

# LADYSMITH BOG ECOLOGICAL RESERVE

## PURPOSE STATEMENT

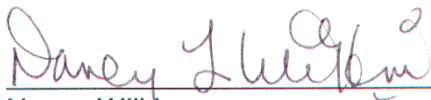
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Approved by:



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Date: August 8/03



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Nancy Wilkin  
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Date: Jan. 21/04

## LADYSMITH BOG ECOLOGICAL RESERVE Purpose Statement

Ecological reserves are areas selected to preserve representative and special natural ecosystems, plant and animal species, features and phenomena. The key goal of ecological reserves is to contribute to the maintenance of biological diversity and the protection of genetic materials. All consumptive resource uses and the use of motorized vehicles are prohibited. Research and educational activities may be carried out but only under permit.

### Primary Role

The **primary** role of Ladysmith Bog Ecological Reserve is to protect a sensitive bog ecosystem and its associated rare plants and high biodiversity values. Bogs in the Nanaimo Lowland are rare and provide the area with an important water catchment function. The ecological reserve protects a great diversity of wetland and forest plants and plant communities, sensitive habitat on rock outcrops covered by shallow soils, Douglas-fir forest of various age classes, open meadows, and numerous swamps and shallow lakes. These diverse sensitive ecosystems provide habitat for waterfowl and aquatic mammals such as beaver and otter; small-mouthed bass, pumpkin-seed sunfish, stickleback, and cutthroat trout in lakes. According to inventory available to date, the significant features are concentrated in the aquatic-terrestrial interface.

### Secondary Role

The **secondary** role is to represent the natural environment typical of southern Vancouver Island. The ecological reserve is located in the Nanaimo Lowlands Ecosession (NAL) and protects the Coastal Douglas-fir (CDFmm) biogeoclimatic subzone. Both of these are greatly under represented in the protected areas system at 1.4% and 2.5% respectively and are under extreme pressures from agricultural and urban development. Thus, any protected area that contributes to the protection of these ecosystems may be considered important.

### Management Issues

Known Management Issue	Response
Impacts of recreation use (mountain bikers, commercial horseback tours) and other association urban uses on ecological reserve values.	<ul style="list-style-type: none"> <li>➤ Allow hiking for nature viewing and educational purposes only on designated trails in the southwest portion of the lot. Access to other trails by permit only.</li> <li>➤ Work with Cowichan Valley Regional District (CVRD), tour companies and local community redirect recreation use to other areas.</li> <li>➤ Work with local community to develop an appreciation and understanding of the ecological reserve and its values and appropriate activities in an ecological reserve.</li> <li>➤ Develop and install signs in adjacent community park and for the ecological reserve to inform and educate visitors of the role and purpose of the ecological reserve and to show boundaries of trail system</li> <li>➤ Install barriers to deter access of high impact recreation activities such as biking, and off-road vehicles.</li> </ul>

	<ul style="list-style-type: none"> <li>➤ Recruit ecological reserve warden from local community to monitor flora, levels of use and impacts (e.g. litter, conflicts) and to assist in public education and compliance.</li> </ul>
Impacts of adjacent land use – potential trespass from subdivision	<ul style="list-style-type: none"> <li>➤ Install boundary and regulatory signs at key locations.</li> </ul>
Traditional cranberry harvesting in the Long Lake Bog area	<ul style="list-style-type: none"> <li>➤ Work with ecological reserve warden and local community to eliminate this use from the ecological reserve.</li> </ul>
Impacts of introduced and invasive species (American Bullfrog, broom and Canada thistle, trout stocking)	<ul style="list-style-type: none"> <li>➤ Work with the Ecosystem and Fish and Wildlife Science and Allocation sections of MWLAP to determine a course of action.</li> <li>➤ Work with volunteer warden to assess and monitor weed levels and remove existing weeds.</li> <li>➤ Work with Fish and Wildlife Recreation Allocation Division of MWLAP to cancel trout pond licence and the stocking trout in the ecological reserve.</li> </ul>
Impacts of varying water levels on ecological reserve values.	<ul style="list-style-type: none"> <li>➤ Research the hydrology of the area, verify major water sources and water licenses. Work with property owners and Lands and Water BC to ensure sufficient water levels to protect ecological reserve values.</li> <li>➤ Work with Ecosystem and Fish and Wildlife Science and Allocation sections of MWLAP to develop an ongoing strategy on the management of beaver dams in recognition of the importance of beaver dams in maintaining water levels.</li> <li>➤ Work with volunteer warden to monitor water levels to ensure adequate levels for fish and wildlife.</li> </ul>
Role of ecological reserve in the protected areas system and local concern over name of the ecological reserve	<ul style="list-style-type: none"> <li>➤ Review status of the protected area. Consider park designation with special feature zoning in order to more effectively manage use. Develop a consistent approach regarding recreational use and access with nearby ecological reserves (Woodley Range).</li> <li>➤ Investigate the possibility of officially changing the name to “Yellow Point Bog Ecological Reserve”.</li> </ul>
Lack of knowledge of cultural values	<ul style="list-style-type: none"> <li>➤ Consult with First Nations on the cultural values and their interests in the ecological reserve.</li> </ul>

## Conservation

Representation - ecosection	<input checked="" type="checkbox"/>	Ladysmith Bog Ecological Reserve contributes 2.77% to the representation of the Nanaimo Lowland Ecosection which is very under represented with only 1.41% of its area protected in the province. Ladysmith Bog's contribution ranks 9 <sup>th</sup> out of 35 protected areas representing this ecosection.
- biogeoclimatic subzone/variant	<input checked="" type="checkbox"/>	Ladysmith Bog Ecological Reserve contributes 2.07% to the representation of the CDFmm variant which has less than 2.5% protected provincially and is the smallest forest subzone in British Columbia with intensive urban and agricultural pressures. The contribution of Ladysmith Bog Ecological Reserve to CDFmm is important given the fragmented nature of this ecosystem and the limited opportunities available for its protection.
Special Features	<input checked="" type="checkbox"/>	Great diversity of wetland flora and plant communities and high biodiversity values, one of the highest of all ecological reserves in the provincial system. Douglas-fir forest of various age classes, meadows, rare plants. Bog and wetland habitat for waterfowl and aquatic mammals such as beaver and otter.
Rare/Endangered Values	<input checked="" type="checkbox"/>	Blue-listed Vancouver Island beggarticks <i>Bidens amplissima</i> (rated as Special Concern by COSEWIC), slender-spike mannagrass ( <i>Glyceria leptosctachya</i> ), water marigold ( <i>Megalodonta beckii</i> var. <i>beckii</i> ). A large number of plants uncommon in BC associated with bogs.
Scientific/Research Opportunities	<input checked="" type="checkbox"/>	Forest ecology and aquatic research. Plant taxonomy research into relationships between the three species of <i>Bidens/Megalodonta</i> (the beggarticks / water marigold complex). The underlying causes of the very high vascular plant diversity could be studied in conjunction with Woodley Range ER.

## Recreation

Representation	<input type="checkbox"/>	Not Applicable
backcountry	<input type="checkbox"/>	Not Applicable
destination	<input type="checkbox"/>	Not Applicable
travel corridor	<input type="checkbox"/>	Not Applicable
local recreation	<input checked="" type="checkbox"/>	Hiking and multi-use trails form a continuation of Yellow Point Community Park trails (historic community recreation site for equestrian and day-use activities pre-dated ER designation).

- Special Opportunities  Not Applicable
- Education/Interpretation Opportunities  Well suited to offer some onsite education in natural history, biodiversity and ecology topics for small groups given outstanding diversity in plants, plant communities, habitats and aquatic life.

### Cultural Heritage

- Representation  Chemainus First Nations historically used the area as a food gathering site. Site of an early Chinese community is located within the ecological reserve.
- Special Feature  None known at this time

### Other Management Considerations

- Other Designations  Not Applicable
- Relationship to other PAs  Part of a system of protected areas on Vancouver Island. Conservation values are complemented by nearby Woodley Range Ecological Reserve. Nearby provincial parks include Roberts Memorial and Hemer.
- Co-operative Management Arrangements  Not Applicable
- Partnerships  Not Applicable at this time
- Vulnerability  Sensitive thin soils covering bedrock. High use in sensitive habitat (including wetlands and streams), mountain bike traffic, commercial horse-riding tours, traditional cranberry harvesting, loss of water through 13 water licenses on Priest Lake, introduced species.
- Relationship to other Strategies  Identified in Cowichan Valley Regional District Official Community Plan as a priority for the parks system as a nature park and groundwater recharge area. Recommended for protection in the Goal 2 component of the Vancouver Island Land Use Plan.

**Area:** 141 hectares

**Date of establishment:** April 30, 1996