessed

#### **Provincial Lists**

List of elements considered to be either endangered or threatened (Red List), special concern (Blue List) or not at risk (Yellow List) in B.C.

Red List	List of ecosystems, and indigenous species and subspecies that are extirpated, endangered, or threatened in B.C. Red-listed species and sub-species may be legally designated as, or may be considered candidates for legal designations as Extirpated, Endangered, or Threatened under the <i>Wildlife Act</i> (see <u>http://www.env.gov.bc.ca/wld/faq.htm#2</u> ). Not all Red-listed taxa will necessarily become formally designated. Placing taxa on these lists flags them as being at risk and requiring investigation.
Riparian	An ecosystem group in BC Species and Ecosystems Explorer: ecosystems influenced by proximity to water bodies (rivers, streams, lakes) and processes associated with moving water.
Riparian Habitats	Areas situated, or dwelling on the bank of a river or other body of water
Sparsely Vegetated	An ecosystem group in BC Species and Ecosystems Explorer: ecosystems dominated by exposed rock or mineral soil, with a generally sparse vegetation layer (less than 10 - 25% cover) dominated by lichens and xerophytes, or low herbaceous vegetation.
Species-at-Risk	An extirpated, endangered, or threatened species or a species of special concern (formerly called vulnerable).
Special Concern	Particularly sensitive to human activities or natural events but not endangered or threatened (as used by COSEWIC – wildlife species that may become a threatened or an endangered species because of a combination of biological characteristics and identified threats)) Special Concern was formerly referred to as Vulnerable.
Threatened	Likely to become endangered if limiting factors are not reversed.
Vulnerable	Particularly sensitive to human activities or natural events. (As used by NatureServe - Vulnerable due to a restricted range, relatively few populations (often 80 or fewer), recent and widespread declines, or other factors making it vulnerable to extirpation.)
Yellow List	List of ecosystems and indigenous species that are not at risk in British Columbia.

## Appendix I: Mount Erskine Provincial Park Summary of Public Consultation

Through input provided at one public meeting, two public open houses, one stakeholder meeting, and through mail, e-mail, and the website, in 2007 and 2008, the public showed overall support for the key values and management issues identified for this park.

The public input for the Mount Erskine Provincial Park management plan is best summarized as diverse and passionate. The public's main concerns were natural and cultural values protection balanced with recreational use. Most of the public input showed a preference for providing minimal park infrastructure with the exception of marking and upgrading existing trails. Some information, interpretation, and recreation facilities were requested. There was significant concern expressed over unsanctioned access and activities in the park, particularly by ATVs, mountain bikes, dirt bikes, and horses.

Key values, activities, and management issues identified through the management planning process included:

Key Park Values:

- Natural beauty;
- Rare plants and habitats;
- The views; and,
- Enjoyable hiking.

Key Appropriate Activities:

- Hiking; and,
- Nature appreciation.

Key Management Issues:

- Protection of natural values and information on what those natural values are;
- The impacts of horseback riding, cycling, and ATVs on the parks natural values;
- Balancing the protection of natural values with recreation use;
- Establishing a safe and ecologically sound trail system;
- Protecting the sensitive environment including rare plants and habitats;
- The introduction of invasive species;
- The lack of facilities, parking areas, and trial signs;
- Ensuring there is good access into the park; and,
- Maintaining a small human footprint in the park.

### Appendix II: Terrestrial Ecosystem Mapping



# Appendix III: Ecosystems Conservation Information

Maynet Fuelding Ducydingial David Mannad Fasay stange Canaam stian Information	(Madrama 2007 9 CDC 2000)
Mount Erskine Provincial Park Mapped Ecosystems Conservation Information	
into ante Erstante into finician i ante inappea Ecosystemis conservation into intation	(1111111111) 2007 & 020, 2005

Polygon Number	Site Code	BEC subzone	Ecosystem	Age Class	BC Rank	BC Status	Conservation Ranking	Comments
776	10DS	CDFmm	100% Douglas-fir / salal (Dry Maritime)	<40 years	S2	Blue- listed	Moderate	sapling forest stage
782	7DS	CDFmm	70% Douglas-fir – / salal (Dry Maritime)	40 - 80 years	S2	Blue- listed	Very High	young forest mixed with mature
	3RK	CDFmm	30% western redcedar – Douglas-fir / Oregon beaked- moss	80 - 250 years	S1	Red- listed	Very High	forest
799	8DA	CDFmm	80% Douglas-fir – arbutus (lodgepole or shore pine)	40 - 80 years	S2	Red- listed	Moderate	young forest stage
	2DA	CDFmm	20% Douglas-fir – arbutus (lodgepole or shore pine)	<40 years	S2	Red- listed	Moderate	young forest stage
1515	5DC	CWHxm1	50% Douglas-fir – lodgepole pine / Cladina (Reindeer Lichen)	40 - 80 years	S2	Red- listed	Moderate	young forest stage
	5AM	CWHxm1	50% arbutus – hairy manzanita	40 - 80 years	S2	Red- listed	Moderate	young forest stage
1523	10HD	CWHxm1	100% western hemlock – western redcedar / deer fern	< 40 years	S2	Red- listed	Moderate	sapling forest stage
1526	10DS	CWHxm1	100% Douglas-fir – western hemlock / salal (Dry Maritime)	80 - 250 years	S2S3	Blue- listed	High	mature forest
1530	6DS	CWHxm1	60% Douglas-fir – western hemlock / salal (Dry Maritime)	40 - 80 years	S2S3	Blue- listed	Very High	young forest mixed with mature forest
	4НК	CWHxm1	40% western hemlock - Douglas-fir / Oregon beaked-moss	80 - 250 years	S2	Red- listed	Very High	
1532	10DS	CWHxm1	100% Douglas-fir – western hemlock / salal (Dry Maritime)	80 - 250 years	S2S3	Blue- listed	High	young forest mixed with mature forest
1542	5DF	CWHxm1	50% Douglas-fir / sword fern	<40 years	S2S3	Red- listed	Moderate	sapling stage
	5НК	CWHxm1	50% western hemlock - Douglas-fir / Oregon beaked- moss	<40 years	S2	Red- listed	Moderate	sapling stage
1543	6DF	CWHxm1	60% Douglas-fir / sword fern	40 - 80 years	S2S3	Red- listed	Moderate	young forest stage
	4НК	CWHxm1	40% western hemlock - Douglas-fir / Oregon beaked- moss	<40 years	S2	Red- listed	Moderate	sapling stage

Polygon Number	Site Code	BEC subzone	Ecosystem	Age Class	BC Rank	BC Status	Conservation Ranking	Comments	
1544	8DC4	CWHxm1	80% Douglas-fir – lodgepole pine / Cladina (Reindeer Lichen)	<40 years	S2	Red- listed	Moderate	sapling stage	
	2DS5	CWHxm1	20% Douglas-fir – western hemlock / salal (Dry Maritime)	40 - 80 years	S2S3	Blue- listed	Moderate	young forest stage	
1545	4AM	CWHxm1	40% arbutus / hairy manzanita	<40 years	S2	Red- listed	High	young forest mixed with	
	3DC	CWHxm1	30% Douglas-fir – lodgepole pine / Cladina (Reindeer Lichen)	<40 years	S2	Red- listed	High	herbaceous meadows, rocky outcrops and cliffs	
	3CL		30% Cliff				High		
1548	7RS	CWHxm1	70% western red cedar / sword fern (Very Dry Maritime)	40 - 80 years	S2S3	Blue- listed	Moderate	young forest stage	
	3RS	CWHxm1	30% western red cedar / sword fern (Very Dry Maritime)	<40 years	S2S3	Blue- listed	Moderate	sapling stage	
1549	7НК	CWHxm1	70% western hemlock - Douglas-fir / Oregon beaked-moss	40 - 80 years	S2	Red- listed	Moderate	young forest stage	
	ЗНК	CWHxm1	30% western hemlock - Douglas-fir / Oregon beaked-moss	<40 years	S2	Red- listed	Moderate	sapling stage	
1550	8НК	CWHxm1	80% western hemlock - Douglas-fir / Oregon beaked-moss	<40 years	S2	Red- listed	Moderate	sapling stage	
	2DS	CWHxm1	20% Douglas-fir – western hemlock / salal (Dry Maritime)	<40 years	S2	Blue - listed	Moderate	sapling stage	
1714	5НК	CWHxm1	50% western hemlock - Douglas-fir / Oregon beaked-moss	40 - 80 years	S2	Red- listed	High	young forest mixed with herbaceous	
	5CL		50% Cliff				High	meadows, rocky outcrops and cliffs	

## Appendix IV: Terrestrial Ecosystem Mapping Polygon Codes and Status

Mount Erskine Provincial Park ecosystems in *bold italic red and blue* (Madrone, 2007)

COASTAL DOUGLAS FIR MOIST MARITIME BIOGEOCLIMATIC SUBZONE				
Polygon Code	Ecosystem	Rating	Status	
CS	western redcedar / slough sedge	S2S3	Blue	
DA	Douglas-fir - arbutus (lodgepole pine or shore pine)	<b>S2</b>	Red	
DG	Douglas-fir - grand fir / dull Oregon-grape	S2	Red	
DO	Douglas-fir / Alaska oniongrass	S1	Red	
DS	Douglas-fir / salal (Dry Maritime)	<b>S2</b>	Red	
FC	Roemer's fescue – camas	S1	Red	
GO	Garry oak / oceanspray	S1	Red	
HL	hardhack – Labrador tea	S3	Blue	
QB	Garry oak / California brome/mixed grasses	S1	Red	
RF	western redcedar – grand fir/three-leaved foamflower (Very Dry	S2	Red	
	Maritime)			
RK	western redcedar - Douglas-fir / Oregon beaked-moss	<b>S1</b>	Red	
RP	western redcedar / Indian-plum	S1	Red	
RS	western redcedar / common snowberry	SI	Red	
RV	western redcedar / vanilla leaf	SI	Red	
SC	Cladina (reindeer lichen) – Wallace's selaginella	S2	Red	

COASTAL WESTERN HEMLOCK VERY DRY MARITIME BIOGEOCLIMATIC SUBZONE			
Polygon Code	Ecosystem	Rating	Status
AM	arbutus / hairy manzanita	<b>S2</b>	Red
DC	Douglas-fir - lodgepole pine / Cladina (reindeer lichen)	<b>S2</b>	Red
DF	Douglas-fir / sword fern	<b>S2</b>	Red
DS	Douglas-fir - western hemlock / salal (Dry Maritime)	<i>S2S3</i>	Blue
HD	western hemlock - western redcedar / deer fern	S2	Red
HL	hardhack – Labrador tea	S3	Blue
НК	western hemlock - Douglas-fir / Oregon beaked-moss	<b>S2</b>	Red
RF	western redcedar / three-leaved foamflower (Very Dry Maritime)	<b>S2</b>	Red
RS	western redcedar / sword fern (Very Dry Maritime)	<b>S2S3</b>	Blue
SC	Cladina (reindeer lichen) – Wallace's selaginella	S2	Red

OTHER features found in Mount Erskine Provincial Park in <i>bold italic</i>			
Polygon Code	Feature	Polygon Code	Feature
BE	Beach	ES	Exposed Soil
CF	Cultivated Field	GP	Gravel Pit
CL	Cliff	RO	Rocky Outcrop
CO	Cultivated Orchard	RW	Rural Residential

## Appendix V: Mount Erskine Provincial Park Plant Species List

List of Vascular Plants, Common Lichens, and Bryophytes of Mount Erskine Provincial Park by Adolf & Oluna Ceska, April 2005 (updated with common names by Tania Tripp, October 2007).

#### **Alphabetical Scientific Name**

Scientific Name	English Name
Abies grandis	grand fir
Acer macrophyllum	bigleaf maple
Achillea millefolium	yarrow
Adenocaulon bicolor	pathfinder
Adiantum aleuticum	maiden-hair fern
Agoseris grandiflora	large-flowered agoseris
Agrostis sp.	bentgrass
Aira praecox	early hairgrass
Allium acuminatum	Hooker's onion
Alnus rubra	red alder
Aphanes microcarpa	small-fruited parsley-piert
Arbutus menziesii	arbutus
Arctostaphylos columbiana	hairy manzanita
Athysanus pusillus	common sandweed
Bartramia pomiformis	apple moss
Brodiaea coronaria	harvest brodiaea
Bromus vulgaris	Columbia brome
Bryum miniatum	Bryum moss
Calandrinia ciliate	desert rock purslane
Calypso bulbosa	fairy-slipper
Camassia leichtlinii	great camas
Camassia quamash	common camas
Campanula scouleri	Scouler's harebell
Cardamine sp.	bitter-cress
Carex deweyana sp.	Dewey's sedge
Carex inops	long-stoloned sedge
Castilleja hispida	harsh paintbrush
Castilleja miniata	scarlet paintbrush
Cerastium arvense	field chickweed
Cerastium semidecandrum	mouse-ear chickweed

Scientific Name	English Name
Chimaphila umbellata	prince'spine (pipsissewa)
Cirsium vulgare	bull thistle
Cladina sp.	reindeer lichen
Claytonia parviflora	narrow-leaf miner's lettuce
Claytonia perfoliata	miner's-lettuce
Claytonia rubra	Redstem springbeauty
Clinopodium douglasii	yerba buena
Collinsia grandiflora var. pusilla	large-flowered blue-eyed Mary
Collomia heterophylla	vari-leaved collomia
Corallorhiza sp.	coralroot
Crocidium multicaule	gold star
Cystopteris fragilis	fragile fern
Cytisus scoparius	Scotch broom
Danthonia californica	California oatgrass
Danthonia intermedia	timber oatgrass
Delphinium menziesii	Menzies' larkspur
Dendroalsia abietina	plume moss
Dicranum scoparium	broom moss
Digitalis purpurea	foxglove
Elymus glaucus	blue wildrye
Epilobium minutum	small-flowered willowherb
Eriophyllum lanatum	woolly eriophyllum
Erythronium oregonum	white fawn lily
Eurhynchium oreganum	Oregon beaked moss
Festuca occidentalis	western fescue
Festuca roemeri	Roemer's fescue
Festuca rubra	red fescue
Fragaria vesca	wood strawberry
Fragaria virginiana	wild strawberry
Galium aparine	cleavers
Gaultheria shallon	salal
Goodyera oblongifolia	rattlesnake-plantain
Heuchera micrantha	small-flowered alumroot
Hieracium albiflorum	white hawkweed
Holcus lanatus	common velvet-grass
Holodiscus discolor	oceanspray
Homalothecium sp.	moss
Hylocomium splendens	step moss

Scientific Name	English Name
Hypochaeris radicata	hairy cat's-ear
Isothecium stoloniferum	cat-tail moss
Juncus laccatus	common rush
Lactuca muralis	wall lettuce
Lathyrus nevadensis	purple peavine
Leucolepis acanthoneuron	Menzies' tree moss
Linnaea borealis	twinflower
Listera cordata	heart-leaved twayblade
Lithophragma parviflorum	small-flowered fringecup
Lithophragma tenellum	slender fringecup
Lomatium utriculatum	spring gold
Lonicera ciliosa	western trumpet
Lonicera hispidula	hairy honeysuckle
Lotus micranthus	small-flowered birds-foot trefoil
Luina hypoleuca	silverback luina
Lupinus bicolor	two-coloured lupine
Luzula subsessilis	short-stalked wood-rush
Madia madioides	Woodland tarweed
Madia sp.	tarweed
Mahonia aquifolium	tall Oregon-grape
Mahonia nervosa	dull Oregon-grape
Melica subulata	Alaska oniongrass
Mimulus alsinoides	chickweed monkey-flower
Microsteris gracilis	pink microsteris
Mimulus sookensis	newly recognized
Moehringia macrophylla	big-leaved sandwort
Monotropa uniflora	single delight
Montia dichotoma	dwarf montia
Montia fontana	blinks (water chickweed)
Montia parvifolia	small-leaved montia
Myosotis discolor	common forget-me-not
Nemophila parviflora	small-flowered nemophila
Orobanche uniflora	naked broomrape
Osmorhiza berteroi	mountain sweet-cicely
Paxistima myearsinites	falsebox
Peltigera aphthosa	gray pelt lichen
Pentagramma triangularis	goldenback fern
Physocarpus capitatus	Pacific ninebark

Scientific Name	English Name
Pinus contorta	lodgepole pine
Piperia elongate	tall rein orchid
Piperia transversa	royal rein orchid
Plagiothecium undulatum	wavy-leaved cotton moss
Plectritis congesta	sea blush
Pogonatum macounii	haircap moss
Polygonum sp.	smartweed
Polypodium glycyrrhiza	licorice fern
Polystichum munitum	sword fern
Polytrichum juniperinum	juniper haircap moss
Pseudotsuga menziesii	Douglas-fir (coast)
Quercus garryana	Garry oak
Racomitrium elongatum	roadside rock moss
Racomitrium lanuginosum	woolly rock moss
Rhytidiadelphus triquetrus	electrified cat's-tail moss
Rhytidiopsis robusta	pipecleaner moss
Ribes sanguineum	red-flowering currant
Rosa gymnocarpa	baldhip rose
Rubus parviflorus	thimbleberry
Rubus ursinus	trailing blackberry
Rumex acetosella	sheep sorrel
Sanicula crassicaulis	Pacific sanicle
Saxifraga ferruginea	Alaska saxifrage
Saxifraga integrifolia	grassland saxifrage
Saxifraga rufidula	rusty-haired saxifrage
Scapania sp.	liverwort
Sedum spathulifolium	broad-leaved stonecrop
Selaginella wallacei	Wallace's selaginella
Senecio jacobaea	tansy ragwort
Senecio vulgaris	common groundsel
Stellaria crispa	crisp starwort
Stellaria nitens	shining starwort
Stereocaulon sp.	lichen
Symphoricarpos albus	common snowberry
Symphoricarpos hesperius	trailing snowberry
Taraxacum officinale	common dandelion
Targionia hypophylla	orobus-seed liverwort
Trachybryum megaptilum	giant fern moss

Scientific Name	English Name
Trientalis borealis	broad-leaved starflower
Trifolium oliganthum	few-flowered clover
Trifolium sp.	clover
Trifolium variegatum	white-tipped clover
Trifolium willdenowii	tomcat clover
Tsuga heterophylla	western hemlock
Urtica dioica var. Iyallii	stinging nettle
Vaccinium parvifolium	red huckleberry
Viola sempervirens	trailing yellow violet

### Alphabetical by English Name

English Name	Scientific Name
Alaska oniongrass	Melica subulata
Alaska saxifrage	Saxifraga ferruginea
apple moss	Bartramia pomiformis
arbutus	Arbutus menziesii
baldhip rose	Rosa gymnocarpa
bentgrass	Agrostis sp.
bigleaf maple	Acer macrophyllum
big-leaved sandwort	Moehringia macrophylla
bitter-cress	Cardamine sp.
blinks (water chickweed)	Montia fontana
blue wildrye	Elymus glaucus
broad-leaved starflower	Trientalis borealis
broad-leaved stonecrop	Sedum spathulifolium
broom moss	Dicranum scoparium
Bryum moss	Bryum miniatum
bull thistle	Cirsium vulgare
California oatgrass	Danthonia californica
cat-tail moss	Isothecium stoloniferum
chickweed monkey-flower	Mimulus alsinoides
cleavers	Galium aparine
clover	Trifolium sp.
coastal reindeer lichen	Cladina portentosa sp.
Columbia brome	Bromus vulgaris
common camas	Camassia quamash
common dandelion	Taraxacum officinale
common forget-me-not	Myosotis discolor

English Name	Scientific Name
common groundsel	Senecio vulgaris
common sandweed	Athysanus pusillus
common snowberry	Symphoricarpos albus
common velvet-grass	Holcus lanatus
coralroot	Corallorhiza sp.
crisp starwort	Stellaria crispa
desert rock purslane	Calandrinia ciliate
Dewey's sedge	Carex deweyana
Douglas-fir (coast)	Pseudotsuga menziesii
dull Oregon-grape	Mahonia nervosa
dwarf montia	Montia dichotoma
early hairgrass	Aira praecox
electrified cat's-tail moss	Rhytidiadelphus triquetrus
fairy-slipper	Calypso bulbosa
falsebox	Paxistima myearsinites
few-flowered clover	Trifolium oliganthum
field chickweed	Cerastium arvense
foxglove	Digitalis purpurea
fragile fern	Cystopteris fragilis
Garry oak	Quercus garryana
giant fern moss	Trachybryum megaptilum
gold star	Crocidium multicaule
goldenback fern	Pentagramma triangularis
grand fir	Abies grandis
grassland saxifrage	Saxifraga integrifolia
gray pelt lichen	Peltigera aphthosa
great camas	Camassia leichtlinii
haircap moss	Pogonatum macounii
hairy cat's-ear	Hypochaeris radicata
hairy honeysuckle	Lonicera hispidula
hairy manzanita	Arctostaphylos columbiana
harsh paintbrush	Castilleja hispida
harvest brodiaea	Brodiaea coronaria
heart-leaved twayblade	Listera cordata
Hooker's onion	Allium acuminatum
juniper haircap moss	Polytrichum juniperinum
large-flowered agoseris	Agoseris grandiflora
large-flowered blue-eyed Mary	Collinsia grandiflora var. pusilla

English Name	Scientific Name
lichen	Stereocaulon sp.
licorice fern	Polypodium glycyrrhiza
liverwort	Scapania sp.
lodgepole pine	Pinus contorta
long-stoloned sedge	Carex inops
maiden-hair fern	Adiantum aleuticum
Menzies' larkspur	Delphinium menziesii
Menzies' tree moss	Leucolepis acanthoneuron
miner's-lettuce	Claytonia perfoliata
moss	Homalothecium sp.
mountain sweet-cicely	Osmorhiza berteroi
mouse-ear chickweed	Cerastium semidecandrum
naked broomrape	Orobanche uniflora
narrow-leaf miner's lettuce	Claytonia parviflora
newly recognized	Mimulus sookensis
oceanspray	Holodiscus discolor
Oregon beaked moss	Eurhynchium oreganum
orobus-seed liverwort	Targionia hypophylla
Pacific ninebark	Physocarpus capitatus
Pacific sanicle	Sanicula crassicaulis
pathfinder	Adenocaulon bicolor
pink microsteris	Microsteris gracilis
pipecleaner moss	Rhytidiopsis robusta
plume moss	Dendroalsia abietina
prince'spine (pipsissewa)	Chimaphila umbellata
purple peavine	Lathyrus nevadensis
Rattlesnake-plantain	Goodyera oblongifolia
red alder	Alnus rubra
red fescue	Festuca rubra
red huckleberry	Vaccinium parvifolium
Redsteam spring beauty	Claytonia rubra
red-flowering currant	Ribes sanguineum
roadside rock moss	Racomitrium elongatum
Roemer's fescue	Festuca roemeri
royal rein orchid	Piperia transversa
rusty-haired saxifrage	Saxifraga rufidula
salal	Gaultheria shallon
scarlet paintbrush	Castilleja miniata

English Name	Scientific Name
Scotch broom	Cytisus scoparius
Scouler's harebell	Campanula scouleri
sea blush	Plectritis congesta
sheep sorrel	Rumex acetosella
shining starwort	Stellaria nitens
short-stalked wood-rush	Luzula subsessilis
silverback luina	Luina hypoleuca
single delight	Monotropa uniflora
slender fringe cup	Lithophragma tenellum
small-flowered alumroot	Heuchera micrantha
small-flowered birds-foot	
trefoil	Lotus micranthus
small-flowered fringe cup	Lithophragma parviflorum
small-flowered nemophila	Nemophila parviflora
small-flowered willowherb	Epilobium minutum
small-fruited parsley-piert	Aphanes microcarpa
small-leaved montia	Montia parvifolia
smartweed	Polygonum sp.
spring gold	Lomatium utriculatum
step moss	Hylocomium splendens
stinging nettle	Urtica dioica var. Iyallii
sword fern	Polystichum munitum
tall Oregon-grape	Mahonia aquifolium
tall rein orchid	Piperia elongate
tansy ragwort	Senecio jacobaea
tarweed	Madia sp.
thimbleberry	Rubus parviflorus
timber oat-grass	Danthonia intermedia
tomcat clover	Trifolium willdenowii
trailing blackberry	Rubus ursinus
trailing snowberry	Symphoricarpos hesperius
trailing yellow violet	Viola sempervirens
twinflower	Linnaea borealis
two-coloured lupine	Lupinus bicolor
vari-leaved collomia	Collomia heterophylla
wall lettuce	Lactuca muralis
Wallace's selaginella	Selaginella wallacei
wavy-leaved cotton moss	Plagiothecium undulatum
western fescue	Festuca occidentalis

English Name	Scientific Name
western hemlock	Tsuga heterophylla
western trumpet	Lonicera ciliosa
white fawn lily	Erythronium oregonum
white hawkweed	Hieracium albiflorum
white-tipped clover	Trifolium variegatum
wild strawberry	Fragaria virginiana
Woodland tarweed	Madia madioides
wood strawberry	Fragaria vesca
woolly eriophyllum	Eriophyllum lanatum
woolly rock moss	Racomitrium lanuginosum
yarrow	Achillea millefolium
yerba buena	Clinopodium douglasii

### Mount Erskine Provincial Park Macrofungi List

Apr. 4 & April 20, 2005 (Oluna Ceska)

Agrocybe praecox	Inocybe nitidiuscula
Amanita pantherina	Inocybe subcarpta
Auriscalpium vulgare	Marasmiellus candidus
Callistosporium luteo-olivaceum	Melanoleuca stridula
Cantharellus tubaeformis	Micromphale perforans
Ciboria rufofusca	Mycena alcalina
Clavulina rugosa	Mycena pura
Clitocybe radicellata	Naucoria escharoides
Clitocybe sinopica	Nolanea cetrata f. cetrata
Clitocybe vibecina	Nolanea cetrata f. minimospora
Collybia maculata	Nolanea hirtipes
Crepidotus lundelii	Nolanea holoconiota
Fomitopsis pinicola	Nolanea sericea
Galerina subbadipes	Nolanea strictia
Ganoderma applanatum	Nolanea verna v. isodiametrica
Geopyxis vulcanalis	Omphalina ericetorum
Guepiniopsis alpinus	Omphalina obscurata
Gyromitra aesculenta	Peziza repanda
Helvella compressa	Pseudoplectania melaena
Inocybe cicatricata	Psilocybe crobula
Inocybe flocculosa f. flocculosa	Psilocybe montana
Inocybe geophylla	Tricholoma saponaceum
Inocybe jacobi	Tubaria hiemalis
Inocybe lacera	Verpa conica