Protected areas in Québec:

A Lifelong Heritage

Réserve écologique du Mont-Gosford

CONSERVATION PLAN

Québec

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CONTENTS

1. Official Toponym

Official name: Réserve écologique du Mont-Gosford, in reference to Mont-Gosford, where the reserve is located.

2. Plan and Description

2.1. Geographical location, boundaries and dimensions

The reserve is located in the municipality of Saint-Augustin-de-Woburn, Municipalité régionale de comté (MRC) du Granit (Figure 1), and covers an area of 306.78 ha. It mainly covers the northern and western slopes of the Massif du mont Gosford, from its peak at about 1,183 m down to an altitude of approximately 720 m (Figure 2).

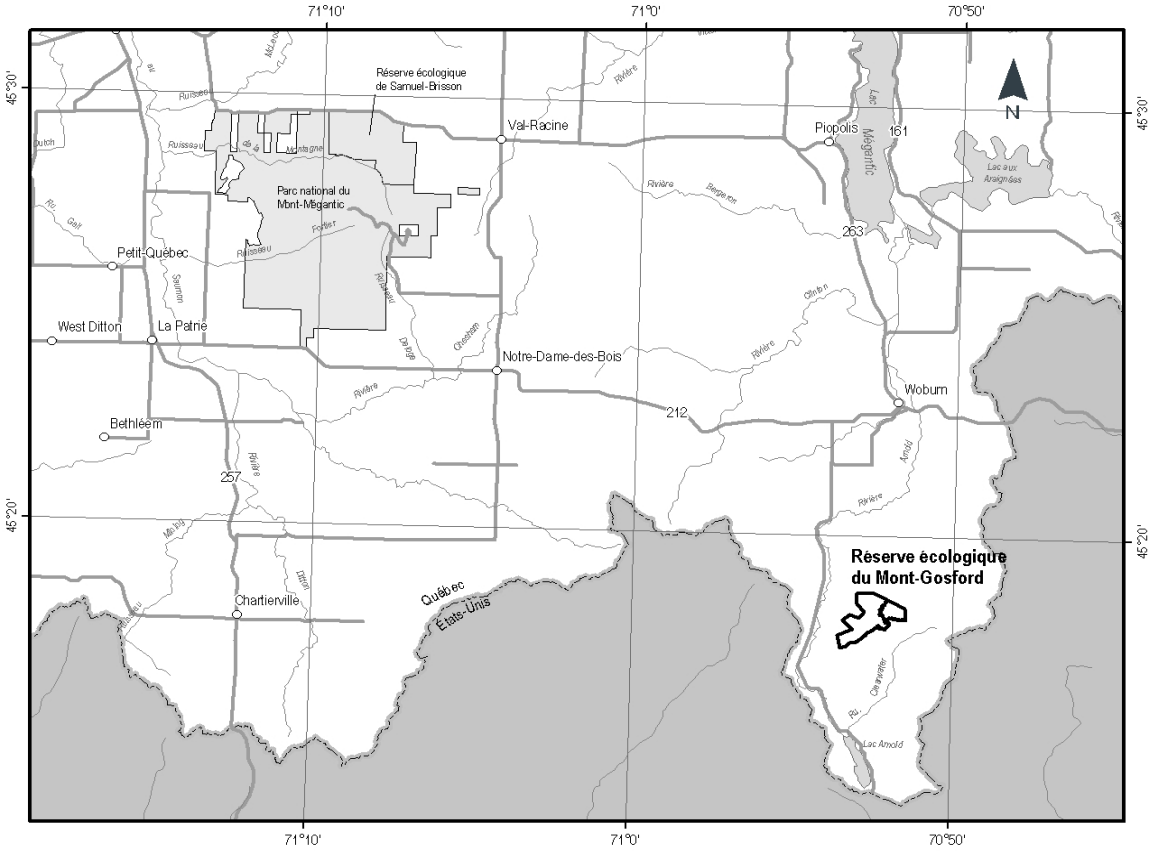

Figure 1. Location of Réserve écologique du Mont-Gosford

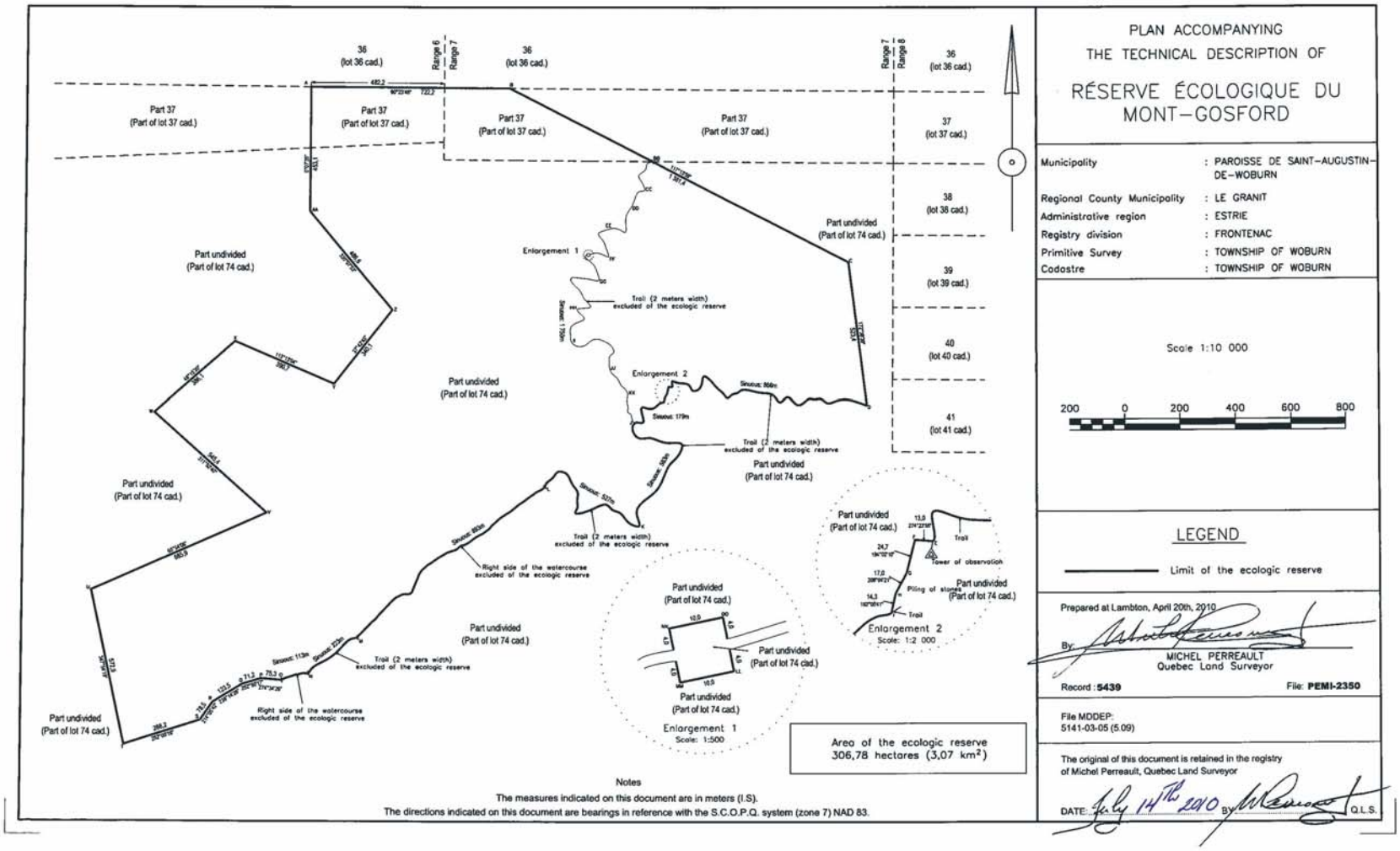

Figure 2. Plan of the Réserve écologique du Mont-Gosford

2.2. Ecological overview

The Réserve écologique du Mont-Gosford contains representative and outstanding elements of the territory in which it is located.

2.2.1. Representative elements

Ecological frame of reference: The Réserve écologique du Mont-Gosford constitutes a representative sample of the upper portion of the peaks encircling the natural region of the White Mountains, one of the five regions of the natural province of the northern Appalachians (Ecological Reference Framework for Québec). This region extends across the border into the United States.

Relief and geology: Mont-Gosford is the highest peak in southern Québec and the seventh highest in the province. Due to the relief, the soil is very shallow and composed of till. The geology of the mountain and the surrounding area is unique in Estrie. The area forms part of the Chain Lakes massif, a supracrustal block that long remained a puzzling element in the orogenesis of the Appalachians. The massif is constituted mainly of meta-sediments and some metavolcanic rock. During the Paleozoic Era, between approximately 685 and 483 million years ago, sediments were deposited in a fore-arc basin on the western shore of the Iapetus Ocean. Around 470 million years ago, magma intrusions related to the formation of the arc provoked the partial fusion of the sediments and their transformation into diatexite. From a physiographic viewpoint, the Chain Lakes massif is an extension of the White Mountains of New Hampshire and Maine.

Photo 1: Mountain-top detritus on the summit of Mont Gosford, formed by in-situ alteration of the rock.

Vegetation: The ecological reserve forms part of the sugar maple–yellow birch bioclimatic domain (Ministère des Ressources naturelles (MRN)). However, due to its high altitude, above 720 m, the vegetation is mainly coniferous and closely resembles that of more northern bioclimatic domains. In fact, only the last stages of vegetation on Mont-Gosford are represented in the ecological reserve. Balsam fir and wood sorrel grow on the uppermost part of the mountain, above 950 m altitude, while balsam fir and red spruce occupy the high and the steep slopes (50% incline or more). Although balsam fir–red spruce stands are almost nonexistent in the Laurentians and Gaspésie, they are characteristic at high altitudes in the Appalachian mountains south of the border. A little lower, one can find balsam fir–white birch and white birch–balsam fir stands. These different forest types are representative of the region's high peaks.

Photo 2: Carpet of common woodsorrel.

2.2.2. Outstanding elements

The representative forest types associated with the Réserve écologique du Mont-Gosford also have outstanding features. Wood sorrel and red spruce stands are rare in Québec, and white birch and white birch–balsam fir stands are rare in the region.

The ecological reserve constitutes one of the rare recorded southern Québec nesting grounds for certain birds characteristic of the boreal forest, such as the spruce grouse, the gray jay, the fox sparrow and the blackpoll warbler. Bicknell's thrush, which has been designated vulnerable in Québec and is considered threatened in Canada, also nests in the reserve.

Photo 3. Bicknell's thrush.

There are no recorded archaeological sites but the existence of such sites in the vicinity indicates the potential for finding some in the reserve

2.3. Land occupation and uses

The land is publicly owned and is surrounded by the zone d'exploitation contrôlée Louise-Gosford. The boundaries of the ZEC, a forest management contract and a trapline have been changed to allow the creation of an ecological reserve. A two-metre-wide hiking trail crosses but is not part of the reserve.

3. Protection Status

A master's study carried out on Mont-Gosford in the mid-1990s highlighted the relevance of establishing an ecological reserve to protect softwood forests that are typical of the higher Appalachian peaks and rare in Québec and in the region. The reserve is similar to the nearby Réserve écologique Samuel-Brisson and characterized by the same forests. However, given how rare and fragile those forests are and how small an area they cover, establishing the Réserve écologique du Mont-Gosford for their protection is a complementary measure. The Réserve écologique Samuel-Brisson is located in a different

natural province (Plateau d'Estrie–Beauce) and its geological nature—an intrusion that forms part of the Montérégie hills—is completely different. The Réserve écologique du Mont-Gosford is currently the only ecological reserve in the natural province of the White Mountains.

The ecological reserve covers the peak and the northern face of the mountain. The contour was adjusted to better cover the rare forests mapped by the MRN and recognized by the department as outstanding forest ecosystems.

4. Framework for prohibited and permitted activities

The following activities are prohibited in an ecological reserve:

- forest anagement within the meaning of section 3 of the Forest Act (chapter F-4.1);
- Mining, and gas and petroleum development;
- Mining, gas, or petroleum exploration, brine or underground reservoir exploration, prospecting, digging or drilling;
- Development of hydraulic resources and production of energy on a commercial or industrial basis; and
- Hunting, trapping, fishing, excavation or construction activities, agricultural, industrial, or commercial activities and, generally, any activity that could alter the state or the nature of the ecosystems.

No person may be in an ecological reserve, except for an inspection or to carry on an activity authorized by law.

Under the Natural Heritage Conservation Act (chapter C-61.01), the Minister of Sustainable Development, Environment, Wildlife and Parks may authorize, in writing and on the conditions the Minister determines, any activity consistent with the purposes or the management of an ecological reserve.

5. Role of the Minister

The Minister of Sustainable Development, Environment, Wildlife and Parks is responsible for the administration of the Natural Heritage Conservation Act, as well as the management of the ecological reserve. The Minister sees to the monitoring and follow-up of the measures provided for in that Act with respect to prohibited and permitted activities. Moreover, the Minister holds authority over these lands, which form part of the domain of the State.

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