



Cape Breton
Highlands
National Park
Provisional
Master Plan

Public Hearings on Provisional
Master Plans for
Canada's National Parks



Trout Brook area
Secteur du ruisseau à la Truite

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This provisional master plan is an assessment of Cape Breton Highlands National Park in its present state and as it may appear in the future. Its purpose is to facilitate discussion and evaluation of future development and operation of the park.

The provisional master plan is the first phase in a continuing planning process. Some aspects may have to be changed as new information becomes available. However, it will provide the foundation for establishing detailed programs of development and activities that are the substance of day-to-day park operations. It will also indicate the need for additional research where current information and knowledge are inadequate.

A public hearing on this provisional plan will be held to stimulate reflection and comment by the people of Canada, the owners and beneficiaries of the national parks. The objective is to establish a working master plan once public opinion has been heard and considered. But even the master plan will require revision from time to time so that the park can truly reflect, at any given time, changes in use patterns resulting from advances in technology and increased mobility and leisure. However, the basic reference in responding to changing conditions must always be the National Parks Act, which has as its primary objective the preservation of the natural character of the national parks.

Plans have to be kept up-to-date, but in order to give ample opportunity to the public to consider its contents, this plan was prepared nearly six months prior to the public hearing. It is quite possible that between completion of the plan and the date of the hearing, some matters which are mere speculation in the plan will have been resolved and others may change under the scrutiny of continued study.

Part I of this document establishes a land-use plan based on the five land-use classes which are being applied to all national parks. Part II sets out the scope of proposals for development of the park and its facilities. Three appendices provide information on history, resources and planning programs. In addition three maps are enclosed to illustrate the narrative of the plan.

Purpose of Cape Breton Highlands National Park

Cape Breton Highlands National Park is a sample of Maritime headlands, rugged coast, inland plateau and barrens typical of the northern peninsula of Cape Breton. Within its 367 square miles there is a rich variety of landscapes and natural living communities. The main purpose of the park is to preserve and interpret:

1. Significant examples of the effect of natural forces on the inland and coastal areas of the northern peninsula of Cape Breton.
2. Forest and plant communities which can continue through their evolutionary succession with minimum influence by man.
3. Native animals of the Maritimes in their natural habitat.

National Parks Act

The National Parks Act is the fundamental basis of the provisional master plan for Cape Breton Highlands National Park. The Act states that the parks are "dedicated to the people of Canada for their benefit, education and enjoyment, . . . and such parks shall be maintained and made use of so as to leave them unimpaired for the enjoyment of future generations."

National Parks Policy

The broad guidance of the National Parks Act was supplemented in 1964 when the Government of Canada approved the National Parks Policy. The policy affirms the general objectives of the Act, provides guiding principles for planning, development and operation, and ensures continuity in the administration of these outstanding natural preserves. The policy is not rigid and is sufficiently general in scope to endure for a considerable time.

If the park is to be representative of the Canadian landscape, its features must be capable of interpretation to the visitor. If the visitor is to be encouraged to sample the experiences offered by the park, access, accommodation and services must be provided. Thus park planning has a threefold purpose; to preserve the natural environment for posterity, to propose development which best displays the typical features of the park and to provide facilities for the park visitor.

Summary of Proposals

1. A land-use classification system which is common to all national parks will be introduced. It is based on five land-use categories. Four of these apply to Cape Breton Highlands National Park as illustrated below:

Class I – special areas

Class II – wilderness recreation areas

Class III – natural environment areas

Class IV – general outdoor recreation areas

Class V – intensive-use areas (not applicable).

2. The capacity of each zone to sustain visitor use will be established. Development of facilities will be limited to retain both the natural features and the park atmosphere. Ultimately, it may be necessary to limit the number of visitors to certain parts of the park at a given time.

3. Two main activity centres will be developed – one at the Ingonish Beach area in the eastern section of the park and a second at the western entrance near Cheticamp.

4. Park interpretation (conducted outings, illustrated talks, interpretation centres, self-interpreting trails and on-site exhibits) will be expanded.

5. Architectural motifs in keeping with the character of the park have been established and will be used in the design of future buildings.

6. An expanded trail system for both hiking and horseback riding will be developed.

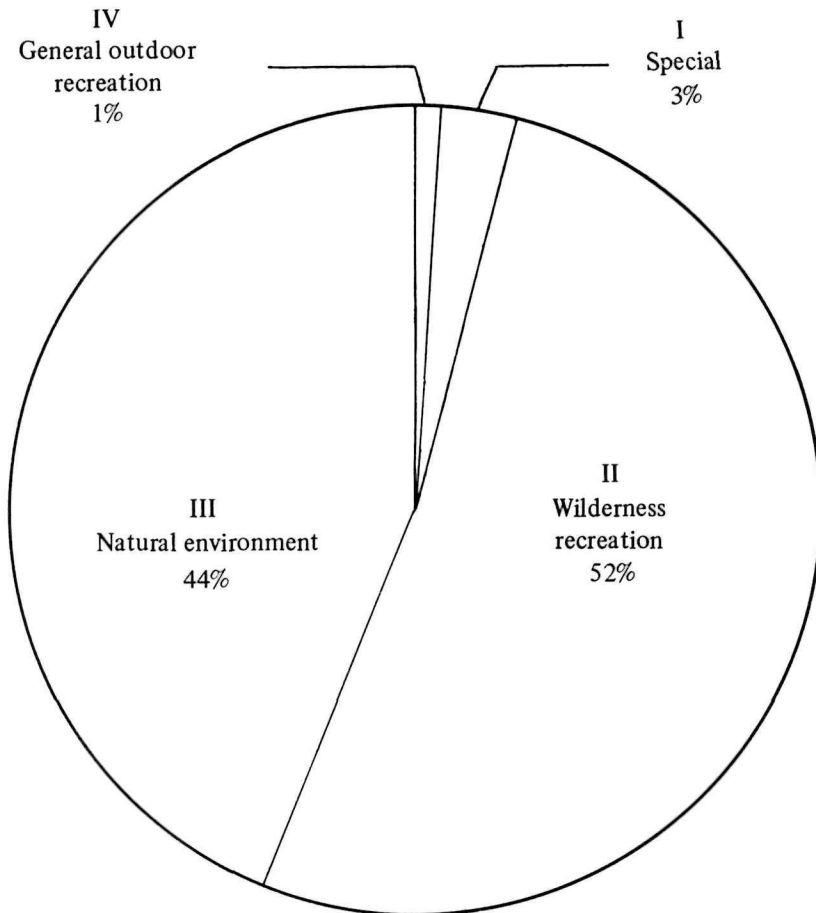
7. Cheticamp campground will be provided with 105 additional individual campsites.

8. Primitive campgrounds will be built to complement the trail system in remote areas.

9. Where road construction is necessary, routes will be carefully assessed in relation to natural resources, interpretive potential, scenic qualities and alternative means of access.

10. Studies of the park's land, plant and animal resources will continue to be a vital part of the data gathering process. Such research will form the basis for resource management programs developed for the park.

11. Close liaison will be maintained with provincial and regional authorities to encourage development of campgrounds, visitor accommodations and related services outside the park.



Zoning

In the national parks the space requirements of development and preservation compete for the same resource, the natural landscape. The zoning plan is the means by which different areas are allocated to specific uses. Five basic land-use classes have been established. Class I - special areas, Class II – wilderness recreation areas, Class III – natural environment areas, Class IV – general outdoor recreation areas and Class V – intensive-use areas. The allocation of these land-use classes within Cape Breton Highlands National Park is illustrated by map no. 1.

Purpose of zoning

The purpose of zoning is to define land areas with specific characteristics which require specialized management. For example, the management methods applied to the Ingonish activity centre (Class IV) and to the inland wilderness area (Class II) differ from each other. The Ingonish activity area caters to a large daily influx of visitors participating in numerous outdoor activities and, as a result, a wild-land environment is not retained. In the inland wilderness area, the objective is to provide wilderness recreation such as fishing and hiking. Access will only be available by trail.

As more information is obtained about the effects of visitors on the plant and animal communities, land-use allocations can be refined and management practices for wildlife, forest and ground cover improved.

Zoning criteria

The following criteria have been used to allocate specific areas to a particular land-use class:

1. The foundation of the classification system is the identification of the natural and cultural features of the park, their locations, size and quality.
2. Topographic or hydrographic boundaries are used for all special areas and the majority of wilderness recreation areas (Class I and II).
3. Natural environment areas (Class III) are designated to provide a visual background to access routes and recreation areas.
4. General outdoor recreation areas (Class IV) include land required for the construction of campgrounds and other facilities.

5. Present development or lack of development is considered in classifying each part of the park.

6. Future developments and transportation patterns must be regulated to preclude conflicts in land-use.

7. Road and trail access to highly protected lands (Class I and II) may be routed through areas of a lesser degree of protection. However, access to Class III and IV areas will not be permitted through Class I or II lands.

Definitions and examples of land-use classes

Class I, Special areas (12 sq. miles, 3 per cent of the park).

Special areas are those having unique or otherwise valuable qualities worthy of preservation and protection. They are of two general types; special ecological areas and special historic or cultural features.

Ecological areas contain major plant types, entire watersheds, animal habitats, and research areas within the park. Management and use will be directed with a minimum of interference so that the life cycles of plant and animal communities can proceed with a minimum of interference. Management may be restricted to the prevention of a natural disaster or unacceptable hazard which would seriously impair the features of the zone. Vehicles will not be permitted in these areas and in certain sections there will be no obvious trail access. Uses may be limited to nature observation and interpretation or hiking trips in daylight hours. In some large areas overnight stops at primitive campgrounds may be permitted.

Not all Class I areas have been identified yet. However, an area comprising some 10 square miles has been designated at the western extremity of Clyburn Brook, bounded by Two Islands Lake, Whitehill Lake and Dundas Lake.

This area is covered with alpine tundra and must be preserved and protected from intrusion by man. Presqu'île, a steeply tilted bed of sedimentary rock striking parallel to the highway and dipping precipitously into the sea, is another special area. It is an outstanding example of rocky Maritime headland and its interpretive potential justified its inclusion in this class. As additional studies of the park's features are carried out, other areas may be assigned Class I status.

Historic or cultural features are those characteristics and areas of the natural landscape which have played a significant role in some aspect of human history or culture.

Research is being conducted to determine the existence of such features in this park.

Class II, Wilderness recreation areas (190 sq. miles, 52 per cent of the park).

In Class II areas the primary purpose is preservation of a wilderness recreation environment. Hiking trails, primitive campgrounds and wildlife habitat are typical features. The area comprises all of the inland plateau and barrens. The treeless barrens are a notable feature of the Cape Breton Highlands and need to be preserved from the intrusion of vehicle-borne visitors. The road and trail plan will allow visitor access to these inland barrens and the plateau at key locations in the park.

Class III, Natural environment areas (161 sq. miles, 44 per cent of the park).

The concept of a wilderness threshold best describes these areas. They serve as buffers between wild areas and more developed areas, form a natural backdrop to many features and are essential to the preservation of the wild-land character of the park. Class III lands are in many ways the most complex to define. Some parts may be regarded as a land bank and, as knowledge increases, portions of them may be added to Class I or Class II areas. It is unlikely they will be reclassified as Class IV areas. Uses such as fishing, hiking and primitive camping will be permitted, as in Class II lands but at higher rates of intensity. Class III lands may also include internal park access roads, roadside exhibits, interpretation centres, interpretive trails and picnic sites. Much of this zone is close to the Cabot Trail.

Class IV, General outdoor recreation areas (4 sq. miles, 1 per cent of the park).

These areas define the limits within which existing and potential facilities will be developed. They include highway corridors, campgrounds and other outdoor activity areas. Examples include the Warren Lake-Broad Cove area, the Black Brook day-use area and the Cheticamp River area. Two proposed activity centres for the Ingonish and Cheticamp areas are also located in this class.

Class V, Intensive-use areas.

In some of the larger national parks, major visitor services centres provide a wide range of visitor facilities. Facilities of this scale do not exist within Cape Breton Highlands National Park and it is not intended that

they should develop. Rather, development and location of such facilities will be encouraged outside the park for the benefit of the regional economy and the preservation of the park's landscape.

Land-use classification summary

	Class	Area in square miles	Percentage of park area	Examples
I	Special	12	3	Presqu'ile
II	Wilderness recreation	190	52	Everlasting Barren
III	Natural environment	161	44	Corney Brook
IV	General outdoor recreation	4	1	Broad Cove
	Total	367	100	

Three main functions make up the park program – resource conservation, interpretation and development. These reflect policy objectives for preserving a natural heritage, making it available to visitors and promoting an awareness of the natural environment through increased understanding and appreciation of the landscape.

The program can be summarized as follows:

- to bring park visitors in contact with the surroundings in a manner that will encourage understanding of the forces that shaped the land and awareness of the park's ecology;
- to develop and present programs to inform visitors about park features and kindle an interest in and an appreciation of outdoor life and natural history;
- to encourage outdoor activities compatible with park purposes;
- to provide adequate road and trail systems to disperse visitors throughout the park;
- to provide the necessary facilities and services to visitors; and
- to protect park features from impairment.

Resource conservation

The objective of the conservation function is to protect the natural resources from impairment. This will be achieved through the land-use plan, enforcement of National Parks Regulations for the protection of wildlife and other resources, management programs directed towards the maintenance of balanced plant and animal communities and measures to control disease in given plant and animal species.

The program must also co-ordinate the protection of the natural aspects of the park with projected uses and proposed developments, to provide optimum public use and enjoyment. The aim is to maintain a balanced natural community wherever practicable.

There are two main approaches to resource conservation, namely, the "evolutionary concept" and the "era concept". To retain the necessary degree of flexibility neither concept is applied rigidly to all lands.

Using the evolutionary concept, park resources are managed to permit a natural progression of change. The Cape Breton Highlands area displays the natural process of mountain building and subsequent erosion by weather and sea action. The park includes a wide variety of land forms,

sand beaches at sea level, a rugged cliff coastline, forest-covered mountainous terrain and an interior plateau of bog and barren land.

The evolutionary process – the effects of the seas on the coastline, the eroding of the hills by weather and the flow of the streams – is dynamic. In applying this concept, a large portion of the park will be managed to allow the forces of nature to continue without interruption. The evolutionary concept has particular application in Class I and II areas.

Management by the era concept requires that resources be managed to retain the character of the park as it appeared at a given time. In Cape Breton Highlands National Park a number of specific features will be preserved in this way. Several excellent sand beaches have been designated for recreation. Management will be directed towards preserving these beaches by preventing erosion. Further, a form of the era concept was applied in the re-introduction of woodland caribou to the area. It may be necessary at some future time to employ similar methods to maintain other wildlife species in balance with the habitat.

The influence of modern man has interfered to a varying degree with the natural equilibrium and atmosphere of the park. Changes to lands outside a park tend to make it an island and have a detrimental effect on wildlife species. Since the establishment of Cape Breton National Park this effect has, fortunately, been minimal due to the absence of large population centres in the area and the fact that lands adjacent to the park have not experienced major exploitation. However, there are indications that forest land in the vicinity will be cut for pulpwood in the near future and, because the park is a wildlife preserve, wildlife may seek sanctuary within it. Thus, this might create abnormally high wildlife populations, and it might be necessary to implement control measures to maintain a balance between numbers and available habitat.

Within the park the effect imposed on natural conditions by roads, campgrounds, visitor services and the growing numbers of visitors are major influencing factors. The introduction of non-native species of animals and plants has also occurred to some degree. The white-tailed deer which, according to research, was non-existent in Cape Breton before the early 1880's was firmly established on the island by 1924.

Zoning of the park and care in the location and design of essential developments can minimize but not eliminate disturbance of the natural course of events.

The development and maintenance of an inventory of the natural resources of the park is basic to any resource conservation program. Much is already known about the park, but a complete inventory is to be made soon.

Cyclical fluctuations in mammal populations are well known. Populations of certain animals have changed considerably over the years in response to changes in availability of food. The present policy of protection tends to encourage the increase of coniferous forests with a corresponding reduction in the deciduous trees and shrubs on which some species depend for food.

The proposed land-use zoning system includes areas under total protection and preservation. Within these are smaller areas where natural forces are allowed to exert their influence with minimum interference from man. Other areas may be set aside where, under the era concept of management, communities which contain specific examples of plant and animal associations will be preserved and perpetuated at a certain stage in their natural progression.

The park's plant and animal communities require considerable mapping and further study including aspects of their origins, trends in growth changes, stability and response to management. These studies will assist in the examination of the present land-use zones, the impact of existing and proposed roads, campsites, and other developments outlined in this plan. Such research will also provide points of reference for evaluating man's influence on the environment and may emphasize the importance of preserving examples of important unaltered plant and animal communities for comparison with other areas which have changed under the impact of civilization.

Plants

The vegetative cover – trees, shrubs, flowers, grasses, etc. – is a living, changing part of the park resources. Its condition and balance can be seriously affected by man. Insufficient protection from fire can result in unacceptably large portions of the park being burned at one time. On the other hand, the absence of natural fire may result in an undesirable imbalance in the ecosystems represented in the park. The possibility of widespread destruction of

forest cover by disease or insects must also be appraised.

Such occurrences could be considered typical examples of natural disasters in large wilderness areas but they would be unacceptable in Class IV and V Lands. Although a forest burnt black by fire or denuded by an insect or disease infestation may be an interesting interpretative feature, it does not make an attractive site for a campground.

In Cape Breton Highlands National Park, as in other national parks, the emphasis has been on maximum protection of the forest land from fire, insects and disease.

Prior to the establishment of the park, fire was a major influencing factor on the landscape and the vegetative cover is witness of it today. The wide variety of habitats and the diversity of plant communities are part of the park's value and contribute to its aesthetic appeal. It may become necessary to allow these naturally destructive forces to operate more freely or, alternatively, to introduce artificial controls.

Animals

The study of wildlife populations in the park is a continuous task. Such studies investigate animals native to the park, population of the various species in relation to the available habitat, and actions necessary to control populations in balance with the available habitat. For example, moose, and more recently woodland caribou, have been re-established in Cape Breton Highlands National Park. Both species were once prevalent throughout Cape Breton, but had been hunted to extinction. The available range conditions can support extensive herds of both species. It is anticipated that populations will multiply to optimum numbers in a short span of time in the protected area. Surplus animals could then migrate or be transported to areas outside the park for controlled hunting under provincial regulations. The need for continuous observation and study of the increase and health of these herds and their range conditions is readily apparent.

Fish

The fisheries program is twofold: to preserve the natural aquatic habitat and to provide game fishing opportunities. A regular stocking program is carried out in some of the park's lakes and streams to

maintain, and in some cases to establish, game fish populations. Branch Pond, for example, has been stocked with eastern brook trout.

In the past stocking has been largely determined by demand for fishing opportunities. In future a more scientific approach will be adopted to provide a greater variety of native species in balance with the aquatic environment and available feed. Consistent with the concept of preserving wild areas, some water bodies will be retained in a natural state and no stocking or fishing will be permitted.

Sea trout, eastern brook trout and a few salmon are found in most of the park's rivers and streams. In particular, the Cheticamp River is noted for runs of Atlantic salmon. Lakes, such as Warren Lake, with relatively easy access to the sea, have a good supply of silver perch and trout, while some of the lakes and streams of the plateau are well stocked with eastern brook trout.

Additional research will be conducted on all the water bodies throughout the park to determine water capacities, natural feed, fish growth and fishing demand. As a result other management measures may be implemented.

Birds

The wide variety of birds is a major visitor attraction of Cape Breton Highlands National Park. The many species, which range from sea birds to the upland, forest and barren-land dwellers, depend on a broad range of habitats and these must be maintained if the rich variety of bird life is to continue. Research is necessary to identify bird relationships and habitat requirements before certain areas can be designated for the preservation of native species.

Conservation and the wardens

The various aspects of the resource conservation program mentioned thus far are carried out primarily by the park wardens, with advice and assistance from specialists within the department and other government agencies. The Canadian Wildlife Service, the Department of Fisheries and Forestry, the meteorological branch of the Department of Transport and the National Research Council are the main sources of specialist support.

Conservation is the wardens' primary role. They provide knowledgeable and practical advice during the planning phase

of resource conservation programs, check on problem areas, and identify special conditions which require remedial action. The wardens also play a prominent part in public relations. They give general information to the park visitor, enforce safety regulations and control travel in hazardous areas. They conduct search and rescue operations for visitors lost or injured in the park. Finding lost visitors in forested areas, safeguarding swimmers and assisting boat operators in trouble are major responsibilities for the national parks' wardens throughout the Atlantic Region.

The enforcement of regulations to protect wildlife from poachers or undue molestation by park visitors is another of their responsibilities. Similarly, they ensure that owners of such domestic animals as dogs, cats or straying livestock comply with park regulations.

Environmental protection

Any development activity by man affects the natural state of the park environment. However, man as an observer and a participant is a part of the park scene. The onus rests on the National Parks Service to prevent over-use of the park, controlling both development and use.

An architectural motif has been established for all of the park buildings. Care is exercised in the design of facilities to ensure conformity with the motif, harmony with the natural surroundings, and control of pollution.

Noise from machines is a growing problem throughout the country. It is particularly important that it be controlled in national parks to preserve their quiet atmosphere. Power boating is not permitted within Cape Breton Highlands National Park and vehicles are not allowed in Class I and Class II areas. Elsewhere, rigid control is maintained over the degree and manner of use of motor-equipped vehicles.

Disposal of the garbage which accumulates in the park requires constant attention. It is a matter of degree – incineration may create air pollution, while landfill operations may create long-term land contamination. Disposal methods must be closely watched and controlled for the protection of the environment.

The park's ability to attract visitors in increasing numbers will exert pressures on the surrounding region to provide commercial facilities. Such development should proceed on a planned basis and it will be necessary for this department to

maintain close liaison with the provincial authorities responsible for regional planning and development. A co-ordinated approach to development will benefit the regional economy, avoid duplication of facilities, and preserve the essential character of the whole area.

Interpretation

Purpose of interpretation

The dedication clause of the National Parks Act states that the parks are set aside for the benefit, education and enjoyment of present and future generations.

The purpose of park interpretation is to promote this understanding and appreciation by providing the park visitor with the kind of information that will enable him to appreciate the natural features and beauty of the park. Interpretation does not teach a passive visitor, but rather suggests the discovery of knowledge and the gaining of insight.

Interpretive process

To be effective, interpretation must be based on knowledge. Data on the biological, geological, and historical aspects of the park are compiled under a continuous inventory program carried out by the park naturalist with the assistance of the wardens. Compiled data are assessed and presented to the visitor through various media. Thus the interpretive program consists of two essential elements – inventory and interpretation.

Interpretive theme

The provisional master plans set out the interpretive theme for each national park. Around these themes, programs are developed and installations constructed to illustrate the natural environment of a particular park.

Cape Breton Highlands National Park is an area of special interest. Stretching across the “highlands” of Cape Breton, the park forms part of a great tableland or plateau that rises over 1700 feet above the surrounding waters. Although generally bordered by a low coastal plain, some sections of the plateau meet the sea in towering cliffs. Great fault valleys cut across the area and a wide variety of habitats extend from the tidal shores to the tundra-like barrens of the plateau.

This vivid contrast of mountains and sea, with a rugged landscape similar to the coastal areas of northwestern Europe (Scotland in particular), is one of the

characteristic features which influenced selection of this area as a national park.

Each national park is a living outdoor museum with a unique central theme. In Cape Breton Highlands it is the remarkable diversity of natural communities produced by the mountains, the climate and the sea that is most apparent. “*Where the Mountains Meet the Sea*” is the logical theme.

Interpretation facilities

Park interpretation is an expanding function and a developing art. New methods, facilities, equipment and approaches are constantly being sought.

Interpretation facilities in current use are interpretation centres, outdoor theatres, on-site exhibits, self-interpreting trails, interpreting signs and printed materials.

Interpretation centres are planned for the Ingonish Beach area and Trout Brook. They are ideally situated near the entrances to the park and the Cabot Trail and will introduce the visitor to the park’s geology, physiography, climate, vegetation, animal and human history and its main natural divisions.

In 1969 a 50-foot exhibit trailer functioned as a temporary interpretation and general information centre at Ingonish Beach. Staffed by a park naturalist, it contained various exhibits and had automatic slide-talk facilities. There was a daily average of 957 visitors and a total attendance of approximately 63,000 during the 66 days the trailer was on display.

Outdoor theatres will be developed in conjunction with major campgrounds to show special interpretive slide-talks and films. These slide-talks are prepared by the park naturalist and tell about the park’s natural environment or human history. Films are generally National Film Board productions with special application to the interpretation of the park.

At present there are outdoor theatres at Ingonish Beach, Broad Cove and Cheticamp. A new 600-seat outdoor theatre is being completed at Ingonish Beach and temporary facilities at Broad Cove and Cheticamp are to be replaced by new structures. An outdoor theatre is also planned for Black Brook.

On-site exhibits and signs will interpret specific features and areas. The structures will be comparatively small, without staff or facilities, and will eventually be provided at many points throughout the park. They are intended not only to deal with the

permanent features, but also with recent developments such as fires, floods, storm damage, infestation and changes of all kinds. This type of display will emphasize that slow imperceptible changes which alter the face of the Highlands are often brought about through the combined effects of many small, local changes.

On-site exhibits and signs proposed include:

- (a) The French Mountain Bogs;
- (b) The McKenzie Mountain Fire;
- (c) The Middle Head;
- (d) The Caribou – their return and range;
- (e) Ingonish Bay Barachois – boulder beaches formed by the sea;
- (f) Clyburn Valley – old mine areas;
- (g) Ingonish Island – bird life;
- (h) Rock Cove – masses of broken rocks;
- (i) Green Point – boulder and sand beaches;
- (j) Black Brook Beach – a vanishing beach;
- (k) Mary Ann Falls – a story of a gorge;
- (l) South Point – tidal action and sandbars;
- (m) White Point – the Aspy Valley fault;
- (n) Gypsum outcrop – white rock and man’s usage;
- (o) Virgin hardwood forest at base of North Mountain;
- (p) Presqu’île – almost an island;
- (q) Cheticamp River outwash; and
- (r) Cheticamp River – salmon run.

Many of these on-site exhibits will be associated with short interpretive trails which will permit detailed examination of the features.

Interpretive trails are designed to lead the visitor through areas especially interesting in natural features. Usually they return to their point of origin without retracing their route. Short and easy to travel, they are suitable for people of all ages and abilities. Some nature trails are self-interpreting, in that a brochure describes the route or signs along the path interpret points of interest. Self-interpreting trails are proposed at:

- (a) Green Cove – one-half mile;
- (b) Broad Cove – one mile;
- (c) French Mountain – one-half mile;
- (d) Cheticamp area – one mile;
- (e) Lone Sheiling;
- (f) Black Brook – behind the campground;
- (g) North Mountain – boreal forest exhibit;
- (h) Corney Brook – one-half mile;

- (i) Base of French Mountain – with geology exhibit;
- (j) Middle Head – one-half mile;
- (k) Lake of Island Road – barrens exhibit and trail; and

(l) MacIntosh Brook – one-half mile.

Interpretive trails developed for special conducted trips with a park naturalist include:

- (a) South Point Trail;
- (b) Warren Lake;
- (c) Presqu'île;
- (d) Ingonish Beach;
- (e) Clyburn Valley;
- (f) Salmon Pool Trail – Cheticamp;
- (g) Car caravan from Cheticamp to MacKenzie Mountain; and
- (h) Car caravan from Ingonish Beach to Neil Harbour.

Interpretive literature is available to the visitor from the park interpretive staff. Presented in several forms, the literature not only expands the visitor's knowledge of the many natural and cultural features of the park, but provides him with an informative record of his visit.

Development

The provision of facilities for visitors or for departmental use constitutes development, and the zoning plan controls the locations. The capacity of each zone to sustain use will control the scale of development. This capacity will be determined by the physical capability of each site and the environmental qualities of the area.

The use of standards based on a specific development capacity for each area requires that, as capacity for a facility is approached, new locations will have to be established. Thus the distribution of facilities is important to the plan. As visitor use increases, a saturation level may be reached. At this point further expansion of facilities would impair the park's environment. A number of solutions are available, including park expansion, establishment of new parks, or the encouragement of development by commercial interests outside the park. It may eventually become necessary to limit the number of visitors in certain zones of the park.

Access and circulation

The primary access route is the Cabot Trail, the northern loop of which lies within the park boundary. The park access points are at Ingonish Beach on the seaward side and near Cheticamp on the west or gulf side.

The Cabot Trail is renowned as one of the most scenic roads in Canada and the objective of the park road plan is to maintain and improve this scenic quality. There is no provision for internal circulation via a loop road – rather, individual routes to special park features will branch out from the main trail. The park is bounded on two sides by the sea, but there has been no demand for access by water and no marina-type developments are planned in the immediate future.

Park roads

Park road locations are in Class III and IV lands as shown on map no. 2. Prior to construction or improvement, each route will be evaluated as to need, distribution of park resources, interpretive and scenic potential and alternative routes.

Approximately 62 miles of the Cabot Trail are within the park. Proposed improvements to this highway include:

- (a) upgrading it to meet adequate standards of highway construction at the park headquarters area and in the Warren Lake area; and
- (b) major re-routing of the Trail between Clyburn River and Broad Cove to provide improved vistas of North Bay Ingonish, and to separate park visitor traffic from local coastal traffic.

Inside the park there are approximately ten miles of access roads. The main proposals for these are:

- (a) to improve and extend the existing route to Glasgow Lakes – the road would require upgrading and the extension would provide visitor access to Long Lake, Round Lake, Lobster Lake and John Dee Lake in addition to the three Glasgow Lakes;
- (b) to improve and extend the existing road leading to Branch Pond. The Branch Pond road requires considerable construction and two alternatives are open:

to construct a new road from the Cabot Trail via Warren Lake, between the Warren Brook and Mary Ann Brook. Such a road would join the existing Branch Pond road between Warren Brook and Mary Ann Brook and extend to Lake of the Islands; or

to construct a new access road directly from the Cabot Trail to Mary Ann Falls, by-pass the Falls and follow the existing Branch Pond road to Lake of the Islands.

Trails and footpaths

Trail use is an important part of the total circulation plan of the park. Access into

most of the remote areas of the park is available by approximately 115 miles of trail, of which 79 miles are fire trails.

A survey of trail-use is being carried out and the results will be used as the basis of a co-ordinated trail program. Layout of trails will make separate provision for hiking and horseback riding and will link park roads, campgrounds and other park facilities. Hiking is becoming a major park activity.

A great many hikers prefer short hikes, not more than five or six miles in length, but the trail system will also provide opportunities for those who wish to travel greater distances. The development of an adequate trail network with a posted sign system should encourage even greater use of the park's trails.

Boating

There has been little visitor demand for boating facilities within the park. This can be attributed to the unsuitability of park waters for boating and the distance factor from main population centres. Boating of any kind is prohibited on specific lakes, but canoeing and rowing is permitted on the remaining park water bodies. None of the park's lakes and streams are suitable for power boating. In the future there will probably be requirements for boat docking facilities to permit access by sea.

Visitor accommodation

Ideally all visitor services should be located outside a park, but in the Cape Breton Highlands National Park there are two exceptions. Keltic Lodge, owned and operated by the Government of Nova Scotia, is located in the Middle Head area and Cape Breton Highlands Bungalow Court, a 25-cabin complex, is located at Ingonish Beach near Freshwater Lake. No additional facilities will be developed inside the park, but accommodation is available at several establishments just outside the park.

Visitor services centres providing such things as gas, meals and supplies, should be located outside the park. With the predicted visitor growth rate, additional privately operated commercial facilities outside the park would benefit the local and regional economy.

Main activity centres are proposed at Ingonish Beach and at Cheticamp. The Ingonish Beach development will include an entrance complex, combining park

administration and information services, an interpretation centre, parking areas and a wide variety of day-use facilities. The swimming area at the northeast corner of Freshwater Lake will remain a minor day-use area, and the Ingonish Beach area will be improved by the construction of a change-house concession building, access walks and additional picnicking facilities. The barachois (rocky barrier separating Freshwater Lake from South Bay Ingonish) will be preserved for interpretive use. Reconstruction of water and sewer services for the area is currently being carried out; a water supply is being provided from the Clyburn Brook site and the improved sewer system will handle all the proposed developments in the area.

A similar complex is planned for the Cheticamp area close to the western entrance of the park. Development of this site will include combined park administration and information services, an interpretation centre, parking lots, and some minor day-use facilities.

Campground use and capacity

Modern camping techniques are constantly changing and improving and the demand for additional facilities is rapidly increasing. Some years ago camping was an experience enjoyed by a relatively small number of enthusiasts. In recent years, however, it has become one of the most popular and enjoyable means of travelling and vacationing. The use of mobile compact trailers or self-propelled "campers" increases annually. Many campers come from urban centres and, while some expect special services, others, using modern camping vehicles, have almost self-contained facilities.

Campgrounds can only be expanded in areas where the land can withstand such use. By this standard Cheticamp is the only campground in Cape Breton Highlands National Park capable of expansion. After the development of a comprehensive trail system it is anticipated that some primitive camp sites will be necessary. The following summary table indicates campground capacities and expansion potential.

Campground development summary

Campground	Existing number of campsites	Expansion	Future Total
1. Big Intervale	10	—	10
2. Black Brook	189	—	189
3. Broad Cove	269	—	269
4. Cheticamp	177	105	282
5. Corney Brook	20	—	20
6. Ingonish Beach	108	—	108
7. McIntosh Brook	30	—	30
Total	803	105	908

Future campground construction

Additional campground construction, with the exception of primitive camp sites, will require either expansion of the park boundary or development outside the park. The latter course is recommended and close co-operation with provincial authorities will be directed towards the encouragement of privately operated campgrounds.

Outdoor activities

In addition to the popular camping experience and the variety of interests offered by the park interpretive program, the park visitor has a wide choice of outdoor activities in Cape Breton Highlands National Park. Hiking, picnicking, sightseeing, fishing, photography and painting are the most popular. Most of these activities require some form of development such as roads, trails, picnic sites, viewpoints or information signs.

Picnic sites and viewpoints are complementary to many of the road improvements and their locations will depend upon traffic patterns within the park. The trail system will be developed to make many of the park's outstanding features more accessible to the visitor.

Although each outdoor activity or park program has been reviewed separately, the park plan must integrate the activities and other facilities, such as trails and roadside car-parks, points of interest, primitive campsites, and fishing waters, with the over-all interpretive program. This will provide the visitor with a choice of activities or interests and makes more efficient use of the same facilities.

Winter recreation.

As winter travel becomes easier an increasing number of visitors can be expected in the future. The possible development of a ski area outside the park could increase the attraction to the winter visitor. However, no special facilities for winter recreation are planned for the park. Eventually over-snow vehicles may become as popular as they are in other national parks. Trails would be designated for their use and operators would be required to comply with the regulations which apply in all national parks.

Park boundaries.

The park spans the Cape Breton Peninsula from east to west and lies roughly in the crook of the northern sweep of the Cabot Trail between the Gulf of St. Lawrence and

the Atlantic Ocean. It thus isolates approximately 150 square miles of the northern tip of the peninsula. When the park was established in 1936 it included that portion of the tip within Inverness County. An exchange of land in 1937 adjusted the boundary by removing the northern area from the park and substituting a smaller area along the southern edge.

The whole northern end of the peninsula has potential for national park purposes on the following basis:

- (i) it is relatively undeveloped;
- (ii) the northern and western shorelines are undisturbed by road access and provide a true wilderness shoreline environment;
- (iii) the landform is the climax of the Cape Breton Highlands as they divide the Gulf of St. Lawrence and the Atlantic Ocean by their dramatic thrust;
- (iv) a variety of shoreline is represented from the sheer cliffs of the gulf side to the barachois and ponds of Aspy Bay; and
- (v) the plant and animal communities are a continuation of those within the park.

For these reasons, and in view of the long term increase in demand for national park areas, the department has investigated the potential of northerly expansion of the park. In these investigations the effect of such expansion on the permanent residents of the several settlements around the coastline of the area is a matter of serious concern.

The process of expanding a park's boundary is neither simple nor rapid. It requires careful analysis of the inhabitants and of all of the existing activities of an area, as well as the natural environment. It can only be carried out through the joint participation of the federal and provincial governments. Negotiations to formally initiate this process have not yet been started.

If such an expansion does ever occur, emphasis on the location of major facilities will inevitably change. The function of the two centres in the Ingonish and Cheticamp areas would probably become subordinate to a new major park centre in the Aspy Bay area which would be more centrally located in relation to an expanded park.

The department will continue its investigations in the area. The priority which it places on the expansion of Cape Breton Highlands National Park is currently not as great as the priority relative to the establishment of new national parks in the Atlantic Provinces and, more generally, other sectors of Canada.

A Brief History

Establishment of Cape Breton Highlands National Park on June 23, 1936 was the culmination of a 14-year campaign to open a national park in Nova Scotia.

In May 1935 the Province enacted legislation to acquire 256,000 acres for the establishment of a national park. In 1936 Canada and Nova Scotia reached agreement on the park boundary and, following acceptance by Canada of title to the lands, the park was established by the Nova Scotia and Prince Edward Island National Parks Act of 1936.

Park boundaries

Cape Breton Highlands National Park originally contained about 458 square miles, but several adjustments of the boundary reduced this to about 390 square miles. An area of 70 square miles in the northern part of the County of Inverness, together with lands in the Pleasant Bay area and in the Aspy River Valley, were withdrawn from the park in 1937. Some 39 square miles in the vicinity of Ingonish, including Middle Head Peninsula, were added in 1938. In 1956 and 1958 two separate areas in the southern part of the park totalling 23 square miles were, at the request of the Province, withdrawn from the park to allow mineral production and hydro-electric development.

Park development

In July 1936 an acting superintendent was appointed and temporary administrative headquarters were established at North Ingonish. In 1938 construction of an administrative complex began at Ingonish Beach. The same year construction started on an 18-hole golf course along the valley of Clyburn Brook, a small campground was developed at Ingonish Beach, a change-house was erected, a sand beach was created on the shore of a small fresh-water lake and parking areas were laid out. Development continued through 1939 and 1940 and, on July 1, 1941, the park was officially opened by the Minister of Mines and Resources.

Buildings

Major construction in the early years of park development included the administration building, the superintendent's residence, and the entrance lodge at Ingonish Beach. In 1942 a building, known as the Lone Shieling, was built at Grande Anse Valley on land donated to the park by D.S. McIntosh. The building, a replica of a

crofter's cabin in the Scottish Highlands, was formally opened in 1947 and is now used as a picnic shelter. In 1953 a community hospital was erected by private enterprise on park land near Neil Harbour. A park information office was built adjacent to the Cabot Trail near Cheticamp in 1954.

Highway development

Reconstruction of the 45 miles of the Cabot Trail within the park was commenced in 1937 and completed in 1940. More improvements were made to the Cabot Trail and additional roads were constructed between 1946 and 1948. In 1954 paving of the Cabot Trail, on the Atlantic side of the park, was started and was completed to Effie's Brook the following year. Reconstruction and paving of the Trail on the Gulf side of the park began in 1958. The entire route, from the park boundary at Cheticamp River through Pleasant Bay to Big Intervale, had been reconstructed and hard surfaced by 1961.

Visitor accommodation

In 1940 the Province of Nova Scotia undertook development of visitor accommodation on Middle Head Peninsula. The former Corson residence was used as a central building to provide dining facilities, a lounge and offices. Attractive bungalow cabins were added in 1940 to form the nucleus of the present day Keltic Lodge. A new lodge, with a large dining room, lounges, gift shop and 32 bedrooms, was opened in 1952.

In 1950 the National Parks Branch undertook construction of a bungalow cabin development on Ingonish Beach at Freshwater Lake and added more cabins the following year. In 1952 a central administration building, containing a snack bar and a small store, was completed. The entire development was leased to a concessionaire.

Campgrounds

The original Ingonish campground was expanded between 1953 and 1961.

On the western side of the park a small campground had been developed near the mouth of the Cheticamp River. A new campground was started in 1956 and facilities were installed from 1957 to 1966.

A serviced campground on the Atlantic Coast, developed at Broad Cove between 1959 and 1963, accommodated 17,556 campers in its first season of operation. In 1966 completion of a trailer area provided

34 serviced trailer lots and 34 tent sites were added in 1967.

In 1963 development of another serviced campground began at Black Brook. Opened in 1966, it provided 86 camping lots. An addition of 195 camping sites was built in 1968. Other campgrounds were opened for use at Corney Brook on the Gulf of St. Lawrence and at Big Intervale, both in 1951, and at MacIntosh Brook in 1957.

Recreation

The natural attractions of the main beach on South Ingonish Bay were augmented by the construction, in 1939, of a change-house for bathers. The same year, as part of the National Forestry Program, walking trails were provided around park headquarters, on Middle Head Peninsula and up the Clyburn Valley. In 1940 three clay tennis courts were built near the athletic field at Ingonish Beach. Completion of an 18-hole golf course at Ingonish Beach in 1941 provided golfers with one of the finest courses in Eastern Canada. In 1941 one of the large buildings from the former Corson property at Middle Head Peninsula was moved to a site behind the first tee and renovated as a golf club-house. A lawn bowling green was constructed near the golf club-house in 1952.

Wildlife and forest protection

Immediately following establishment of the park, a warden service was formed to protect the park's natural values. Early communications were provided by a park radio-telephone system. In 1949 forestry lookout towers were erected on Francey Peak and on French Mountain.

The worst fire in the history of the park occurred early in July 1947 in the MacKenzie River Valley. Fanned by a wind of gale proportions, the fire destroyed 4,000 acres of woodland inside and 3,000 acres outside the park before it was controlled by a fire-fighting force of 700 men.

Cape Breton Highlands National Park, the largest in Eastern Canada, lies across the 'highlands' or plateau area of northern Cape Breton Island. It's southern boundary runs from Ingonish Harbour on the east to Cheticamp on the west and its northern limits extend from Pleasant Bay to Aspy. The rugged landscape, particularly that of the coastal areas, is reminiscent of the Scottish highlands. The park has three major characteristics: it is bounded on two sides by the sea; it is an isolated region where, at present, animals and plants are not often threatened by the exploitation of material resources; and its barrens are a unique formation in this part of Canada.

Geomorphology

The park is situated in the northern peninsula of Cape Breton Highlands, on a tableland of Precambrian rock that rises to 1,750 feet above sea level. Here and there the land extends seaward in bold headlands, while in other places there is a low fringe of younger rocks abutting the seacoast. A number of streams running down to the sea have gouged deep gorges which sometimes widen out at the lower end so that the stream meanders through a pleasant interval. The rocks of the plateau are more or less impervious, causing muskegs that are treeless or covered with stunted spruce and balsam. This upland region is a northeastern extension of an ancient land surface found in parts of New England, the Eastern Townships of Quebec, the Maritimes to the west and probably the plateau of western Newfoundland to the northeast.

The highest point in the park, and indeed in Nova Scotia, is about seven miles west of Ingonish, at an altitude of 1,747 feet in the North Barren. The plateau has been deeply cut by streams in fairly recent geological times. The Cheticamp River, in the southwestern corner of the park, has cut a valley 1,000 feet below the plateau. In the northwestern corner of the park the main road climbs to the upper levels along the deep valley of the MacKenzie River.

Spectacular cliffs of 1,000 feet exist along the western shore where the plateau comes almost directly to the sea. The eastern side slopes more gently, although there is an escarpment along a great fault, or break in the earth's crust, continuing along the valley of the North Aspy River and northward beyond the park boundary.

Most of the park area is underlain by a series of ancient sedimentary and igneous rocks that have been folded, faulted and metamorphosed. Sedimentary materials such as sand, limy mud and gravel collected on the bottom of an ancient sea and solidified to form rock. Masses of granite were intruded into this sedimentary bedrock during periods of folding and faulting that affected this part of North America at least once and perhaps several times during the last 500 million years.

Some 300 million years ago a chapter in the geologic history began when sedimentary materials collected in shallow marine estuaries and river deltas. Later, when the sea level changed and parts of the estuaries were cut off, evaporation left reddish mud and silt beds behind. Patches of these sedimentary rocks lie on top of the ancient bedrock at the four corners of the park.

During the last million years a great ice-cap covered all of northern North America in much the same way as ice now covers Antarctica. Soils were scraped away, great boulders were torn from the solid rocks and masses of rock rubble were piled over the land. Now, 10,000 years after the ice has left, masses of glacial debris and stranded boulders can be seen everywhere. Streams are again eroding the land and the rocks which took a 1,000 million years to form are exposed to view. The low tides and the drift material from torrential streams have caused the formation of barchois, low sand and rock bars enclosing brackish ponds of fresh water areas.

On the plateau shallow soils prevail, while elsewhere coarse sandy loams or bedrock exposures are common. In the relatively cool and moist climate mature soils are podzols (white or grey ash-like soils), while gleysols (very wet soils) and peats are present due to poor drainage conditions.

Climate

Frequent rain and fog conditions contribute to a damp climate, and the area experiences heavy winter snow. The surrounding sea is relatively warm, and the weather is usually fine in late summer and early fall. A characteristic feature of the climate is the persistence of snow into June in the higher inland areas. Winter drifts are very deep, and the strong winds of the inland areas result in hard packing. The winds and drifts of mid-winter and the

persistence of winter snows explain the absence of trees on the high plateau.

During July and August an average of 210 hours of sunshine helps to keep mean daily temperatures between 65 and 70 degrees Fahrenheit. The temperature is slightly warmer on the gulf side. Mid-summer temperatures are warm enough for swimming in the open sea, while rain — an average of 10 inches during July and August — is no serious handicap to tourism.

Plants

The bold headlands of the seacoast, the numerous deep streams and the interior barrens embrace many diverse plant communities. The small ponds and fresh-water lakes and the presence of sea water along the coast also contribute to the diversification of plant communities. The forests of northern Cape Breton Island generally have little commercial value. The few stretches of good timber are offset by large areas without a single tree. The Roper Lake, Warren Lake and Clyburn Brook sections of the east slope contain the largest areas of good forest growth. The northeastern section, which was badly burned in the past, includes the Lumpy Barren.

The park lies within the Acadian Forest Region. Balsam fir, white spruce, black spruce and white birch are predominant. Yellow birch, sugar maple, red maple, white elm, beech, balsam poplar, aspen poplar, red oak, tamarack and mountain ash are found in most of the environments. The stunted appearance of forest stands on ridges and hills is a result of strong prevailing winds.

The entire area from Ingonish Bay to Aspy Bay has been burned. At the time of Fletcher's geological survey in 1880-82, this region was all blueberry barren, but most of it is now covered with trees again. In one large tract near Neil Harbour, known as the Lumpy Barren, there is still little or no tree growth because of repeated burns. Regeneration has often been so slow that the aspect of a true barren has been assumed, even to the growth of 'caribou' lichens. The only stand of jackpine in north Cape Breton Island is found in the regenerated portion of a burnt area at Green Cove.

In the early 1940's the Dominion Forest Service, working from aerial photographs, estimated areas of the various vegetation-types or plant communities in the park. A forest inventory for Cape Breton, using

new aerial photographs, will be carried out in the near future.

On the high plateau much of the area is devoid of trees. Thickets of bushy, deformed conifers alternate with peat bogs. Although a very interesting region, it is seldom seen by the casual visitor. Here are unique areas of muskeg, small ponds and lakes, and broad areas of drier heath-barrens, where lichens, Labrador tea, and many other interesting plants can be found.

This aspect of the countryside appears similar to that of Labrador or other sub-arctic areas, but the plants and animals in this environment are not the same as those of the more northern regions. Both in the interior heath bogs and along the seacoast headlands, the spruce and other trees are stunted and twisted into bizarre shapes. The headlands also support such interesting plants as creeping juniper, ground juniper, black crowberry and Scotch lovage, which are able to live in spite of the winds and salt spray. The barrens are a notable feature of the Cape Breton Highlands and several different types are found in the park. On the highest sector or interior of the plateau the predominant vegetation is caribou lichens (*Cladonia*). There are two large areas of this type, one called the Centre Barren, stretching from Pond of Islands to the headwaters of the Margaree, and the other called the Everlasting Barren, situated between the Margaree and Cheticamp. The Lumpy Barren is an extensive example of a temporary barren resulting from fire. Persistent barrens caused by repeated burns are found on Cap Rouge and French Mountain.

Animals

Mammals

There are only three large herbivores in the park: white-tailed deer, moose and the recently re-established woodland caribou. The black bear is the only other large species. Other mammals characteristic of the park are lynx, beaver, red fox, muskrat, weasel, marten, otter, mink, chipmunk, snowshoe hare, red squirrel and flying squirrel.

Moose became extinct in Cape Breton around the turn of the century but were re-introduced in 1947-48 when 18 head were transferred from Elk Island National Park. Early accounts relate that moose were slaughtered in great numbers for French and British garrisons, for sale to

passing ships and for local use. At the time of the geological survey of 1880-82 moose were already becoming scarce and they were probably extinct before 1900. The area is excellent moose habitat and can support a relatively large population.

The woodland caribou became extinct in the area during the first quarter of this century but the species has been re-established in recent years. In 1968 18 head of caribou were flown from Laurentides Provincial Park in Quebec. Another 32 animals were released in the spring of 1969. Caribou lichens abound for winter feed and there is also plenty of summer forage.

The white-tailed deer is a relatively recent immigrant to Cape Breton. The deer population spread north from the peninsula of Nova Scotia and was firmly established in 1924. There are no cedar swamps in which deer prefer to make their winter range and it is doubtful that their number will increase appreciably.

Birds

Over 180 species of birds have been identified in the park and it is a particularly good area for observing seabirds. Gannet, sooty shearwater and Leach's petrel can be seen from time to time. The seacoast dwellers, black guillemot, common murre, cormorant and common raven, may also be found. Among the gulls and terns which are well represented, the Great Black-backed gull and the Arctic tern are of special interest. Ducks and geese are prominent during migration and some, such as the black duck, the ring-necked duck, the common goldeneye, the common eider and the red-breasted merganser, breed in the park. Shore birds in the park include semi-palmated plover, common snipe and spotted sandpiper.

There are few places in Nova Scotia where bald eagles can be observed more readily than in northern Cape Breton. Reproductive failure has made them scarce throughout eastern North America. The western coastline of Nova Scotia is the best area for observation. Other carnivorous birds commonly seen in the park are the red-tailed hawk and the osprey. Spruce grouse and ruffed grouse are common and the exotic ring-necked pheasant may also be found occasionally.

Fish

Modern methods of fish management are followed and a regular program of stocking

is carried on in the lakes and streams to maintain and improve sport fishing. Sea trout and lake and eastern brook trout may be taken in most waters, and Atlantic salmon may be caught in the Cheticamp River pools. Deep-sea fishing is an increasingly popular sport and local fishermen can be engaged to take visitors out for this purpose.

Visitor-use Data

Figure 1
Visitor attendance

Visitor-use studies provide background information for planning decisions. Information is obtained from a number of sources: records are kept of the number of visitors entering the park, their origin and type of camping equipment; campground permits show timing, length of stay and size of party; and ticket sales indicate use of other facilities.

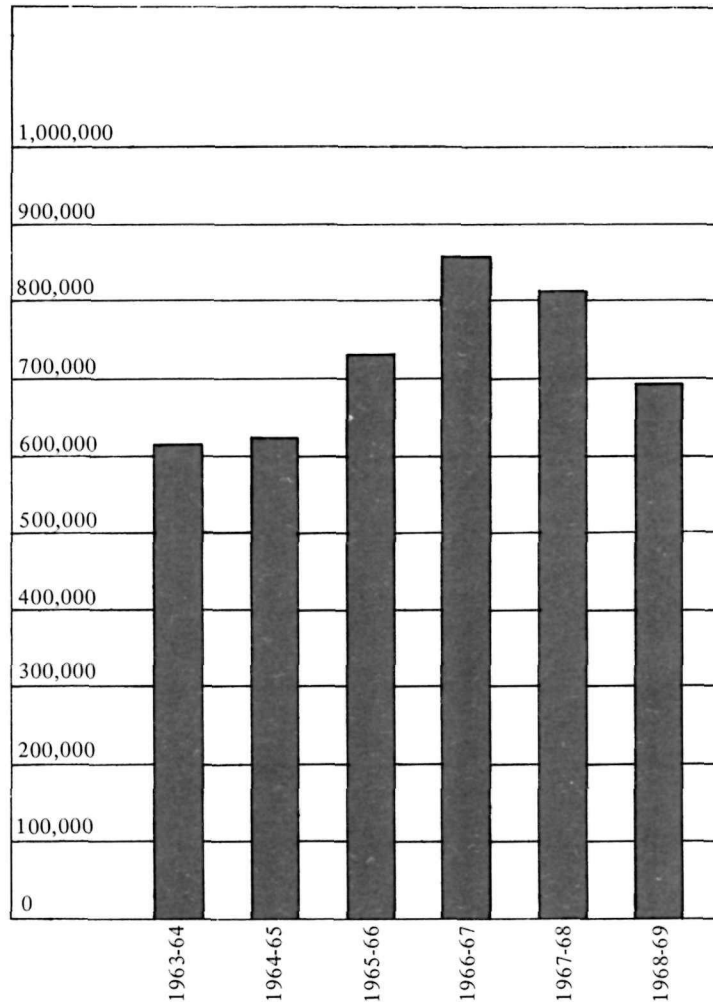
Special studies are carried out to identify use patterns and visitor characteristics not readily obtained from administrative records. These include studies of campers, road-side picnickers and so on. Graphs and tables have been appended as examples of the type of data collected.

Long-term trends in visitor-use also provide guidelines for future development. These trends can be determined from historical patterns and projections into the future. Present forecasts of increased leisure time, income and mobility all point to continued pressures on national parks.

Visitor attendance at the park has increased nearly tenfold in the past few years – from 75,000 in 1956 to approximately 700,000 in 1969. This is the highest rate of increase achieved by any national park in the Atlantic Provinces. Should this trend continue until 1975, approximately two million visitors may be expected that year.

The interpretive program of conducted hikes and illustrated talks was first introduced in 1966. The growing response by the visitor is reflected in the following number of interpretive contacts, through conducted hikes, talks, and visits to the interpretive trailer during 1969:

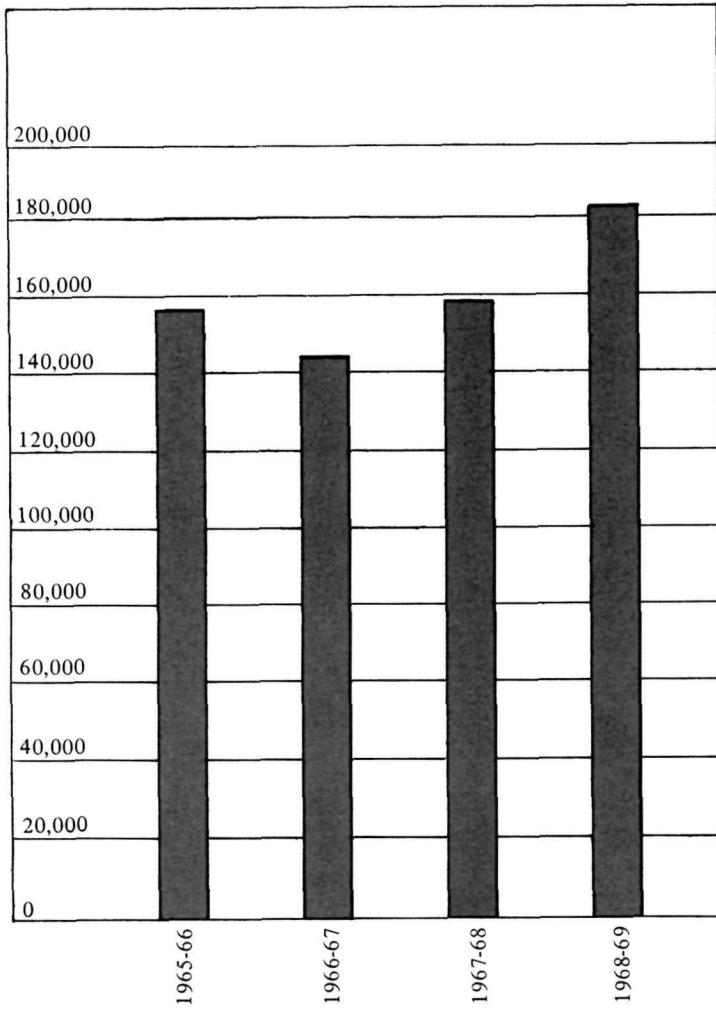
1966	11,381
1967	15,813
1968	26,358
1969 (to August 31)	81,053



Total annual count of all automobile and bus passengers entering Cape Breton Highlands National Park from 1963-64 to 1968-69

1963-64	615,133
1964-65	624,942
1965-66	729,443
1966-67	851,653
1967-68	810,651
1968-69	689,973

Figure 2
Campground use



Number of camper-days per year

1965-66	157,666
1966-67	146,184
1967-68	160,035
1968-69	185,029

The use of a campground can be measured in camper-days. This is the product of the number of campers and the number of nights they camped.

Effective planning depends on a constant flow of accurate and complete information of changes in resources and use-trends. These data are obtained from special inventories such as ground cover maps, user surveys, consultants' studies or research reports, and from normal administration sources, such as ticket counts. Use data are sometimes required on a daily or hourly basis. These may be obtained from periodic gate counts or other measurements on the use of each facility. Visitor capacities must be established and are essential for each new development to ensure that a "quality experience" is sustained.

Studies will take many forms and cover a wide spectrum of information in varying detail. They will be conducted as economically and conveniently as possible with minimal disturbance to the park or the visitor. The following list is not exhaustive, but illustrates the range and nature of essential studies.

Land-use

1. Park expansion to explore feasibility of extending the park boundaries.
2. Regional study. The current relationship of this park to its surrounding regions should be examined at an early date to correlate existing and planned park programs with those of the Province of Nova Scotia. Included would be such items as roads, visitors services, population patterns, regional economic aspects and resources.

Park resources

1. Soil mapping at selected locations to determine recreational use potential and erosion dangers.
2. Ground cover mapping and up-dating of the plant cover maps for the future mapping of animal habitats and management.
3. Continued fish, bird and mammal habitat studies.
4. Archaeological and historical research.

Visitor-use

1. Graphs to relate daily use and capacity of each campground.
2. Surveys to relate use and capacity of outdoor activity areas or facilities.
3. Surveys to forecast needs for visitor services.
4. Periodic traffic counts to provide data for road service projects.

Area development projects and conceptual plans

1. Visitor services centre plans.
2. Trail system expansion.
3. Highway and secondary road development.

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MacKenzie River area
Secteur de la rivière MacKenzie

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CAPE BRETON HIGHLANDS NATIONAL PARK PARC NATIONAL DU CAP-BRETON

MILES - MILLES

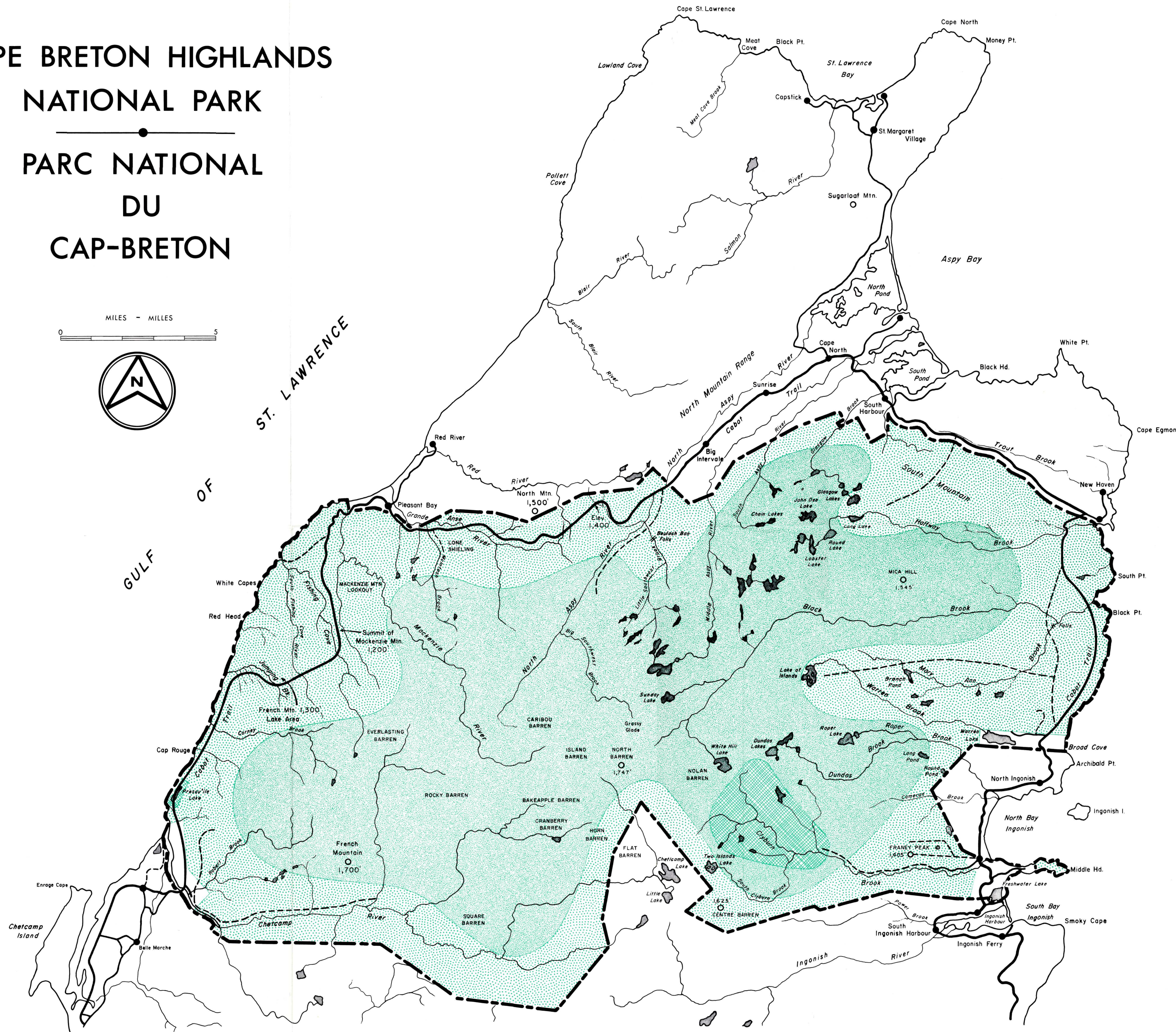


LAND USE • UTILISATION DU TERRAIN

Class 1	Special Areas		Aires spéciales	Classe 1
Class 2	Wilderness Recreation Areas		Aires incultes de récréation	Classe 2
Class 3	Natural Environment Areas		Aires d'ambiance naturelle	Classe 3
Class 4	General Outdoor Recreation Areas		Aires de récréation en plein air	Classe 4
Class 5	Intensive Use Areas		Aires de forte utilisation	Classe 5

NATIONAL PARKS SERVICE
SERVICE DES PARCS NATIONAUX

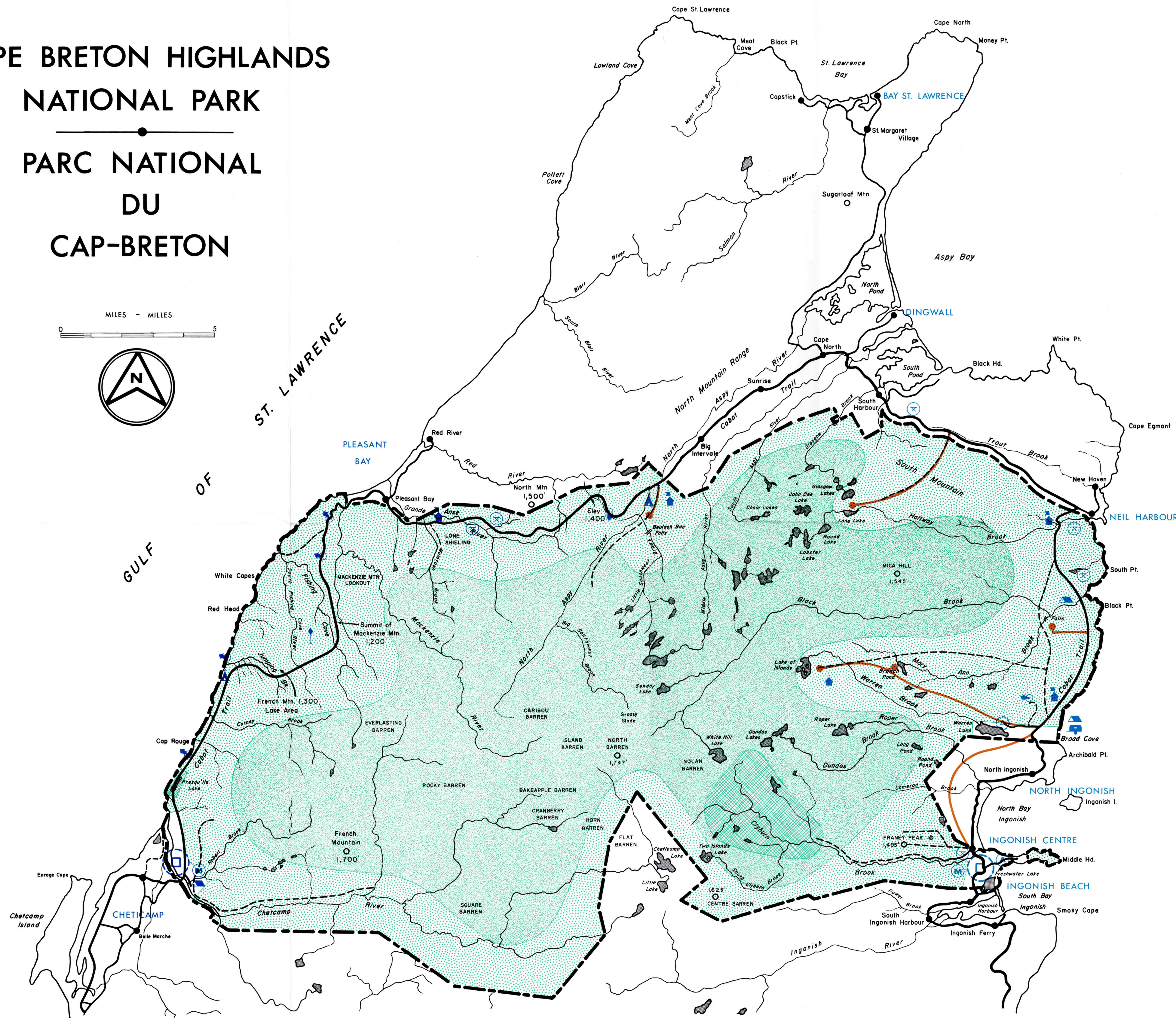
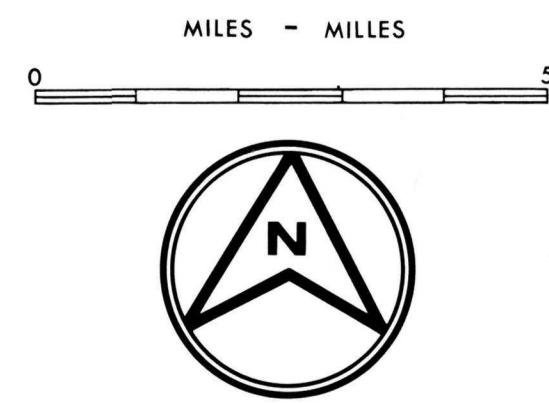
DEPARTMENT OF INDIAN AFFAIRS AND NORTHERN DEVELOPMENT
MINISTÈRE DES AFFAIRES INDIENNES ET DU NORD CANADIEN



MAP
CARTE 1

LAND USE
UTILISATION DU TERRAIN

CAPE BRETON HIGHLANDS NATIONAL PARK PARC NATIONAL DU CAP-BRETON



- LAND USE • UTILISATION DU TERRAIN**
- | | | | | |
|---------|----------------------------------|--|----------------------------------|----------|
| Class 1 | Special Areas | | Aires spéciales | Classe 1 |
| Class 2 | Wilderness Recreation Areas | | Aires incultes de récréation | Classe 2 |
| Class 3 | Natural Environment Areas | | Aires d'ambiance naturelle | Classe 3 |
| Class 4 | General Outdoor Recreation Areas | | Aires de récréation en plein air | Classe 4 |
| Class 5 | Intensive Use Areas | | Aires de forte utilisation | Classe 5 |
- CIRCULATION • LES VOIES DE CIRCULATION**
- | | | |
|---------------|--|----------------|
| Existing Road | | Route actuelle |
| Proposed Road | | Route projetée |
- DEVELOPMENTS • LES AMÉNAGEMENTS**
- | | | |
|--------------------------|--|--|
| Proposed Day-Use Centre | | Centre de fréquentation diurne projeté |
| Proposed Activity Centre | | Centre d'activité projeté |
| Campground | | Terrain de camping |
| Trailer Camp | | Camp de remorques |
| Primitive Campground | | Camping naturel |
| Picnic Area | | Terrain de pique-nique |
| Fire Lookout | | Tour d'observation |
| Viewpoint | | Poste d'observation |
| Warden Station | | Poste de patrouilleurs |
| Patrol Cabin | | Cabine de patrouilleurs |
| Maintenance Compound | | Service d'entretien |
| Administration | | Administration |

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