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## Regulations and other acts

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Gouvernement du Québec

### **O.C. 516-2003, 11 April 2003**

Natural Heritage Conservation Act  
(2002, c. 74)

#### **Ecological reserve of Serpentine-de-Coleraine — Establishment and approval of the conservation plan**

Establishment of the Serpentine-de-Coleraine ecological reserve and approval of the conservation plan

WHEREAS the land appearing in the plan and in the technical description attached as a schedule was set aside with a view to the establishment of an ecological reserve and a notice of that setting aside was published in the *Gazette officielle du Québec* of 14 June 2000 in accordance with section 4 of the Ecological Reserves Act (R.S.Q., c. R-26.1);

WHEREAS the public was consulted on the proposed ecological reserve through the publication of a notice in the *Gazette officielle du Québec* of 10 April 2002 and in the regional newspaper *Courrier Frontenac* of 19 April 2002, and the 30-day consultation period before the granting of permanent ecological reserve status, required by section 2 of the Act, has expired;

WHEREAS, under section 86 of the Natural Heritage Conservation Act (2002, c. 74), that Act replaced the Ecological Reserves Act (R.S.Q., c. R-26.1);

WHEREAS, under section 88 of the Natural Heritage Conservation Act (2002, c. 74), which came into force on 19 December 2002, the proposed ecological reserves in whose respect a notice was published in the *Gazette officielle du Québec* before 19 December 2002 are maintained and governed, as of that date, by the provisions of that Act;

WHEREAS, under section 43 of the Natural Heritage Conservation Act (2002, c. 74), the Minister of the Environment may recommend to the Government that all or part of land set aside for that purpose be assigned permanent ecological reserve status, and recommend the Government approve the conservation plan for the reserve;

WHEREAS the granting of such protection status makes it possible to safeguard rare forest areas as well as several threatened or vulnerable species in the territory including Indian's Dream, Ebony Spleenwort, Lake Ontario Goldenrod, Aleutian Maidenhair and Green Mountain Maidenhair;

WHEREAS the land considered for the ecological reserve is part of the domain of the State and is not situated in a reserved area or in an agricultural zone established under the Act respecting the preservation of agricultural land and agricultural activities (R.S.Q., c. P-41.1);

WHEREAS Municipalité régionale de comté de l'Amiante has given its opinion confirming that the proposed ecological reserve is in compliance with the objectives of its development plan;

WHEREAS the Commission de toponymie du Québec has approved the use of the name "Réserve écologique de la Serpentine-de-Coleraine";

WHEREAS, under section 45 of the Natural Heritage Conservation Act (2002, c. 74), permanent protection status for the land and its conservation plan take effect on the date of publication of the order in the *Gazette officielle du Québec* or on any later date specified therein;

IT IS ORDERED, therefore, upon the recommendation of the Minister of State for Municipal Affairs and Greater Montréal, the Environment and Water and Minister of the Environment :

THAT permanent ecological reserve status be assigned to the land, the plan and technical description of which are attached as a schedule, under the name "Réserve écologique de la Serpentine-de-Coleraine";

THAT the proposed conservation plan for that area, the text of which is attached as a schedule, be approved;

THAT the ecological reserve status and conservation plan come into force on the date of publication in the *Gazette officielle du Québec* of the notice of the decision of the Government provided for in section 44 of the Natural Heritage Conservation Act.

JEAN ST-GELAIS,  
*Clerk of the Conseil exécutif*

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QUÉBEC  
REGISTRATION DIVISION OF THETFORD

TECHNICAL DESCRIPTION

SERPENTINE-DE-COLERAINE  
ECOLOGICAL RESERVE

Land of irregular shape, situated in the territory of Municipalité régionale de comté de L'Amiante in the administrative region of Chaudière-Appalaches and comprising the following in reference to the cadastre of the township of Coleraine, registration division of Thetford:

— The whole of lot A-3 of block A, the said lot A-3 being made up of two parts separated by lot 238;

— Lot A-4 of block A;

— Lot B-2 of block B;

— The whole of lot B-3-1 of block B, the said lot B-3-1 being made up of two parts separated by lot 238;

— Part of lot 238;

— Two parts of lot A-1 of block A;

— Four parts of lot B-1 of block B.

The perimeter of the land may be described as follows, namely:

Starting at point "A" situated at the intersection of the dividing line between lots B-3-1 and B-3-2 of block B with the dividing line between the cadastre of the township of Coleraine and the cadastre of the township of Ireland;

Thence, northeasterly, following the dividing line between the cadastre of the township of Coleraine and the cadastre of the township of Ireland, that is, successively the northwestern line of lot B-3-1 of block B, the northwestern line of lot A-3 of block A, then over 1,220.00 metres along the northwestern line of part of lot A-1 of block A, that is, point "B";

Thence, southeasterly, following in lot A-1 of block A and across lot 238 a straight line parallel to the northeastern line of lots A-3 and A-4 of block A for a total distance of 2,455.86 metres, that is, point "C";

Thence, southwesterly, following in lot A-1 of block A a straight line over approximately 1220 metres to the eastern corner of lot A-4 of block A, that is, point "D";

Thence, southwesterly, following the southeastern line of lot A-4 of block A, then the southeastern line of lot B-2 of block B and its extension across lot B-1 of block B and lot 237 (railroad) to the dividing line between lot B-1 of block B and Rang 8, that is, point "E";

Thence, northwesterly, following the dividing line between lot B-1 of block B and Rang 8 to its intersection with the southwestern line of lot 237 (railroad), that is, point "F";

Thence, northwesterly, following the southwestern line of lot 237 (railroad) to its intersection with the dividing line between lot B-1 of block B and Rang 8, that is, point "G";

Thence, northwesterly, following the dividing line between lot B-1 of block B and Rang 8, crossing Chemin de Vimy (Chemin Benet), for a total distance of 613.33 metres, that is, point "H", that point being situated 145.63 metres measured in reference to the dividing line between lot B-1 of block B and Rang 8 from the southwestern limit of the right-of-way of Chemin de Vimy;

Thence, northeasterly, following a straight line in lot B-1 of block B, crossing Chemin de Vimy (Chemin Benet) and lot 237 (railroad) to point "I" situated on the southwestern line of lot B-1-1 of block B, at a distance of 473.99 metres from the southern corner of the said lot B-1-1;

Thence, southeasterly, following the southwestern line of lot B-1-1 of block B for a distance of 473.93 metres to the southern corner of the said lot, that is, point "J";

Thence, northeasterly, following the southeastern line of lot B-1-1 of block B, then the southeastern line of lot B-3-2 of block B to the dividing line between lots B-3-2 and B-3-1 of block B, that is, point "K";

Thence, northwesterly, following the dividing line between lots B-3-1 and B-3-2 of block B, its extension across lot 238 and again the dividing line between the said lots B-3-1 and B-3-2 to its intersection with the dividing line between the cadastre of the township of Coleraine and of the cadastre of the township of Ireland, that is, the starting point "A".

TO BE WITHDRAWN from the land whose perimeter is described above, the following parcels:

— The portion of Chemin de Vimy (Chemin Benet) being part of lot B-1 of block B, having a right-of-way 15.25 metres wide and extending in length from its intersection with line "G-H" to the southwest to its intersection with line "H-I" to the northwest. More par-

ticularly, that portion of Chemin de Vimy measures 17.66 metres along its northwestern line, 201.90 metres along its northwest line, 28.66 metres and 168.70 metres along its southwestern lines and its area covers 2,824 square metres.

— The portion of the railroad, being part of lot 237, measuring 30.48 metres wide and 1,330.19 metres long, extending from its intersection with line “D-E” to the southeast to its intersection with line “H-I” to the northwest and covering an area of 4 hectares.

The territory of the ecological reserve covers an area of 396.55 hectares as a whole and is shown on a map to a scale of 1 : 10 000, prepared by the undersigned and bearing the same minute number as this technical description to which it is attached.

#### NOTES :

— The plan attached to this technical description was drawn in reference to the plan prepared by Gérald Marois, land surveyor, on 30 November 1999, under number 4711 of his minutes.

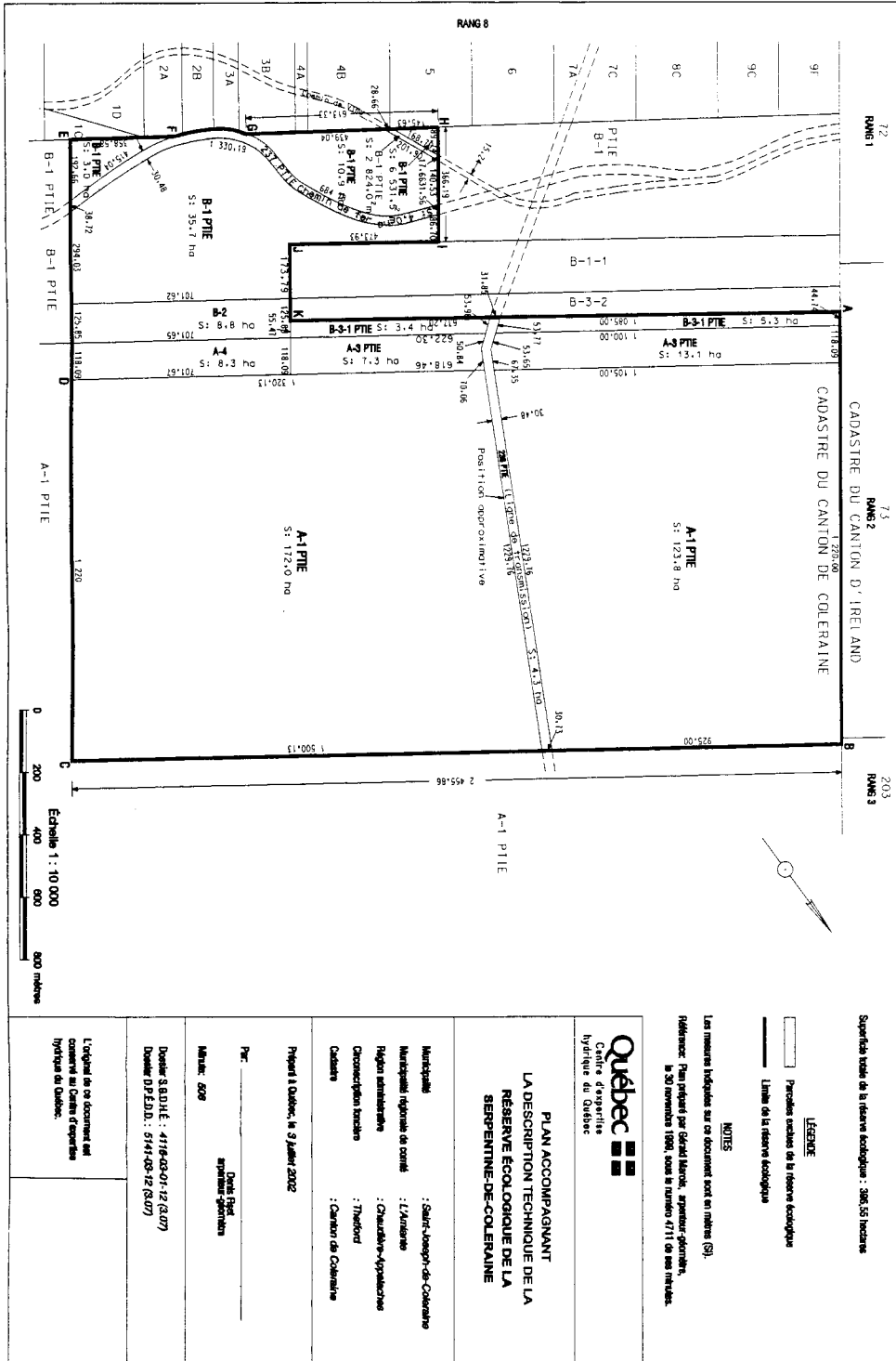
— Measurements are expressed in the international system of units (SI).

— Survey of the limits of the territory will improve the accuracy of the perimeter of the ecological reserve.

Prepared at Québec this 3 July 2002 under number 506 of my minutes.

DENIS FISET,  
*Land surveyor*

Ministère de l'Environnement du Québec  
File number at the Service de la gestion du domaine  
hydrique de l'État:  
4116-03-01-12 (3.07)  
File number at the Direction du patrimoine écologique  
et du développement durable  
5141-03-12 (3.07)



Superficie totale de la réserve écologique : 368,55 hectares

**LEGÈRE**

Parcelles cadastrales de la réserve écologique

Limite de la réserve écologique

**NOTES**

Les mesures indiquées sur ce document sont en mètres (M).

Référence : Plan initial par Gérard Marché, ingénieur-arpenteur, le 30 novembre 1998, sous le numéro 4711 de ses minutes.



**PLAN ACCOMPAGNANT  
LA DESCRIPTION TECHNIQUE DE LA  
RÉSERVE ÉCOLOGIQUE DE LA  
SERPENTINE-DE-COLEBAINE**

**Municipalité** : Saint-Jean-de-Colebaine  
**Municipalité régionale de comté** : L'Annohée  
**Région administrative** : Chaudière-Appalaches  
**Circoscription fédérale** : Thérèse  
**Cadastre** : Canton de Colebaine

Préparé à Québec, le 9 juillet 2002

Par :          **Daniel Fiset**  
 arpenteur géomètre

Matr. n. 609

Dossier S.B.D.H.E. : 4114-03-01-12 (2/07)  
 Dossier D.P.E.D.D. : 5141-03-12 (S/07)

L'original de ce document est conservé au Centre d'expertise hydrique du Québec.

CONSERVATION PLAN FOR THE SERPENTINE-DE-COLERAINE ECOLOGICAL RESERVE,  
MARCH 2003

1. Plan and description

1.1. Geographic location, limits and dimensions

The occupation and uses of the Serpentine-de-Coleraine ecological reserve and its location are shown on the annexed maps.

The Serpentine-de-Coleraine ecological reserve is located in Municipalité de Saint-Joseph-de-Coleraine, within the limits of Municipalité régionale de comté de l'Amiante. It is situated immediately to the south-west of Ville de Thetford-Mines. It covers an area of approximately 397 hectares.

1.2. Ecological overview

The ecological reserve is in the Appalachians natural province. It protects a number of threatened or vulnerable species associated with the presence in this location of a rock type referred to as "serpentine." The ecological reserve also protects forest communities of interest that are rare in this part of Québec.

1.2.1. Representative elements

**Climate:** The ecological reserve is characterized by a moderate climate. It belongs to the bioclimatic field of sugar maple-yellow birch stands.

**Geology and geomorphology:** The territory of the ecological reserve includes two hills, Kerr and Mont Oak, between which sits a valley. It also includes part of the south-east side of Mont Caribou, characterized by its talus slopes.

The bedrock, with which a unique flora complex is associated, is mainly peridotite with dunite and, on the south slopes of Mont Oak, with pyroxenite.

The term "serpentine" is frequently used to describe this rock type, even though it is not technically accurate. The rocks are part of the large group of magnesium-rich ultrabasic rocks.

The dominant deposits are generally thin till (less than 1 metre thick) deposited by the last glaciation. Where the slopes are steep, the deposits produce a till veneer with rock outcrops, in particular on the upper slopes of Mont Oak. Colluvial deposits are also present.

**Vegetation:** Sugar maple-red maple, poplar and paper birch stands colonize mainly stations at the base of Mont Oak and the west and south slopes of Kerr hill. The forest communities are generally dominated by red maple, paper birch, red spruce, and balsam fir accompanied by white pine. Pine-deciduous stands cover the lower west slopes of Kerr hill, and continue up those slopes, while sugar maple-white birch, red pine and sugar maple-basswood stands are among the main forest communities found on the flanks of Mont Oak. An oak-sugar maple stand on thin till also covers part of the south-west flanks of Mont Oak. The summit of Mont Oak is partly covered by red pine and sugar maple-basswood stands.

The ecological reserve is home to several forest communities of great interest from the perspective of conservation. Among these are the oak-sugar maple stand, recognized as an exceptional forest ecosystem. A mixed stand of red and white pine, considered to be rare in this region and also classified as an exceptional forest ecosystem, colonizes the east flank of Mont Oak.

1.2.2. Outstanding elements

The unique flora complex found in the territory is directly linked to the presence of serpentine. No fewer than five species of plants likely to be designated as threatened or vulnerable, four of which are considered to be serpentine plants, are found inside the ecological reserve: Mountain Goldenrod (*Solidago simplex subsp. Randii var. monticola*), Aleutian Maidenhair (*Adiantum aleuticum*), Green Mountain Maidenhair (*Adiantum viridimontanum*) and Indian's Dream (*Aspidotis densa*). Among these species, Green Mountain Maidenhair is unique to south-western Québec and the northern part of the New England states, while only six occurrences of Indian's Dream have been reported in North America, all six in Québec. Ebony Spleenwort (*Asplenium platyneuron*), a calcicolous plant, is also present.

1.3. Land occupation and use

The territory is public property. The status of proposed ecological reserve was assigned to the territory with the publication of a notice in the *Gazette officielle du Québec* of 14 June 2000.

Over the years, the Ministère de l'Environnement has approved the development of hiking trails on the territory which will be used within the framework of the implementation of an educational program on the ecological reserve pursuant to section 2 of the Natural Heritage Conservation Act (2002, c. 74).

## 2. Protection status

The Serpentine-de-Coleraine ecological reserve meets the objectives for which it is established, namely:

(1) to conserve the elements constituting biological diversity in their natural state, as integrally as possible and in a permanent manner, in particular by protecting ecosystems and the elements or processes on which their dynamics are based;

(2) to set aside land for scientific study or educational purposes; and

(3) to safeguard the habitats of threatened or vulnerable flora or fauna.

## 3. Activities within the reserve

All activities carried on within the Serpentine-de-Coleraine ecological reserve are governed by the provisions of the Natural Heritage Conservation Act (2002, c. 74, s. 48). This conservation plan does not specify any prohibited activity other than those prohibited in ecological reserves by the Act.

### 3.1. Prohibited activities

— General prohibitions under the Act

For reference purposes, it is important to note that under the Natural Heritage Conservation Act, the main activities prohibited in an area designated as an ecological reserve are:

– hunting, trapping, fishing, earthwork or construction activities, agricultural, industrial or commercial activities, and generally, any activity likely to alter the state or nature of ecosystems;

– forest management activities within the meaning of the Forest Act (R.S.Q., c. F-4.1);

– mining, and gas or petroleum development;

– mining, gas or petroleum exploration, brine and underground reservoir exploration, prospecting, and digging or boring; and

– the development of hydraulic resources and any production of energy on a commercial or industrial basis.

In addition, no person may be in an ecological reserve, except for an inspection or for the carrying on of an activity authorized under law. The Minister may, however, authorize, in writing and on the conditions the Minister determines, any activity consistent with the purposes of an ecological reserve or with the management thereof.

### 3.2. Supervision of activities

The Minister of the Environment is responsible for the application of the Natural Heritage Conservation Act, and is also responsible for the ecological reserves established under that Act. The Minister will supervise and monitor the measures contained in the Act with regard to permitted activities in protected areas.

In addition, the Minister has authority over that land, which forms part of the domain of the State.

