MANAGEMENT PLAN



WATTS POINT ECOLOGICAL RESERVE



Parks and Natural Areas Division Department of Environment and Conservation Government of Newfoundland and Labrador



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1.0 WATTS POINT ECOLOGICAL RESERVE

Ecological Reserves are established under the Wilderness and Ecological Reserves Act (1980) for the preservation of areas in the Province which contain unique or representative ecosystems or rare or natural phenomena.

The Watts Point Calcareous Barrens (Figure1) are representative of similar plant habitats found on isolated calcareous exposures in the Gulf of St. Lawrence and Western Newfoundland. These barrens are characterized by a high degree of botanical diversity and the occurrence of a large number of rare species. The rare species are thought to be descendants of western North American plants that have been isolated for thousands of years since the last continental glaciation. The extremes of the coastal climate in the Strait of Belle Isle have maintained these calcareous gravels as an open refuge for the rare plants from competition with shrubs and trees that dominate most of the boreal landscape.

In addition, the barrens provide a unique meeting place for the plants from two widely separated continents, North America and Western Europe (amphi-Atlantic element) and the extreme eastern and western corners of North America (Cordilleran element). Perhaps most important, these barrens support a significant portion of the Newfoundland flora comprised of species that occur in low abundance and are restricted to the calcareous barren habitat.

The international significance of the Calcareous Barrens stems from the large extent from the scientific puzzle created by the distribution patterns of the component species. Plant distributions provide important supporting evidence for the geological interpretation of the earth's history. The ongoing solution to this puzzle requires plants preserved in natural habitats as free as possible from the selected forces of humans. In this context, the Calcareous Barrens at Watt's Point are authenic biological artifacts as important to science as the Viking artifacts at L'anse aux Meadows.

2.0 **OBJECTIVES**

The objectives of the Watts Point Ecological Reserve are:

- (a) to conserve the endemic plants that are only known to occur in the calcareous barren habitat of this region, within their natural habitat;
- (a) to protect a representative example of the Strait of Belle Isle eco-region;
- (c) to conserve representative examples of geological features, particularly patterned ground such as sorted polygons and stripes;
- (d) to provide an educational opportunity for the general public of Newfoundland and Labrador to share in a unique feature of our natural history; and
- (e) to provide opportunities for scientific research of the calcareous barrens flora and the factors leading to its development and maintenance.



Figure 1. Watts Point Calcareous Barrens Ecological Reserve.

3.0 NATURAL RESOURCE FEATURES

3.1 Geographic Setting

The Watts Point Reserve is representative of the Strait of Belle Isle eco-region as described by Damman (1983). The eco-region occupies the northernmost part of the Great Northern Peninsula where the vegetation approaches that of tundra more than any other part of the island. Rocky coastal barrens completely devoid of productive forest, dominate the entire area. Tuckamoor and shallow minerotrophic peatlands cover the landscape interspersed with extensive rock outcrops and calcareous gravel.

Ice floes carried by the Labrador Current and the disintegrating pack-ice off the coast, block the Strait of Belle Isle from December until June or July. Consequently, the vegetation season is less than 110 days and frost can occur at any time of the year. Annual precipitation consists of 1000 mm of rainfall and 300 cm of snowfall. Mean daily temperature varies from -8.0 C in December to 12.0 C in July (Banfield, 1983).

Bedrock is dominated by Paleozoic limestone, dolomite, quartzite, sandstone and shale. The stratigraphy is variable and complex, being controlled by the mode of deposition relative to the ancient marine limit some 500 million years ago (Knight, 1985). Faulting combined with strikeslip motion has produced a distinct surface pattern in the area consisting of inclined bedding planes aligned parallel to the coastline. Intervening areas between the exposed ridges are filled with shallow deposits of coarse till and organic material.

Although podzolic soils occur in association with stunted forest, the dominant soils in the area are Regosols, characterized by limited soil profile development due to severe soil-frost activity. The soil reaction is neutral to basic (pH 7.9), however the coarse texture and low organic matter content impedes nutrient retention. Therefore, essential nutrients such as phosphorous and potassium are in low supply. Much of the coarse gravel and boulder pavement found has been sorted into a distinct pattern of polygons 2-3 m in diameter by intense soil frost activity. Inland, much of the area is a covered shallow slope fen, broken by numerous small pools and brooks.

Most residents of the area derive their livelihood from the sea and consequently land use is very limited. Small vegetable gardens are planted along the roadside where organic material from peatlands is mixed with neutral soil to enhance vegetable growth. Subsistence is supplemented by hunting small game and sea birds. The barrens and bogs yield bountiful crops of blueberries, partridge berries and bakeapples. Historically, the barrens between the coastal highway and the beach are used for storage of lobster pots and drying and mending fishing gear. Since the construction of the highway to St. Anthony, the coastal road (Route 430), is only used as an alternate link to the small community of Big Brook from Eddies Cove East. Washouts often render sections of the road impassable.

3.2 Plant Communities

The distribution of plant communities in the reserve is strongly controlled by local topography. Figure 2 shows a typical toposequence of communities from the seashore to the interior of the reserve. Detailed descriptions of the heathland vegetation is provided in Meades (1983).

Beach and Crowberry Lawns

The summer berm of the beach is generally devoid of vegetation with the exception of several salt tolerant species *(Senecio Pseudo-Arnica, Cakile edentulata* and *Iris versicolor*. The winter berm is covered by a lawn-like mat of *Empetrum eamseii* and *Salix cordifolia*. The almost continuous vegetation carpet and acidic humus layer associated with this habitat, mask the effect of the underlying calcareous substrate. Consequently, truly calcareous plants are restricted to small erosion scars covering less than 5% of the habitat.

Cow Parsnip Snowbeds

Snowbed communities exist 50-100 m from the shoreline where bedrock emerges to form an abrupt terrace, 10-15 m above the coastal platform. This, combined with the northerly aspect of the terrace and the sharp incline of the bedding plane, creates ideal conditions for the development of these communities. The foot of the terrace scarp (Figure 2) is dominated by a luxuriant forb community that alternates with discontinuous patches of tuckamoor characterized by *Heraculeum maximum, Angelica laurentiana, Sanguisorba canadensis, Alchemilla minor* and *Aster novibelgii*.

Willow Scree

The scarp of the terrace is covered by an intermediate snowbed community dominated by *Salix reticulata, Salix cordifolia, Empetrum eamseii* and *Arctostophylos alpina*. The substrate is boulder scree formed from the cleavage of large blocks from the inclined bedding face of the exposed bedrock. Similar communities have been described from Scandinavia (Gjaerevall, 1965) and Scotland (McVean, 1964).

Dryas Rock Gardens

A spectacular change in vegetation occurs at the summit of the scarp. Here, the continuous vegetation carpet changes to a platform terrace dominated by calcareous gravels with an intricate pattern of sorted polygons and stripes. The vegetation cover in this habitat rarely exceeds 25% of the ground surface, however, these rock gardens are among the most floristically diverse habitats on the island of Newfoundland. Insulating snow cover is absent from this habitat for most of the winter. The effect of wind is clear in areas where vegetation cushions develop in the lee of the wind leaving behind a trail of sandblasted root systems. The rock polygons are 2-3 m in diameter with a parameter of large boulder blocks and flat irregular stones sorted to the inside. *Dryas integrifoia, Empetrum eamseii, Arctostophylos alpina, Potentilla fruticosa* and *Betulla pumila* are the dominant woody plants forming discontinuous vegetation patches. *Saxifraga oppositifolia, S. aizoon* and *Anemone parviflora* are the most common species in the gravels.

Alpine Rush Hummocks and Scrub Forest

Climatic conditions are somewhat less severe about 800 m from the coast allowing for the development of fairly large patches of scrub forest dominated by Balsam Fir, White Spruce, Black Spruce and Tamarack. It is in these small 'tucks' that the rare plant *Cypridpedium calceolus L*. *Var. Planipetalum* is most likely to be encountered.

Open areas between these tucks are characterized by a complex of wet heath and peatland communities. The wet heath is comprised of an intricate network of turf hummock 1-2 m in height alternating with intermittent pools that dry out in the summer. *Myrica gale, Betula pumila* and *Potentilla fruticosa* are the dominant shrubs on the hummocks while *Juncus alpinus, Scirpus hudsonianus* and *Carex vaginata* occur on the pool edges.

Slope Fens

Peatlands to the interior of the reserve are dominated by slope fens interrupted occasionally by rock exposures. These fens are usually less than 50 cm in depth and the peat is influenced by minerotrophic seepage waters. Flat lawn-like areas are dominated by the *Potentilla-Campylietum stellatii* community whereas fen hummocks are dominated by the *Calamargrostieto-Sphagnetum fusci* vegetation (Wells, 1983). The occurrence and abundance of *Carex aquatilis* and *Triglochin maretima* distinguish these northern slope fens as a distinct variant from other parts of the island.



Figure 2. Topographic relationships of the plant communities in Wafts Point Ecological Reserve.

3.3 Phytogeographic Affinities

The following examples serve to illustrate some of the unique distributions of the plants found on the calcareous barrens. Note that the dots on the maps are locations for the species and do not reflect their abundance. Even species that display a wide distribution may be locally rare because of the restriction of these species to calcareous substrata.

Cordilleran Disjuncts

Figure 3 illustrates a plant distribution which occurs in western North American and eastern North America but are absent from the central portion of the continent. These plants are thought to have had a continuous distribution prior to the Pleistocene glaciation. The present distribution pattern is considered to reflect populations that survived glaciation in refuge on the east and west coast of the continent. These populations have been isolated for more than 10,000 years and there is considerable doubt if such taxa should be treated as species, subspecies or varieties. This is reflected in the considerable synonymy in the nomenclature of these plants.

Amphi-Atlantic

The amphi-Atlantic plants proper are the remains of species previously having a circumboreal range (around the Northern Hemisphere). These species died out in the Pacific sector because of climatic changes and survived in the Atlantic sector of their range for reasons unknown. See Figure 4.

Cypripedium Calceolus L. (Yellow Ladies Slipper)

The Yellow Ladies Slipper is regarded by biologists throughout the world as a rare species in danger of extinction. The variety *planipetalum*, which occurs in the limestone barrens of Newfoundland, is even less common. Fernald (1936) considered this variety to be the missing link between the typical European plant and other more widespread varieties in North America (Hulten, 1958). *Draba novegica, Kobresia simpliciusula* and *Carex microglochin* are other amphi-Atlantic species.

Gulf of St. Lawrence Endemics

This group of plants includes species that are restricted in distribution to the calcareous gravels in Newfoundland, Mingan Islands, Anticosti Island and the Gaspe Peninsula. Many were described by Fernald and some botanists contend that these taxa actually represent varieties of more widely distributed species. More research is necessary to verify the taxonomical status of these species.

Arnica chionopappa Cochlearia tridactylites Amica terrae-novae Conioselinum chinense Lesquerella purshii Cochlearia cylocarpa Pamassia parviflora Salix vestita Gentiana nesophila Salix reticulata var. semicalva Habenaria hookeri var.abbreviata



Figure 3. Distribution of Arnica alpina subspecies tomentosa as an example of a Cordilleran distribution (Hulten, 1958).



Figure 4. Amphi Atlantic distribution of Cypridpedium calceolus (Hulten 1958).

Limestone and Serpentine Barrens

Plant species of this group on the island of Newfoundland are restricted to the calcareous barrens of the Northern Peninsula and the Serpentine Mountains of the West Coast (Damman 1965). Most of these plants are rare or at least uncommon. Whether they occur in the limestone gravels because of specific adaptation to this substrate or because such habitats provide refuges from competition with more gregarious species is uncertain. What is certain is that if these habitats are not afforded ample protection most will cease to exist in Newfoundland.

Oxytropis foliolosa Salix reticulata Drvas integrifolia Carex terrae-novae Salix vestita Saxifraga aizoon *Arenaria humifusa Potentilla nivea *Arenaria rubella *Salix cordifolia *Rhododendron lapponicum

Bartsia alpine Carex bicolor Saxifraga Cespitose Hedysarum alpinum Carex rupestris Saxifraga oppositifolla *Cerastiurn beeringianum Arenaria dawonenis *Armeria labradorica

Kobresia simpliciuscula *Castilleja septentrionalis Polygonum viviparum Solidago multiradiata Pyrola grandiflora Primula eqaliksensis Habenaria straminea Carex microglochin

* Occurs in the Serpentine Barrens of Gros Morne National Park.

3.4 Summary

The limestone barrens of northern Newfoundland are a unique Newfoundland resource of wide reaching botanical significance due to:

- 1. Species which only occur on the east and west coast of North America;
- 2. Species which display an ancient affinity with European flora.
- 3. The absence of these species from elsewhere in Newfoundland.
- 4. The limestone barren plant communities represent a unique world vegetation.

Gros Morne National Park offers refuge for some of the floral species mentioned in this report, however there are many that remain unprotected. The site proposed for protection under the International Biological Program has been bisected by highway construction. Much of the remaining habitat is also in close proximity to the coastal highway and is in immediate danger of being destroyed. These plants may be lost forever unless their protection is given priority in the near future.

More in-depth discussion of the Phytogeographic significance of the Gulf flora can be found in Drury (1969) and Morisset (1971).

4.0 MANAGEMENT POLICY

4.1 Purpose

Resource management at Watts Point Ecological Reserve emphasizes the conservation of the flora and plant communities of the calcareous barrens while at the same time providing opportunities for public education and scientific research. The primary purpose of Watts Point Ecological Reserve is to encourage public awareness of the natural history of the area and to encourage scientific research that does not conflict with the general objective of site protection. The following management policies apply:

- a. Use of the site for educational purposes is encouraged. Liaison with high schools in the St. Anthony and Flower's Cove areas for use of the site for educational purposes.
- b. Scientific research including the collection of plant and animal specimens is controlled by a permit system. Results of such research must be forwarded to the managing agency.
- c. The introduction of exotic species or the extermination of native species is strictly prohibited.
- d. Since this habitat appears to have evolved in the absence of fire, strict measures for the prevention and control of fire will be implemented.
- e. Suitable sites for drying and maintenance of fishing nets will be arranged in consultation with local residents using the reserve area.
- f. Traditional hunting and fishing are allowed as long as there is no evidence of damage to the reserve.
- g. A public right-of-way consisting of an abandoned roadbed, that dissects the reserve, is not part of the reserve. If road maintenance occurs in future, disturbance must be limited to the roadbed; materials for the maintenance must be obtained from outside the reserve area.

4.2 Implementation Guidelines

In addition to the requirements of the *Wilderness and Ecological Reserves Act* (1980), which applies to all ecological reserves, the following statements are intended to serve as a guide to users and managers of the Watts Point Ecological Reserve.

4.2.1

- a. The managing agency of Watts Point Ecological Reserve is Parks and Natural Areas Division of the Department of Environment and Conservation.
- b. The boundaries of the reserve will be clearly identified by signs placed along the perimeter.
- c. Routine patrols will be conducted by the managing agency and/or other designated government officials. However, the managing agency should conduct an annual inspection of the area to ensure the integrity of the reserve is not being undermined.
- d. Priority will be given to undertaking a botanical inventory for the reserve aimed at providing a systematic checklist of the flora and the location of rare species. Concurrently, a vegetation and special features map showing the location of major habitats, rare flora and major disturbances and traditional trails should be produced. These activities will also provide essential information for future development of interpretive displays and educational activities.
- e. It is essential to establish permanent sample plots within the reserve to monitor long-term environmental quality of the reserve. Permanent plots should be measured at the time the reserve is established and every five years thereafter.

4.2.2 Scientific Research

One of the main reasons for creating and managing ecological reserves is to provide areas for long-term scientific research. Therefore, it is important that research be conducted without destroying or diminishing the scientific value of the reserve for future investigators. A scientific research permit is required of anyone conducting research withing the reserve. Research applications may be obtained from Parks and Natural Areas Division, Department of Environment and Conservation. Applications should be addressed to Parks and Natural Areas Division, Department of Environment and Conservation. Applications must contain a description of the research with objectives, methodologies and time frame required.

- a. All published material related to research done at the site will acknowledge the existence of the reserve, Parks and Natural Areas Division's permission and the requirements made of the researcher:
- b. A report of the results of each research project will be filed with Parks and Natural Areas Division of the Department of Environment and Conservation and a copy of all scientific papers published and unpublished will be forwarded to the Department upon completion.

4.2.3 Educational use

The site may be used for educational purposes as long as such use does not damage the scientific value of the reserve. Permits will be required for institutions, individuals and groups wishing to utilize the area. Permits can be obtained from Parks and Natural Areas Division of the Department of Environment and Conservation.

Public information and educational activities will involve establishing a liaison with schools in the local area. The science curriculum will be complemented with reserve information.

Appendix 1 - Selected References

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Appendix II - Reserve Order and Regulations

Watts Point Ecological Reseive Order under the Wilderness and Ecological Reserves Act (O.C. 96-199)

Under the authority of subsection 18(1) of the *Wilderness and Ecological Reserves Act* and the *Subordinate Legislation Revision and Consolidation Act*, the Lieutenant-Governor in Council makes the following Order.

ORDER

	Analysis
Section:	Section:
1. Short title	4. Repeat
2. Area included	Schedule A
3. Outline	Schedule B

Short title 1. This Order may be cited as the Watts Point Ecological Reserve Order.

287/90 s1

Area included 2. The area included in the Watts Point Ecological Reserve is as set out in Schedule A.

287/90s2

Outline 3. An outline of the Watts Point Ecological Reserve Management Plan is as set out in Schedule B.

287/90 s3

Repeal 4. The Watts Point Ecological Reserve Order, 1990. Newfoundland Regulation 287/90, is repealed.

Schedule A

All that piece or parcel of land situate and being at the northern end of the Northern Peninsula in the province, abutted and bounded as follows, that is to say:

Beginning at a point on the northwest coast of the Northern Peninsula northeast of Watts Point (Watts Point being northeast of Eddies Cove), that point having co-ordinates of north 5,701.550 metres and east 547.000 metres;

Then running in a southeasterly direction for a distance of 4.850 metres. more or less, to a point in a wooded lot, that point having co-ordinates of north 5,697,475 metres and east 549,575 metres:

Then running in a northeasterly direction for a distance of 6,900 metres, more or less, to a point on the northeast shore of a small pond, that point having co-ordinates of north 5.701.100 metres and east 555,425 metres;

Then running in a northwesterly direction for a distance of 4,640 metres. more or less, to a point near Four Mile Head on the northwest coast, that point having co-ordinates of north 5.705,000 metres and east 552.825 metres;

Then following the northwest shoreline in a southwesterly direction to the point of beginning and containing an area of 30.9 square kilometres, more or less, all bearings being referred to Zone 22 of the Universal Transverse Mercator Projection.

Reserving nevertheless out of the above described piece of land a public rightof-way consisting of the abandoned roadbed extending through that land.

287/90 Sch A

Schedule B

Outline of Watts Point Ecological Reserve Management Plan

The area known as Watts Point on the Great Northern Peninsula is established as an ecological reserve to preserve the unique flora of the calcareous barrens and a representative portion of the Strait of Belle Isle Eco-region for scientific and educational purposes. To accomplish this, there will be no removal of plants or other material from the site except under specific permit, and there will be no development on the reserve. Scientific research at the site will be encouraged, and educational use will be permitted where it does not conflict with the general objectives of preservation and scientific research. Recreational activities such as hunting. fishing, and hiking will be permitted.

287/90 Sch B

Botanical Ecological Reserve Regulations under the Wilderness and Ecological Reserves Act (O.C. 97-247)

(Filed May 21, 1997)

Under the authority of sections 25 and 29 of the *Wilderness and Ecological Reserves Act*, the Lieutenant-Governor in Council makes the following regulations.

Dated at St. John's, May 13, 1997.

John Cummings Deputy Clerk of the Executive Council

REGULATIONS

Analysis

Section:

- 1. Short title
- 2. Definitions
- 3. Restrictions
- 4. Exception
- 5. Research in reserve

Section:

- 6. Exception for research
- 7. Hunting and fishing
- 8. Permit required
- 9. Application of regulations Schedule

Short title **1.** These regulations may be cited as the *Botanical Ecological Reserve Regulations*.

- Definitions 2. In these regulations
 - (a) "Act" means the Wilderness and Ecological Reserves Act;
 - (b) "managing agency" means the Parks and Natural Areas Division of the Department of Tourism, Culture and Recreation;
 - (c) "management plan" means the management plan for a declared botanical ecological reserve on file with the managing agency;
 - (d) "permit" means a permit issued and valid under these regulations;
 - (e) "personal water craft" includes jet-skis, sea-doos, wave-runners and the like but excludes ordinary motorized boats, kayaks and canoes;
 - (f) "reserve" means a botanical ecological reserve set aside under the Act and listed in the Schedule;
 - (g) "structure" means a man-made object intended to be permanent or semipermanent in nature and includes, but is not limited to, buildings, houses, cottages, cabins, wharves, docks, boathouses, slipways, trailers, mobile homes, tents, tent platforms, and recreational vehicles used for any purpose but does not include semi-permanent blinds and signs erected under the authority of the management plan; and
 - (h) "wildlife" means an animal or plant.

Restrictions **3.** Within a reserve, a person shall not

- (a) remove or dislocate a botanical specimen except for scientific study and this only when the researcher is the holder of a valid permit;
- (b) pollute or obstruct a stream or other body of water or dispose of any garbage;

- (c) build or erect or cause to have built or erected any structure;
- (d) destroy, damage, remove, disturb, or handle the home, den, or nest of wildlife;
- (e) destroy, damage, remove, disturb, or handle an egg of any wild bird;
- (f) destroy, damage and remove any wildlife, fossil or other natural object;
- (g) destroy, damage, or remove a sign or other government property;
- (h) remove sand, stone, or gravel;
- (i) prospect, claim stake, mine or quarry;
- (j) use, operate or be in possession of a motor car, motor truck, four-wheel drive vehicle, all-terrain vehicle, snowmobile, personal water craft or other motorized conveyance;
- (k) land an aircraft;
- (l) operate a commercial establishment or commercial enterprise within the reserve, except guiding, touring and outfitting;
- (m) display, post or broadcast an advertisement;
- (n) herd or graze animals within a reserve;
- (o) light a fire; and
- (p) camp.
- Exception 4. A person engaged in the administration or management of a reserve in the normal course of his or her duties is exempt from paragraphs 3(a), (d), (e), (f), (g), (k) and (in).

Research in **5.** Scientific research within a reserve shall require a permit and those permits may be obtained from the managing agency on submission of a written request outlining the research project. and subject to the terms and conditions that the managing agency may determine.

21				
Exception for research	6.	A person engaged in scientific study which is approved by the managing agency and for which a permit has been issued under section 5 may be exempted from paragraphs $3(a),(c), (d), (e)$ and <i>(t)</i> . Hunting and fish-		
Hunting and				
Fishing	7.	All hunting and fishing within the West Brook and Watts Pointing Reserves is allowed in accordance with permits or licenses issued under the <i>Wildlife Act</i> , the <i>Migratory Birds Convention Act</i> (Canada) or the <i>Fisheries Act</i> (Canada).		
Permit required	8.	(1) A person engaged in a touring, guiding or outfitting enterprise shall obtain a permit for the enterprise from the managing agency.		
		(2) Applications for a permit shall provide a full description of the enterprise planned.		
Application of regulations	9.	These regulations shall apply to the botanical ecological reserves listed in the Schedule, except to the extent that they have been modified by the Order declaring a given botanical ecological reserve in effect.		

Schedule

1.	Hawke Hill	Ecological	Reserve.
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- 2. Watt's Point Ecological Reserve.
- 3. West Brook Ecological Reserve.
- 4. King George IV Ecological Reserve.



NEWFOUNDLAND REGULATION 33/99

Botanical and Ecological Reserve Regulations (Amendment) under the Wilderness and Ecological Reserves Act (O.C. 99-13 8)

(Filed April 5, 1999)

Under the authority of sections 25 and 29 of the *Wilderness and Ecological Reserves Act.* the Lieutenant-Governor in Council makes the following Order.

Dated at St. John's. March 29, 1999.

John R. Cummings. Q.C. Deputy Clerk of the Executive Council

REGULATIONS

Analysis

1. S.7 R&S Exceptions 2. Schedule Amdt.

- NR 64/97 1. Section 7 of the *Botanical Ecological* repealed and the following substituted:

NG-99-04-23

7. (1) Notwithstanding paragraph *3(f)*, all hunting and fishing E.~Captions within the West Brook and Watts Point Reserves is allowed in accordance with permits and licences issued under the *Wild Life Act*, the *Migratory Birds Contention Act* (Canada) and the *Fisheries Act* (Canada).

(2) Notwithstanding paragraphs 3(f). (j) and (p), all hunting, trapping, fishing, camping, snowmobiling and access by motorized boat within the Redfir Lake — Kapitagas Channel Ecological Reserve is allowed in accordance with permits and licences issued under the *Wild Life Act*, the *Migratory Birds Convention Act* (Canada) and the *Fisheries Act* (Canada).

33/99

2. The Schedule to the regulations is amended by adding immediately after the line commencing with the number "4" the following

5. Redfir Lake — Kapitagas Channel Ecological Reserve.

NG-99-04-23