



Time for Nature



Searching for Fungus in the Forest

Cataloguing the Mushroom Population of Gros Morne National Park of Canada

Mushrooms can be good to eat. (At least some people like them!). But they are also an essential part of the natural cycle of birth, death, decay and renewal in all forest ecosystems.

Because of the ecological importance of mushrooms and other fungi, scientists are very interested in their numbers and kinds as well as the health of their populations.

In Gros Morne National Park of Canada, in Newfoundland, this interest has led to an annual mushroom hunt called the Mushroom Foray. Since the Foray was first held in 2003, 296 different species of mushrooms have been identified in the park.



Collecting a Piptoporus mushroom in Gros Morne National Park. © Parks Canada, R. Smith, 2004.

Mushrooms: natural recyclers

Some mushrooms are pathogens, causing illness and death of the organisms on (or in) which they grow. Others are decomposers. They live on dead plant matter such as fallen trees, helping to break it down so that it is recycled. Without the decomposers, dead trees and other organic matter would simply pile up and leave no room for anything else to grow.

Other fungi have a mutually beneficial relationship with trees and shrubs: they help each other absorb nutrients from the soil. Still, forest landowners, including Parks Canada, have often overlooked the lowly mushroom.



Parks Canada is preparing a photographic record of Gros Morne's mushrooms. © Parks Canada, M. Burzynski, 2004.

Mushroom hunters unite!

To learn more about its resident fungi, Gros Morne National Park hosted its first annual Mushroom Foray in 2003. The Humber Natural History Society organized the two-day event, during which volunteers and experts scoured the woods to locate and identify as many different species as possible.



The Mushroom Foray has enabled Parks Canada to catalogue its mushroom list and to photograph and collect specimens of every species found. The result is a valuable ecological record and source of information for scientists.

In the two years the Foray has been held, almost 300 different species have been identified, including species formerly unknown in North America. The mushrooms range from the highly edible King Mushroom (*Boletus edulis*) to the deadly poisonous Death Angel (*Amanita virosa*).

Parks Canada's partners in the Foray include the Newfoundland and Labrador Department of Environment and Conservation, the Humber Natural History Society and the North American Mycological Association, the world's largest mushroom club.



Foray participants carefully catalog the species encountered. © Parks Canada, M. Burzynski, 2004.

Putting our knowledge to use

In each of the national parks of Canada, Parks Canada collects information to keep track of plant and animal populations; all in the name of helping forests stay healthy.

For example, if a particular kind of plant, animal or mushroom were to become less common or disappear, this could mean something is wrong in the forest. With proper data, Parks Canada can respond to this type of ecological problem. Clearly then, events like Gros Morne's annual Mushroom Foray help biologists and park managers better understand and protect our complex ecosystems.

For more information visit www.pc.gc.ca/grosmorne