

BIG CREEK

ER #127

ORIGINAL PURPOSE To permanently protect a natural climax grassland in the Chilcotin region

OVERVIEW

Date established:	10 Aug. 1989	Location:	At confluence of Big Creek and Chilcotin River, 52 km SW of Williams Lake.
ORC #:	3127		
Map number:	92 L/7	Latitude:	51°50'N
		Longitude:	122°41'W

Total Area:	233 ha	Elevation:	300-900 m
Land:	233 ha		

Access: Access is possible by foot from logging roads several kilometres south of the reserve.

Biogeoclimatic Zone: Bunchgrass (BG); Interior Douglas-Fir (IDF)
Biogeoclimatic Variant: BGxw2 Alkalai Very Dry Warm; IDFxmVery Dry Mild
Ecosection: Fraser River Basin
Region: Cariboo
Management Area: South Chilcotin

COMPOSITION

Physical: Most of the reserve consists of steep east to southeast-facing slopes formed by downcutting of Big Creek into the lava plateau. Small areas of more level topography include the Big Creek fan and terraces above the Chilcotin River. Surficial materials are primarily glacial till and fluvial deposits. Soils of grasslands and open woodland are mostly Chernozems. Some rocky outcrops and eroded slopes are present.

Biological: Natural climax grasslands which have not been subjected to livestock grazing are the main feature of this reserve. These comprise about 55% of the reserve area, occur largely on steep slopes, and are mostly dominated by bluebunch wheatgrass. A few Douglas-fir trees are scattered over the grassland. Douglas-fir forest, largely restricted to alluvial flats, basins and the plateau edge, covers 35% of the reserve. The remaining 10% consists of rock outcrops and eroded lands.

Six non-forested communities have been described: (1) bluebunch wheatgrass, (2) rabbitbrush-trailing fleabane, (3) Oregon woodsia, (4) needle and thread grass-Sandberg's bluegrass, (5) kinnikinnick-spreading needlegrass, and (6) bluebunch wheatgrass-pinegrass. Three forested communities are present: (7) Douglas-fir-Rocky Mountain juniper-bluebunch wheatgrass, (8) Douglas-fir-pinegrass/kinnikinnick-moss, and (9) Douglas-fir-prickly rose with occasional paper birch and Douglas maple.

Several plants of the dry interior (giant wildrye; rabbitbrush; sagebrush; mariposa lily) are at the northwestern limits of their range in this reserve.

The reserve is good winter range for Mule Deer and has capability for Bighorns. Black bears and Coyotes have been observed.

Cultural: Numerous pithouses have been identified in the reserve.

MANAGEMENT CONCERNS

SIGNIFICANT SPECIES	BC LIST STATUS	COSEWIC STATUS	CF PRIORITY
sickle-pod rockcress	Red listed		2
Bighorn Sheep	Blue listed		3
Sharp-tailed Grouse	Blue listed		2
White-throated Swift			4

THREATS

Climate Change: Grassland communities, which were well represented in Southern/Central BC in past warmer, drier areas may expand and proliferate as the climate changes.

Agriculture: There is potential for cattle to access and graze in reserve.

Forest health: Fuel build up due to fire suppression and accumulated beetle kill.

Recreation: Camping occurs at the mouth of Big Creek in the reserve, impacting the vegetation, producing fire pits and human waste.

Recreation: Presence of rafters at confluence (outside the reserve) may lead to people damaging the pithouses inside the reserve.

RESEARCH OPPORTUNITIES

Research opportunities in plant ecology, vegetation-wildlife interactions and effects of climate change on community reorganization. It can be used as a permanent range reference area for ecosystem classification.

As a climax grassland community without domestic grazing, it would make a good place to study the relationship of disturbance to invasive weed ingress (or lack thereof).

SCIENTIFIC NAMES OF SPECIES MENTIONED IN THE BIG CREEK ER ACCOUNT

Flora

birch, paper (*Betula papyrifera*)

bluegrass, Sandberg's (*Poa secunda* ssp. *sandbergii*)

Douglas-fir (*Pseudotsuga menziesii*)

fern, western cliff (aka Oregon woodsia) (*Woodsia oregana* ssp. *oregana*)

fleabane, trailing (*Erigeron flagellaris* var. *flagellaris*)

grass, needle-and-thread (*Hesperostipa comata*)

juniper, Rocky Mountain (*Juniperus scopulorum*)

kinnikinnick (*Arctostaphylos uva-ursi*)

lily, mariposa (*Calocortus* spp.)

maple, Douglas (*Acer glabrum* var. *glabrum*)

needlegrass, spreading (*Achnatherum richardsonii*)
pinegrass (*Calamagrostis rubescens*)
rabbit-brush (*Chrysothamnus* spp.)
rockcress, sickle-pod (*Arabis sparsiflora*)
rose, prickly (*Rosa acicularis* spp. *sayi*)
sagebrush, big (*Artemisia tridentata*)
wheatgrass, bluebunch (*Pseudoroegneria spicata*)
wildrye, giant (*Leymus cinereus*)

Fauna

Bear, American Black (*Ursus americanus*)
Coyote (*Canis latrans*)
Deer, Mule (*Odocoileus hemionus*)
Grouse, Sharp-tailed, ssp. columbianus (*Tympanuchus phasianellus columbianus*)
Sheep, Bighorn (*Ovis canadensis*)
Swift, White-throated (*Aeronautes saxatalis*)