Province of British Columbia

Ministry of
Provincial Secretary
and Government Services
PROVINCIAL SECRETARY

British Columbia
Provincial Museum
Parliament Buildings
Victoria
British Columbia
V8V 1X4

Botany Division
87.2.3

Larry Halverson
Kootenay National Park
P.O. Box 220
Radium Hot Springs, B.C.
V0A 1M0.

Dear Larry:

I enclose seven plant specimens which are being returned to you after our checking their identifications.

In my last letter I gave you the name changes for the Artemisia and Senecio specimens. Dr. Brayshaw has now finished checking the Ranunculaceae specimens which are as follows:

Delphinium bicolor (2 specimens) - these are D. nuttallianum (a very similar species, but D. bicolor is restricted to the southern Rocky Mountain Trench area.

Ranunculus pedatifidus - changed to R. eschscholtzii.

Ranunculus inamoenus - o.k.; no change.

We will go over the list of species from the Park which you sent, and if any should be checked I'll let you know, and perhaps we can borrow them.

I just received your letter remarking on Epipactis gigantea. I had read Brunton's papers in the Canadian Field-Naturalist on this species and the other two rare species. I fully agree that it is very important to determine accurately which rare species occur in a National Park. Once this is done one can do an annual check on each population to make sure they are surviving (or even expanding!).

Best regards.

R.T. Ogilvie.

R.T. Ogilvie
Curator of Botany.

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V8V 1X4

Botany Division
January 27, 1987.

Larry Halverson
Kootenay National Park
P.O. Box 220
Radium Hot Springs, B.C.
V0A 1M0.

Dear Larry:

I have had a chance to check over the Artemisia and Senecio specimens which you sent.

The two specimens are Artemisia michauxiana Bess. This species is very aromatic, with a woody base, and it typically grows on dry slopes in the alpine.

The Senecio is not S. congestus; most likely it is S. lugens or it might be S. integerrimus. The specimen does not adequately show the basal leaves, and the stem has been broken on several places. Both S. lugens and S. integerrimus are common in your area, so either could occur and neither would be a range extension.

Dr. Brayshaw will be finished with the Ranunculaceae specimens shortly. He was botanising in Venezuela when the specimens arrived. When he is finished with them I will return all of the specimens to you.

With best regards.

Yours sincerely,

Bob Ogilvie

R.T. Ogilvie
Curator of Botany

Reading File

Environment Canada Parks
Environnement Canada Parcs

P.O. Box 220
Radium Hot Springs, B.C.
V0A 1M0
Oct. 28, 1986

Our file Notre référence
6100-1/K2
Your file Votre référence

Dr. R. Ogilvie
Botany Division
B.C. Provincial Museum
675 Belleville St.
Victoria, B.C.
V8V 1X4

Dear Dr. Ogilvie:

I have enclosed a list of 52 species of the rare vascular plants of British Columbia, which are found in Kootenay National Park. This represents 7.7% of the vascular taxa found within the park and 6.4% of the rare vascular taxa of B.C. Ten of the 52 speices have an R1 status. This list may expand to a possible 66 species once we verify subspecies and varieties.

I have also included for your information and files The Plants of Kootenay National Park, newsarticles on finding poison ivy at Radium Hot Springs, and the discovery of Opuntia fragilis.

Sincerely,

LH

L. Halverson
Park Interpreter
Kootenay National Park

P.S. - I enjoyed reading your article in the latest Discovery journal.

HALVERSON/ib

Enclosures

Canada

12-11-86

P.O. Box 220
Radium Hot Springs, B.C.
V0A 1M0
Oct. 30, 1986

6100-1/K2

P. BENSON
RESOURCE STUDIES MANAGER
WESTERN REGION

RARE VASCULAR PLANTS OF KOOTENAY NATIONAL PARK

I have discussed with Peter Whyte the changes to the rare vascular plant list for Kootenay National Park in relation to the Province of British Columbia. The attached list will replace pages 129 and 130 in the Ecological Land Classification of Kootenay National Park, B.C. Vol. I.

With the new information available, 20 species have been removed from the existing list and nine new species added, five of which are represented by only a few known populations in the Province of B.C. The next step will be to identify exactly where these species are found within the park so that they can receive added protection. I should point out that this list does not take into account plant species which may be common within British Columbia, yet rare within Kootenay National Park.

It would be appreciated if you would ensure that this addendum is sent to all holders of the ecological land classification report. You may also wish to advise the other B.C. Parks of Syllogeus Number 59.

Original Signed By
LARRY HALVERSON

for C.L. Bjorgan
Acting Superintendent
Kootenay National Park

HALVERSON/lb

10/11/86
10-11-86

THE RARE VASCULAR PLANTS OF BRITISH COLUMBIA
WHICH ARE FOUND IN KOOTENAY NATIONAL PARK

CLASSES OF RARENESS:

R1 - Plant taxa that are represented by a single or few known populations.

R2 - Plant taxa that have few to several populations, but usually with a relatively large number of individuals in each population.

R3 - Plant taxa that have no distinct geographical range or distribution, usually scattered in the province, in isolated populations consisting of small numbers of plants.

R4 - Plant taxa that are restricted in their general distribution in the province and often represent the northern or southern limits of more commonly distributed plants. The populations often consist of numerous individuals, but with a narrow geographical range in the province.

ARABIS NUTTALLII - R2	NUTTALL'S ROCK CRESS
ARNICA LOUISEANA SUBSP. LOUISEANA - R1	LAKE LOUISE ARNICA
ARTEMISIA CANA - R1	SILVER SAGEBRUSH
ASTRAGALUS ABORIGINUM - R3	INDIAN MILK-VETCH
ASTRAGALUS BOURGOVII - R1	BOURGEAU'S MILK-VETCH
ASTRAGALUS LOTIFLORUS - R3	LOTUS MILK-VETCH
ASTRAGALUS ROBBINSII - R4	ROBBIN'S MILK-VETCH
CALAMAGROSTIS MONTANENSIS - R4	PLAINS SMALL REED GRASS
CAREX CRAWEI - R1	CRANE'S SEDGE
CAREX MICROGLOCHIN - R3	FEW-SEEDED BOG SEDGE
CAREX SARTWELLII - R3	SARTWELL'S SEDGE
CASTILLEJA CERVINA - R4	DEER INDIAN PAINT BRUSH
CASTILLEJA OCCIDENTALIS - R3	WESTERN INDIAN PAINT BRUSH
CASTILLEJA RHEXIFOLIA - R3	ALPINE INDIAN PAINT BRUSH
CHEILANTHES FEEI - R3	SLENDER LIP FERN
CYPRIPEDIUM MONTANUM - R3	MOUNTAIN LADY SLIPPER
CYPRIPEDIUM PASSERINUM - R3	SPARROW'S-EGG LADY'S-SLIPPER
CYSTOPTERIS MONTANA - R3	MOUNTAIN BLADDER FERN
DELPHINIUM BICOLOR - R2	MONTANA DELPHINIUM
DRABA PORSILDII - R1	PORSILD'S WHITLOW-GRASS
ELEOCHARIS QUINQUEFLORA - R2	FEW-FLOWERED SPIKE-RUSH
ERIGERON LANATUS - R1	WOOLY FLEABANE
GAULTHERIA HUMIFUSA - R3	ALPINE-WINTERGREEN
HELENIUM AUTUMNALE - R2	MOUNTAIN SNEEZEWEED
HACKELIA FLORIBUNDA - R3	MANY-FLOWERED HACKELIA
JUNCUS TRIGLUMIS - R2	THREE-FLOWERED RUSH
LILIUM PHILADELPHICUM - R3	WOOD LILY
LITHOSPERMUM INCISUM - R3	YELLOW GROMWELL
LONICERA DIOICA - R3	GLAUCOUS-LEAVED HONEYSUCKLE
LYGODESMIA JUNCEA - R2	RUSHLIKE SKELETONPLANT
MINUARTIA DAWSONENSIS - R3	ROCK SANDWART
MINUARTIA NUTTALLII - R3	NUTTALL'S SANDWART

MUHLENBERGIA GLOMERATA - R3	MARSH MUHLENBERGIA
ORYZOPSIS MICRANTHA - R3	LITTLESEED RICE GRASS
OXYTROPIS PODOCARPA - R3	STALKED-POD LOCOWEED
PEDICULARIS CONTORTA - R2	COIL-BEAKED LOUSEWART
PENSTEMON ERIANTHERUS - R4	FUZZY-TONGUED PENSTEMON
PINUS FLEXILIS - R2	LIMBER PINE
POTENTILLA HYPARCTICA - R3	ARTIC CINQUEFOIL
PRIMULA MISTASSINICA - R2	MISTASSINI PRIMROSE
PYROLA ELLIPTICA - R3	WAXFLOWER PYROLA
RANUNCULUS INAMOENUS - R2	UNLOVELY BUTTERCUP
*RANUNCULUS PEDATIFIDUS - R1	BIRDFOOT BUTTERCUP
RANUNCULUS PYGMAEUS - R3	PYGMY BUTTERCUP
RANUNCULUS VERECUNDUS - R3	MODEST BUTTERCUP
SAUSSUREA NUDA - R4	DWARF SAW-WORT
*SENECIO CONGESTUS - R1	MARSH RAGWORT
SILENE DRUMMONDII - R3	DRUMMOND'S CAMPION
THERMOPSIS RHOMBIFOLIA - R1	PRAIRIE GOLDEN BEAN
TOWNSENDIA HOOKERI - R1	HOOKER'S TOWNSENDIA
TRICHOPHORUM PUMILUM - R1	SMALL DEER-GRASS
VACCINIUM MYRTILLUS - R2	LOW BILBERRY

Reference: Achuff, P.L. et. al. 1984.
Ecological Land Classification of Kootenay National Park
Vol. 1: Integrated Resource Description
Alberta Institute of Pedology Pub. No. M-84-10, 373 p.

Straley, G.B. et. al. 1985.
The Rare Vascular Plants of British Columbia
Syllogeus No. 59, National Museums of Canada, Ottawa, 165 p.

Environment Canada | Environnement Canada
Parks | Parcs

P.O. Box 220
Radium Hot Springs, B.C.
V0A 1M0
February 9, 1987

Our file / Notre référence
C6100-1
Your file / Votre référence

Dr. R.T. Ogilvie
Curator of Botany
B.C. Provincial Museum
Victoria, B.C.
V8V 1X4

Dear Bob:

Thank you for checking and making the correct identifications for the Artemisia, Senecio and Ranunculaceae specimens. The service is greatly appreciated.

The number of corrections leaves me wondering how many other specimens collected during Kootenay National Park's biophysical inventory are misidentified.

Yours sincerely,

Larry Halverson
Park Interpreter
Kootenay National Park

cc: P. Benson
Resource Studies Manager
Western Region

Canada

Parks Canada Parcs Canada

P.O. Box 220
Radium Hot Springs, B.C.
V0A 1M0
January 27, 1987

Our file Notre référence
6100-1/K2
Your file Votre référence

Dr. R. Ogilve
Botany Division
B.C. Provincial Museum
675 Belleville Street
Victoria, B.C.
V8V 1X4

Dear Dr. Ogilvie:

It is sad to learn that threatened plan species like Epipactis gigantea have been extirpated in Kootenay National Park by development (Cosewic status report).

Hopefully this will not happen again in the park now that we have established a list of rare vascular plants, are identifying their locations and conducting environmental impact studies prior to any development.

Sincerely,

Larry Halverson

Larry Halverson
Park Interpreter
Kootenay National Park

HERBARIUM (CAFB) - Canadian Forestry Service, Edmonton

Plants of Kootenay National Park, British Columbia

Ranunculus inamoenus Greene
Ranunculaceae
Ochre Creek, 11 UNG 58 68
lower subalpine zone, 1500 m asl

! T.C. Brayshaw, 27/1/-87

coll. H. Dudynsky 23/June 1982
det. Matt Fairbarns

R. inamoenus Greene
Determinavit
T. C. BRAYSHAW 27/1/-87

HERBARIUM (CAFB) - Canadian Forestry Service, Edmonton

Plants of Kootenay National Park, British Columbia

Senecio congestus (R. Br.) DC.
Asteraceae
Stoddart Creek, Kootenay National Park
11 UNG 757 050
upper subalpine herb/dwarf shrub
2290 m A.S.L., 86% sw slope, gullied
mesic, well drained
colluvial veneer over inclined rock,
lithic Orthic Humic Regosol

coll. H. Dudynsky HD2056 7/7/1982
det. Matt Fairbarns

This is definitely not S. congestus. It is most likely S. lugens, but could be S. integerrimus The poor specimen makes it difficult to be more precise.

R.T. Ogilvie
87.1.27

Determinavit Senecio lugens Richardson
(could fit S. integerrimus Nutt.)
R.T. Ogilvie 87.1.27

HERBARIUM (CAFB) - Canadian Forestry Service, Edmonton

Plants of Kootenay National Park, British Columbia

Ranunculus pedatifidus J.E. Smith
Ranunculaceae
north of Ochre Creek, 11 UNG 560 714
upper subalpine zone, 2320 m asl
45% S slope, subhygric, imperfect drainage
colluvium blanket on inclined rock. avalanched, soliflucted
turbic Orthic Dystric Brunisol
rich herbs: Epilobium angustifolium-Senecio triangularis-Valeriana sitchensis-Anemone occidentalis-Antennaria lanata

coll. P. Achuff PA2 023 12/July 1982
det. Matt Fairbarns

Stylar beak > 1 mm long, not strongly recurved. Receptacle glabrous.
∴ Ranunculus eschscholtzii Schlechtendal

Determinavit
T. C. BRAYSHAW
27/1/-87