



**COLORADO NATURAL HERITAGE PROGRAM
PLANT ELEMENT OCCURRENCE FIELD FORM**
COLORADO STATE UNIVERSITY-WARNER COLLEGE OF NATURAL RESOURCES

Please submit copies of personal/agency field data forms, digital data (GIS or spreadsheet), or this field form to:
CNHP, 1474 Campus Delivery, Fort Collins, CO 80523 or Jill.Handwerk@colostate.edu (970) 491-5857
(For a list of elements tracked by CNHP, refer to <http://www.cnhp.colostate.edu/download/list.asp>)

Element Scientific Name: Botrychium paradoxum
Survey Date: 2017/09/22 (yyyy-mm-dd)
Observer(s) Name & Affiliation: Gay Austin, Colorado Native Plant Society
Observer(s) Address & Phone Number: 600 North Iowa, Gunnison, CO 81230
970-641-6264

Ownership

Owner Type: Private USFS BLM State Military Indian BuRec NPS: Other:
Owner Name (or National Forest, BLM District, etc.): Gunnison Ranger District (GMUG NF)
Owner Comments (special requests, permissions, circumstances): _____

Locational Information (REQUIRED); please complete as many fields as possible
(Provide a photocopy of map with location of the occurrence marked or outlined)

USGS Quadrangle Name: Crested Butte Surveysite Name (from 7.5' quad): _____



Directions (REQUIRED)

Driving and hiking directions and prominent topographical features: Drive ca. 3 mi. north to Crested Butte Ski Area. Take Silver Queen lift to top. Turn to right (south) and walk through trees to talus field. Walk ca. 100' up along edge of talus to site.

Element Occurrence Data (REQUIRED)

Number of Individuals (or exact count, if feasible; if plants are spreading vegetatively, indicate number of aerial stems):

15
Estimated Population Size: 25 Number of Subpopulations (if applicable): _____
Size of Area Covered by Population: none (point) _____ acres
10' x 10'

Phenology: Vegetative: 10% Flower: _____% Fruit: 90%
Reproductive Success: (evidence of seed dispersal and establishment): 4-3 cm plants seen

Age Classes Present: Difficult to tell - maybe 2.
Symbiotic or Parasitic Relationships (e.g. pollinators): Nothing seen.

Evidence of Disease, Predation or Injury: Plants nearby grazed to 3-4 cm tall. Pika nearby in talus field.

Condition Comments (productivity, vigor/health; evidence of reproduction, health of population, degree of anthropogenic disturbance, naturalness of hydrology, and other ecological processes): Plants somewhat greenish and senescing (turning brownish).

Landscape Comments (biological structure, species composition, degree of fragmentation and connectivity, condition, and extent of surrounding landscape; abiotic physical/chemical factors): Rocks in area moved by people. Rocks placed in YO design. Also rock movement by snow in winter.

General Habitat Description (refer to data dictionary)

spruce-fir stand (north)

General Habitat Comments: Habitat in between A and large talus field (south) with pika. Graminoids growing with Vaccinium and Salix arctica.

Dominant Plant Community (list dominant species currently present, include age structure if known): Vaccinium spp, Salix arctica, Sibbaldia procumbens

Associated Plant Species (be concise): Vaccinium spp (V. myrtillus?), Salix arctica, Sibbaldia procumbens!

Topographic Position: southwest-facing slope

Aspect: _____ degrees % Slope: 1% % or degrees (circle one)

Slope Shape: Concave Convex Straight Other _____

Light Exposure: Open Shaded Partial shade Other _____

Moisture: Dry Moist Saturated Inundated Seasonal seepage Other _____

Soil Texture: unknown

Geomorphic Land Form (e.g., glaciated mountain slopes and ridges, alpine glacial valley, rolling uplands, breaklands, alluvial-colluvial-lacustrine, rockslides, etc.): glaciated mountain slope

Protection Comments (Comments on any legal protection or strategies needed or in place): Crested Butte Mtn

Resort has put fencing around top of Silver Queen lift to discourage people from walking towards habitat.

Management Comments

Evidence of Threats and Disturbance (e.g. effects on population viability due to mining, recreation, grazing, exotic species; past/present/future recommendations): Grazing by pika in drought years?

People trampling and moving rocks around.

Predominant Land Uses: Recreation

Exotic Species: NONE

Documentation

Photographs Taken: Y N Photographer: Gay Austin Photo Number(s): _____

Repository: _____

Specimens Taken: Y N Collector: _____ Collection Number(s): _____

Repository: _____

General Comments

Another Botrychium with a sporophore & a trophophore was found close to the BOTPAR population. Botrychium minganense?