

# The Environment in Estérel What's New?

Citizens bulletin July 2019

# Discovering PARC D'ESTÉREL

Parc d'Estérel is located south of the city on an area of 349 hectares that includes most of Lake Castor. Glacial deposits formed during the ice age are present in Estérel, as evidenced by large rocks scattered throughout the territory. Parc d'Estérel offers 13 km of hiking trails and 35 km of trails for cross-country skiing and snowshoeing, ranging from easy to difficult!

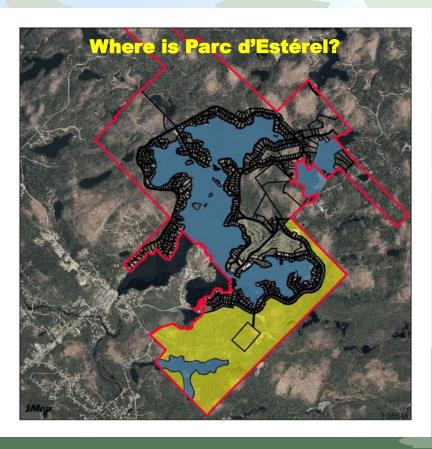
#### New!

 An access trail to Lac Castor is planned, adding activities to observe aquatic species by canoe or kayak to Estérel's wonders.



Le refuge, located on Avenue d'Anvers In Parc d'Estérel

• A grand future dream to connect Estérel to the 'P'tit Train du Nord' bicycle path, is in the



first stage of planning, linking the city of Sainte-Marguerite-du-Lac-Masson to Parc d'Estérel by the snowmobile trail. Grant applications are in collaboration with SOPAIR, the Société de Plein Air de la MRC des Pays-d'en-Haut .

## CLIMATIC IMPACT ON OUR PARKS

Climate change in Canada's forests may be sudden or gradual, with impacts on tree growth rates, mortality rates, disturbance patterns, and distribution of tree species after disruptions. The impacts will be cumulative and interrelated.

For example, drought can stress trees, making them more vulnerable to attack by insects and diseases. Insect damage can increase the risk of catastrophic wildfires, Climate change affects the winter rest period, leafing, flowering and germination.

Catastrophic wildfires are of particular concern because they pose a direct threat to communities and humans.



Large white pine tree withstood the 1914 forest fire

### WHAT TREES DO FOR US

- ♦ Absorb CO<sup>2</sup> and potentially harmful gases. (sulphur dioxide, carbon monoxide) To compensate for the individual's CO<sup>2</sup> emissions that are assessed on average at 11.5 tons of CO<sup>2</sup> (transport, housing, food), each person should plant 64 trees per year!
- Release oxygen. One large tree can produce oxygen for four people a day.
- Produce shade to counter the heat. In winter, conifers can reduce heat loss by 10 to 50%.
- Reduce wind speed and block up to 40% of surrounding noise.
- Settle and trap dust, pollen and smoke. Up to 75% of these irritants are reduced around a tree.
- Reduce water runoff, soil erosion and loss of sediment in the stream.
- Filter the chemical components of our lakes.
- Provide a sense of peace, of private space.

## PARC D'ESTÉREL'S WONDERS - Fauna and flora -

Parc d'Estérel forest is composed of a mixture of 15 different trees. The main hardwoods are red maple, sugar maple, white birch and yellow birch. The main conifers are balsam fir, eastern white cedar, black spruce and white spruce. There are also 23 kinds of shrubs, 63 kinds of herbaceous plants as well as 5 kinds of mosses. Two endangered plant species, including arethusa bulbosa and St. John's wort, have been found in Parc d'Estérel wetlands.

There are 12 wetland areas that serve as water filtration, groundwater recharge, and critical habitats for wildlife and plant diversity. These are protected under the Environment Quality Act by the Ministère de l'environnement et de la lutte contre les changements climatiques (MDDEP).

There have been 54 bird species identified, belonging to 18 distinct families. Also sighted were 16 types of warblers, including the Canada Warbler, which is considered an endangered species. There are also 5 kinds of peaks including the big peak. Truly, our Parc d'Estérel is an ideal place for bird watching in both winter and summer.

Other wildlife includes beavers, hares, chipmunks, muskrats, white-tailed deer, wild turkeys, ducks raccoons, foxes and various kinds of frogs.



Canada warbler (Cadellina canadensis)

An endangered species in Parc d'Estérel

### **MEASURES TO PROTECT OUR LAKES ... OUR QUALITY OF LIFE AND LEISURE**

- vegetation on the shoreline of your properties.
- Prevent erosion by limiting the speed of boats to 6 km / h at 60 meters from the banks and respect the practice of Wake-Surf at 150 meters from the shore in the designated areas of lac Masson and lac du Nord.
- Maintain your septic system with a scheduled cleaning every 4 years for vacationers and every 2 years for permanent residents.
  - Be vigilant to preserve the floating islands on Lac Dupuis as well as wetlands and aquatic plants such as water lilies.
- Preserve the riparian strip and continue natural Focus on the health of our lakes rather than the shortlived beauty of your lawn, avoiding fertilizers. Practice grasscycling, an environmental alternative that consists of leaving grass and mowed leaves on the ground. These materials will produce a natural fertilizer on your lawn and preserve soil moisture, reducing the frequency (or even need) of watering. Your lawn will be more resistant to drought and disease. Grasscycling also reduces the emission of greenhouse gases associated with landfill or transportation.



## HÉMISPHÈRES REPORT ON THE WATER QUALITY OF ESTÉREL'S LAKES

The City of Estérel mandates environmental consultants, Groupe Hémisphères for a study each year and in 2019, testing will include samples from Lac Castor. Our lakes are precious and vigilance to protect them is everyone's responsibility

The 2018 results show that water transparency has improved since 2014. But other results suggest a deterioration of the water quality of both Lac du Nord and Lac Dupuis. The concentration of chlorophyll decreased in Lac Masson but increased in the other lakes. Phosphorus levels have increased everywhere except in Lac Grenier.

The summer of 2018 was a particularly hot year and this, along with external factors, may be associated with the observation of a decrease in water quality criteria in all lakes. However, by analyzing historical trends since 1979, all lakes show an improvement in water quality, with the exception of Lac Masson's Baie du Désespoir.



Lac Castor

# EURASIAN WATERMILFOIL

#### (Myriophylle à épi)

Good news! No specimens of Eurasian watermilfoil were detected in 2018. Washing hulls and nautical equipment and emptying bilges and ballasts at a distance from the lakes are the simple and only effective means of prevention.



### Help us protect our lakes against invasive aquatic plants to preserve biodiversity and to enjoy our favorite marine activities this summer.

#### REFERENCES

- Le suivi 2018 de la qualité de l'eau des lacs - Ville d'Estérel -Ville d'Estérel (five-year report available for consultation at City Hall, In French only)
- Plan de protection et mise en valeur du Parc d'Estérel (March 2012)
- 3. Étude du potentiel récréatif et mise en valeur du Lac Castor (December 2015)
- 4. NC State University, Department of Horticultural Science
- 5. https://calculcarbone.org