The Eastern Red Cedar: An Endangered Tree Protected in Gatineau Park

- Did you know that
 - o in the Park, the Eardley Escarpment is home to nearly 15,000 eastern red cedars, or approximately 80 per cent of the total number in Quebec.
 - o the Park's eastern red cedars provide **shelter and food** for the juniper hairstreak, **a rare butterfly in Canada**.
 - o you can **observe an eastern red cedar** from the small **lookout midway along the Champlain Trail**.
- **To learn more** about this tree that can live up to 500 years, please refer to the text below.

Status

The eastern red cedar is **likely to be designated as an endangered or threatened tree** in Quebec.

Botanical Description

The eastern red cedar (*Juniperus virginiana*) is **also called red cedar** because of the red colour of its wood. This small conifer grows up to 10 metres tall and is generally pyramidal in shape. Its mature, dark green leaves are shell-shaped and overlap, whereas the young, thorny leaves are further apart and turn red in winter.

Photo 1: Shell-shaped adult leaves (NCC, 2004)



Photo 2: Young leaves (NCC, 2004)





The **berries** ripen from July on, when they are easily visible because of their **dark blue colour**. **Birds and small mammals** eat the fruit and **spread the red cedar's seeds** in their droppings.

The eastern red cedar has a recognizable brownish-red trunk with **bark that peels away in long fibrous bands**.

(NCC, 2004)

The eastern red cedar **beats records for longevity!** In fact, specimens over 500 years old have been found in Kansas, Oklahoma and Texas. **A three-hundred-year-old cedar has been recorded in the Park**.

Habitat and Distribution

In Canada, eastern red cedar populations are found in Quebec and Ontario. A **dozen populations** are **in Quebec**, most of them in the Outaouais.

The eastern red cedar is generally found on rocky ridges or on dry, sandy ground. This species seeks sunny areas and grows most often on south-facing slopes. Its long roots dig deeply for water and its tiny leaves minimize evaporation, thus enabling it to adapt well to dry environments.

Gatineau Park Eastern Red Cedar

The Park's eastern red cedars are at the northern limit of their distribution area. Most are found in the sector of the Eardley Escarpment, a cliff approximately 300 metres high that faces south-southwest. Here they benefit from a warm, dry microclimate that is unique to the region. The Eardley Escarpment is the only place in Quebec where the species can be studied in a protected environment.

According to a study conducted in 1994 (G. Forest, UQAM), the **population of the Escarpment** represents approximately **80 per cent of all of Quebec's eastern red cedars**. During the last study conducted (NCC, 2002), around 15,000 cedars were recorded. **Guidelines** have been developed to ensure adequate **protection** for the Park's red cedar populations. Their implementation includes informing the public about the status of the eastern red cedar and monitoring the populations.

Relation with the Juniper Hairstreak Butterfly (Mitoura gryneus)

Although widespread in the United States, the **juniper hairstreak butterfly** is **rare in Canada**. In Quebec, an isolated colony, the only one known in the province, was discovered in Gatineau Park in 1990. The caterpillar feeds on leaves of the eastern red cedar without causing significant damage to the tree. Once it has metamorphosed, this little green-winged butterfly stays close to its host plant. The eastern red cedar is therefore particularly important for the protection of this rare butterfly.