

Where to look for Boreal felt lichen in Nova Scotia

A field guide to BFL habitat








Mersey Tobeatic
Research Institute

Canada

The Government of Canada
Habitat Stewardship Program for
Species at Risk

Are you in BFL habitat?

	Habitat Parameters	Image	Always Present	Generally Present
<input type="checkbox"/>	Within 25 km of the Atlantic Coast		◆	
<input type="checkbox"/>	Mature Balsam fir (<i>Abies balsamea</i>) stand		◆	
<input type="checkbox"/>	North-facing slope			◆
<input type="checkbox"/>	Associated wetland dominated by sphagnum mosses		◆	
<input type="checkbox"/>	Herbaceous layer including cinnamon fern			◆
<input type="checkbox"/>	Stand includes scattered red maple and black spruce			◆



Typical BFL Habitat






Once you are in BFL habitat






- Focus on the north side of Balsam fir trees
- Look for indicator species **on Balsam fir**:

If BFL is located, indicator species will also be found nearby **on Balsam fir trees**. However, indicator species may be found without the presence of BFL.

	Species Name	Image	Always Present	Generally Present
<input type="checkbox"/>	<i>Coccocarpia palmicola</i>		◆	
<input type="checkbox"/>	<i>Lobaria scrobiculata</i>		◆	

	Species Name	Image	Always Present	Generally Present
<input type="checkbox"/>	<i>Moelleropsis nebulosa</i>			◆
<input type="checkbox"/>	<i>Platismatia norvegica</i> (useful indicator for Cape Breton Island)			◆
<input type="checkbox"/>	<i>Sphaerophorus globosus</i> (useful indicator for Cape Breton Island)			◆
<input type="checkbox"/>	<i>Frullania tamarisci</i> (Note: this is a liverwort, not a lichen)		◆	

Is it BFL?

	Distinctive Features	Image
<input type="checkbox"/>	<p>The thallus (vegetative leafy part) is green when moist or dark grey to brown when dry.</p>	 <p style="text-align: center;">dry wet</p>
<input type="checkbox"/>	<p>BFL has distinct upturned edges that reveal white undersides.</p>	
<input type="checkbox"/>	<p>The upper surface has a felt-like covering of fine whitish hair best viewed with a hand lens.</p>	
<input type="checkbox"/>	<p>Globular apothecia (disk-shaped fruiting bodies) of a rusty red colour appear on the lobe margins of mature BFL.</p>	
	<p>DO NOT CONFUSE WITH SIMILAR RARE SPECIES <i>Erioderma mollissimum</i>, felt lichen. Felt lichen does not possess apothecia like BFL.</p>	 <p style="text-align: center;">Felt lichen</p>

Boreal felt lichen
Erioderma pedicellatum




Predictive habitat mapping for Boreal felt lichen prepared by the Nova Scotia Department of Environment is available for those who would like to help search for boreal felt lichen.




What to do if you have located BFL:

- Record the GPS coordinates of the site
- Take a photo of the lichen
- Using flagging tape mark two trees, one on either side of the tree with BFL
- Inform the MTRI of your discovery by phoning the Rare Species Reporting Line at 1-866-727-3447
- MTRI will arrange to have the discovery confirmed

Another rare lichen species you may see in BFL habitat

Name	Image
<p data-bbox="131 959 311 987">Ghost Antler</p> <p data-bbox="131 1032 334 1084"><i>Species of Special Concern</i></p>	 <p data-bbox="426 1292 572 1317">H. & D. Clapp</p>

Other interesting lichen species you may see in BFL habitat

Name	Image
Cyanolichens:	
<i>Pannaria rubrogenosa</i>	 A photograph showing a close-up of a rock surface covered with a dense, crusty lichen. The lichen has a dark, almost black, granular texture with numerous small, reddish-brown, circular or oval spots scattered across it. The rock itself is light-colored and appears to be part of a larger rock formation.
<i>Degellia plumbea</i>	 A photograph of a rock surface with a lichen that has a distinct, somewhat crystalline or plate-like appearance. The lichen is primarily a dull, greyish-blue color with some darker, almost black, areas. It is growing on a dark, reddish-brown rock surface.
<i>Pseudocyphellaria perpetua</i>	 A photograph showing a lichen with a highly irregular, wavy, and somewhat leaf-like or lobed structure. The color is a mix of dark brown, black, and some lighter, yellowish-green areas. It is growing on a dark, textured rock surface. <p data-bbox="490 1425 621 1451">R. Cameron</p>

Tips for BFL Field Surveys

- Wear rubber boots or waders.
- Fall and early winter are the best seasons to search for lichens because they are easier to view when there is less foliage on the trees and the ground.
- If you choose to search in winter, use light snow cover to help you keep track of where you have already searched.
- You can request a map of BFL predicted habitat for your area. Contact MTRI for more information.
- Let us know the areas you have searched and whether or not the habitat seemed suitable for BFL.
- As with any field surveying, it is safest to travel with a partner, carrying a map, compass and GPS as well as safety items including a first aid kit and a whistle. Be sure someone knows your plans and will be able to get help if you do not return by an appointed time.

Useful Resources

- The Macrolichens of New England
- Lichens of North America
- Species at Risk in Nova Scotia Identification & Information Guide

Acknowledgements



9 Mount Merritt Road
PO Box 215 Kempt
Nova Scotia B0T 1B0
Ph. (902) 682-2371
Fx. (902) 682-2760
www.merseytobeatic.ca

This booklet was prepared by MTRI staff Tom Neily and Crystal Doggett. Thank you to dedicated field volunteers Harold Clapp and Frances Anderson and for support from Robert Cameron, Nova Scotia Department of Environment and Mark Elderkin, Nova Scotia Department of Natural Resources. Thank you for boreal felt lichen project support from the Government of Canada Habitat Stewardship Program for Species at Risk, the Nova Scotia Department of Natural Resources and industry partners such as NewPage.