

# MARA MEADOWS ECOLOGICAL RESERVE

## PURPOSE STATEMENT

February 2006

Approved by:



Drew Carmichael  
Okanagan Regional Manager  
Environmental Stewardship Division

Date: Feb. 14, 2006



Nancy Wilkin  
Assistant Deputy Minister  
Environmental Stewardship Division

Date: March 26, 2006

## **Mara Meadows Ecological Reserve Purpose Statement**

### **Introduction**

Mara Meadows Ecological Reserve is located 12 kilometres southeast of Salmon Arm on the southeastern edge of the Larch Hills. The 178 hectare reserve covers a large low lying marshland, surrounded by boggy cedar-hemlock forest on its west side and drier upland forest to the east and north. The reserve is accessed via the Larch Hills (18 km from Salmon Arm) forest road system. The ecological reserve abuts private land on its west side and a woodlot on the east side, and is bounded by provincial forest land to the south and north.

The major feature of the reserve is a large, mostly treeless wetland that is formed by upwelling of carbonate rich water through limestone bedrock and surficial deposits. Low forested hills enclose the wetlands creating an area of impeded drainage at the headwaters of two streams. A small pond and series of pools in the lowest central areas of the wetland are bordered by expanses of fen and wet meadows. The unusual combination of alkaline and acidic soil conditions of marl and peat support an exceptional array of plants. The assortment of native orchids, some of which are rare, is considered of special significance. Of the 32 species of orchids found in British Columbia, 14 occur in the reserve, a diversity unmatched anywhere else in the province.

Pockets of treed wetlands contribute to habitat diversity, varying from wet meadows containing scattered spruce and willows to dense lodgepole pine stands. Boggy islands within the wetlands support stunted conifer stands of lodgepole pine, spruce and red cedar.

### **Primary Role**

The primary role of Mara Meadows Ecological Reserve is to protect a unique calcareous fen ecosystem and its diverse flora, including several rare orchids.

The Mara Meadow wetlands and delicate plant life are extremely sensitive to human disturbance and, for this reason, the reserve was closed in 1977 by Order-in-Council to all uses and entry without an issued permit. The reserve is actively patrolled by a volunteer warden.

Maintenance of stable water level regimes is an important factor in protecting the established plant communities in the reserve. A drainage ditch was constructed through the meadows for agricultural purposes during the period predating the reserve. After designation of the reserve, the North Okanagan Naturalist Club successfully undertook to re-establish natural water levels in the wetlands through construction of series of small weirs and dams along the ditch course.

Ensuring consistent quantity and chemical balance of inflowing water is also of critical concern. Recommendations of the Okanagan-Shuswap Land and Resource Management Plan (LRMP) led to the designation of provincial park status over portions of Upper Violet Creek to provide strong measures of authority and control over all land uses and activities along a key section of this primary drainage course leading into the meadows. The LRMP also recommended establishment of "Mara Meadows Park" to protect a major portion of Mara Meadows Creek on



|                                   |   |
|-----------------------------------|---|
| Special Features                  | subzone/variant is reasonably well represented (7.9%) in the protected areas system.  |
| Rare/Endangered Values            | unique calcareous fen ecosystem with diverse flora including rare orchids.<br>Rhynchospora capillacea<br>Epipactis gigantea<br>Liparis loeselii |
| Scientific/Research Opportunities | Studies related to calcareous fen ecosystem.  |

### **Cultural Heritage**

Representation

Special Feature

### **Other Management Considerations**

Other Designations

Relationship to Other Protected Areas

Upper Violet Creek Park protects water flowing from the west into the ecological reserve. Designation of Mara Meadows Park over lands immediately north and east of the Ecological Reserve is pending legislative action.

Collaborative Management Arrangements

Partnerships

Vulnerability

Changes to quality and quantity of inflowing water.

Relationship to Other Strategies

Okanagan-Shuswap (LRMP) led to designation of Upper Violet Creek Park and pending designation of Mara Meadows Park.

### **Area**

178 hectares

### **Date of establishment**

September 1, 1972