BEDNESTI LAKE   ER #86

ORIGINAL PURPOSE   To preserve representative wetland communities and disjunct tamarack stands on the Interior Plateau

OVERVIEW

Date established:	10 Feb. 1978	**Location:**	45 km W of Prince George, 2.5 km S of Highway 16
ORC #:	3086		
Map number:	93 G/14	**Latitude:**	53º52'N
		Longitude:	123º27'W

Total Area:	140 ha	**Elevation:**	820-845 m
Land:	129 ha		
Lake:	11 ha		

Access:	An access road, south from the east end of Cluculz Lake, passes through the western end of the reserve.

Biogeoclimatic Zone:	Sub-Boreal Spruce (SBS)
Biogeoclimatic Variant:	SBSdw3 Stuart Dry Warm
Ecosection:	Nechako Lowland
Region:	Omineca
Management Area:	Nechako

COMPOSITION

Physical: This rectangular reserve, located on a nearly level portion of the Interior Plateau, contains two small, bog-like lakes. These are connected by a small, meandering stream of imperceptible flow that drains northwestward into Cluculz Lake and the Nechako River. The climate, based on statistics for nearby Prince George (http://www.pacificclimate.org/docs/publications/PrinceGeorge.31Aug2009.pdf) for the 1961-1990 reference period, is characterized by 69 cm of precipitation per year (33% as snow) and mean daily January and July temperatures of -10ºC and 15.3ºC respectively. The area has warmed at a rate of 1.3 ºC from 1918-2006 with nighttime temperatures warming much faster than daytime (PCIC 2009). Precipitation is showing a downward trend with more falling as rain.

Biological: The lakes, about 12 ha in total area, are surrounded by a broad band of treeless wetland vegetation, beyond which are stands of coniferous forest. Wetland vegetation comprises about 15 ha of the reserve. Most of the wetland zone is made up of floating mats of sedge, particularly cordroot sedge, a species which in British Columbia is confined to the Sub-Boreal Spruce Zone. Some water sedge occurs at the outer margin of these sedge mats, which are slowly encroaching into the lakes. Communities dominated by buckbean and pondweeds occur as narrow bands in shallow waters adjacent to the more extensive sedge stands. Toward the forest margin, shrubs such as scrub birch become common in the sedge habitats.

Boggy forests dominated by tamarack, black spruce, or a mixture of the two occur in low sites near the sedge wetlands. Scrub birch and sphagnum moss are characteristic understory species. Black arboreal lichens are abundant on the larch trees. Typical upland forests contain a mixture of white and black spruce and

lodgepole pine, and have ground cover characterized by lingonberry, bunchberry and mosses.

Both tamarack and cordroot sedge occur here as isolated populations well south of their more continuous subarctic ranges.

The fauna has not been inventoried but these wetlands provide excellent habitat for a variety of nesting and migrating waterfowl, and other aquatic wildlife such as beaver and muskrat.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES   None listed

THREATS

Climate Change:	It has been projected that the trend towards drier and warmer conditions that has already been measured, will continue into the future. This is likely to result in shifts in forest composition and distribution. Tamarack, a species adapted to poorly drained soils, may be displaced in this area by more drought tolerant species of trees.
Access:	Access leads to increased recreational use.
Forest health:	Insufficient fuel reduction raises the risk of catastrophic wildfire and disrupts natural disturbance regimes.
Harvest:	Illegal hunting of moose and deer occurs.

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE BEDNESTI LAKE ER ACCOUNT

Flora
birch, scrub (*Betula nana)*
buckbean (*Menyanthes trifoliata*)
bunchberry (*Cornus canadensis)*
lingonberry (*Vaccinium vitis-idaea* ssp. *minus)*
moss, peat *(Sphagnum spp.)*
pine, lodgepole (*Pinus contorta* var. *latifolia)*
pondweed (*Potamogeton* spp*.*)
sedge, cordroot (*Carex chordorrhiza)*
spruce, black (*Picea mariana)*
spruce, white (*Picea glauca)*
tamarack (*Latrix laricina)*

Fauna
Beaver, American (*Castor canadensis)*
Moose (*Alces americanus)*
Muskrat, Common (*Ondatra zibethicus)*