

RESULTS OF THE 1989 SEARCH OF REGIONAL HERBARIA
FOR LOCATION INFORMATION PERTAINING TO
IDAHO'S RARE FLORA:
THE FOURTH GENERATION SEARCH

by

Robert K. Moseley
Natural Heritage Section
Nongame/Endangered Wildlife Program
Bureau of Wildlife

March 1990

Idaho Department of Fish and Game
600 South Walnut, P.O. Box 25
Boise, Idaho 83707
Jerry M. Conley, Director

Cooperative Project Among:

Idaho Department of Fish and Game
U.S. Forest Service, Region 1
U.S. Forest Service, Region 4
U.S.D.I. Bureau of Land Management, Idaho State Office

TABLE OF CONTENTS

Table of Contents 1
Introduction 2
Methods 3
Herbaria Searched 4
Results of Search 7
Discussion 9
References 11
Acknowledgements 12

Appendix 1: List of Idaho's rare taxa included in the 1989 search.

INTRODUCTION

In the late 1960's and early 1970's the American public became aware of their responsibility to preserve and protect rare species and their habitats. This concern culminated in passage of the Endangered Species Act of 1973. With a mechanism in place to "officially" list Endangered and Threatened species under the Act, biologists realized that information pertaining to the abundance and distribution of potentially rare species was woefully lacking. This problem was especially acute in plants. Without such basic information, decisions as to the proper conservation status of a species were difficult to make. With few exceptions, the basic distribution information for plants resided in herbaria, which eventually went on to play an essential role in determining the initial conservation status of many plant species.

Although the first list of endangered and threatened plants of the United States was compiled on a national basis by the Smithsonian Institution in 1974, it soon became apparent that a tremendous amount of local expertise went untapped. From the mid-1970's on, much of the work to compile lists of rare plant species was generally done on a state-by-state basis, usually by committees comprised of in-state experts. Such was the case with Idaho.

The Rare and Endangered Plants Technical Committee of the Idaho Natural Areas Council formed in 1974 (Wellner and Johnson 1974). Charter members of the committee included Doug Henderson (University of Idaho), Fred Johnson (University of Idaho), Pat Packard (College of Idaho), and Bob Steele (U.S. Forest Service, Intermountain Research Station). They were later joined by Steve Brunsfeld (University of Idaho) and Karl Holte (Idaho State University).

The Technical Committee's initial task was to compile a list of the rare plants species in the state (Henderson 1974; Johnson and Steele 1974). The results of the first search of herbaria for rare plants in Idaho was reported by Johnson and Steele (1974) in their tentative list of uncommon plants in Idaho. The committee later published the first "Redbook" (Rare and Endangered Plant Technical Committee, Idaho Natural Areas Council 1977) in which they reported the results of a second search of regional and national herbaria for location information pertaining to endangered and threatened plants of Idaho. An updated and much expanded version of the Redbook was published in 1981 (Rare and Endangered Plants Technical Committee of the Idaho Natural Areas Council 1981). This edition contained the results of the third search of regional and national herbaria for location information on many hundreds of species (including those rejected from consideration).

As with the initial compilations of state rare plants lists, herbaria continue to play an essential role in providing information on the distribution of potentially rare plant species. After nearly a decade of rare plant conservation activity since publication of the last Redbook, including many floristic studies in which potentially "new" rare plants have come to light, a new search of regional herbaria was deemed desirable. Thus, the BLM, Regions 1 and 4 of the Forest Service, and the Idaho Natural Heritage Program embarked on a cooperative project to do just that. The search was coordinated by the Idaho Natural Heritage Program, whose data base has become the central repository

information pertaining to the rare elements of Idaho's flora.

Although many of the major regional herbaria were again searched, the 1989 search also included many small herbaria scattered around Idaho, generally in small colleges and federal agency offices. These were overlooked in the first three searches.

METHODS

Two search scenarios were employed in the 1989 search:

Ann DeBolt, Boise District BLM, searched a majority of the large herbaria around the region (see table in Results section for a listing). In an effort to minimize duplication of past efforts, she was given a printout from the Heritage Program of the COMMENTS field from the Element Occurrence Record for all rare plant locations in the data base. The COMMENTS field may contain the collector, collection number, and herbarium or herbaria where the specimen is deposited (please note that not all locations in the Heritage Program data base were generated from herbarium data).

Because of the scope of the search, numerous "volunteers" were recruited to search the smaller herbaria scattered around the state (see Results section for a complete list of members of the "search team" and herbaria searched). These volunteers did not have access to the Element Occurrence Record printout.

In addition, as part of the contract with Regions 1 and 4 of the Forest Service, the Idaho search team also searched for locations of Forest Service Sensitive Species from Nevada, Utah, Wyoming and Montana, that were deposited in Idaho herbaria. The Nevada, Wyoming, and Utah Heritage Programs did likewise for Idaho's rare plants in major herbaria in their respective states.

HERBARIA SEARCHED

Below is a list of major herbaria searched, either completely or partially, for Idaho rare plant locations in the four generations of searches.

Herbarium Arocnym ¹ (location)	Year Searched				
	1974 ²	1977 ³	1981 ⁴	1989	
BOIS (USFS, Intermountain Research Station, Boise)	X	X	X	X	
BRY (Brigham Young University, Provo, UT)			X	X	
CIC (College of Idaho, Caldwell)		X	X	X	
F (Field Museum of Natural History, Chicago)			X		
FSU (<u>Chrysothamnus</u> only) (Florida State University, Tallahassee, FL)				X	
ID (University of Idaho Herbarium, Moscow)	X	X	X	X	
IDF (University of Idaho, Forest, Wildlife and Range Experiment Station, Moscow)	X	X	X	X	
IDS (Idaho State University, Pocatello)	X	X	X	X	
IFGH (Idaho Fish and Game Herbarium, Garden City)			X	X	
LAGO (USFS, Pacific Northwest Research Station, LaGrande, OR)			X		
MO (Missouri Botanical Garden, St. Louis, MO)		X			
MONTU (University of Montana, Missoula, MT)			X	X	X

Herbarium Arocnym ¹ (location)	Year Searched			
	1974	1977	1981	1989
MRC (USFS, Intermountain Research Station, Missoula, MT)			X	X
NY (New York Botanical Garden, Bronx, NY)			X	
OGDF (USFS, Intermountain Research Station, Ogden, UT)		X	X	
ORE (University of Oregon, Eugene, OR)			X	X
OSC (Oregon State University, Corvallis, OR)			X	X
PH (Academy of Natural Sciences, Philadelphia)			X	
RM (including USFS) (University of Wyoming, Laramie, WY)			X	X
RENO (University of Nevada, Reno, NV)			X	X
SRP (Boise State University, Boise)	X		X	X
UC (University of California, Berkeley, CA)	X		X	
UNLV (University of Nevada, Las Vegas, NV)				X
US (Smithsonian Institution, Washington, DC)			X	
UT (University of Utah, Salt Lake City, UT)			X	X
UTC (Utah State University, Logan, UT)			X	X
WILLU (Willamette University, Salem, OR)		X		

Herbarium Acronym ¹ (location)	Year Searched			
	1974 ²	1977 ³	1981 ³	1989 ⁴
WS (Washington State University, Pullman, WA)	X	X	X	X
WSCO (Weber State College, Ogden, UT)			X	
WTU (University of Washington, Seattle, WA)		X	X	X

¹Herbarium acronyms follow Holmgren et al. (1981).
²From Johnson and Steele (1974).
³From Rare and Endangered Plants Technical Committee, Idaho Natural Areas Council (1977).
⁴From Rare and Endangered Plants Technical Committee of the Idaho Natural Areas Council (1981).
 =====

In addition to the major herbaria listed above, several small colleges and many BLM and Forest Service offices around the state have small herbaria, generally containing reference collections of the local flora. Below is a list of local herbaria in Idaho known to me, along with an abbreviation used in the Heritage Program data base (please let me know if I've missed any!):

Colleges

North Idaho College, Coeur d'AleneNorth Idaho
 Ricks College, RexburgRicks

Bureau of Land Management Offices

Boise District, BLM, BoiseBoise BLM
 Cottonwood Resource Area,
 Coeur d'Alene District, BLM, CottonwoodCottonwood BLM
 Deep Creek Resource Area,
 Burley District, BLM, MaladDeep Creek BLM
 Idaho Falls District, BLM, Idaho FallsIdaho Falls BLM
 Salmon District, BLM, SalmonSalmon BLM
 Shoshone District, BLM, ShoshoneShoshone BLM

Forest Service Offices

Avery Ranger District,
Idaho Panhandle National Forests, AveryAvery RD
Boise National Forest,
Supervisors Office, BoiseBoise SO
Bonners Ferry Ranger District, Idaho Panhandle
National Forests, Bonners FerryBonners RD
Caribou National Forest, Supervisors Office,
Pocatello (housed at IDS)Caribou SO
Challis National Forest,
Supervisors Office, ChallisChallis SO
Clearwater National Forest,
Supervisors Office, OrofinoClearwater SO
Council Ranger District,
Payette National Forest, CouncilCouncil RD
Idaho Panhandle National Forests,
Supervisors Office, Coeur d'AlenePanhandle SO
Leadore Ranger District,
Salmon National Forest, LeadoreLeadore RD
Mackay Ranger District,
Challis National Forest, MackayMackay RD
McCall Ranger District,
Payette National Forest, McCallMcCall RD
Nez Perce National Forest,
Supervisors Office, GrangevilleNez Perce SO
Palisades Ranger District,
Targhee National Forest, Idaho FallsPalisades RD
Priest Lake Ranger District,
Idaho Panhandle National Forests,Priest Lake RD
Salmon National Forest, Supervisors Office,
Salmon (housed at Cobalt Ranger District) ...Salmon SO
Sawtooth National Forest,
Supervisors Office, Twin FallsSawtooth SO
Sawtooth National Recreation Area,
Sawtooth National Forest, StanleySawtooth NRA
Slate Creek Ranger District,
Nez Perce National Forest, Slate CreekSlate Creek RD
Targhee National Forest,
Supervisors Office, St. AnthonyTarghee SO

National Park Service Office

Craters of the Moon National Monument, ArcoCraters

U.S. Fish and Wildlife Service

U.S. Fish and Wildlife Service,
Boise Field Office, Boise (housed at SRP) ...Fish & Wildlife

RESULTS OF SEARCH

Following is a summary of the results of the 1989 search of herbaria for Idaho rare plant locations, including search team members, herbaria they searched, number of rare plant specimens recorded, and an estimation of the time required to search each herbarium (rounded to the nearest hour):

	# records	time (hours)
<u>Ann DeBolt</u> (Boise District BLM)		
ID	401	16
WS (partial with Chris Lorain)	118	18
CIC (with Scott Riley and LeAnn Henry)	312	30
IDS	124	10
Ricks	13	2
Shoshone BLM	16	2
Targhee SO	12	1
Caribou SO	2	1
Boise BLM - completed previously		
<u>Chris Lorain</u> (Idaho Natural Heritage Program)		
IDF	248	25
WS (partial with Ann DeBolt)	39	18
Clearwater SO	11	2
Nez Perce SO	4	1
Slate Creek RD	3	1
Cottonwood BLM	25	3
<u>Susan Bernatas</u> (The Nature Conservancy)		
Deep Creek BLM	7	1
<u>Bill Little</u> (Sawtooth NF, retired)		
Sawtooth SO	24	5
<u>Jill Blake</u> (Idaho Panhandle National Forests)		
Panhandle SO (with Bob Shackelford)	0	?
<u>Bob Moseley</u> (Idaho Natural Heritage Program)		
BOIS	84	3
IFGH	47	3
MONTU (with Chris Lorain)	65	7
SRP	26	2
Challis SO	6	1
McCall RD (with Barbara Ertter)	8	4
Craters	0	1
Boise SO	7	1
Fish and Wildlife	13	1
<u>Roger Rosentreter</u> (BLM, Idaho State Office)		
Idaho Falls BLM	0	1

	# records	time (hours)
<u>Pete Stickney</u> (Intermountain Research Station)		
MRC	30	3
<u>Loran Anderson</u> (Florida State University)		
FSU (<u>Chrysothamnus</u> only)	9	?
<u>Terry Knight</u> (Nevada Natural Heritage Program)		
UNLV	1	?
<u>Mary Neighbours</u> (Wyoming Natural Diversity Database)		
RM (including USFS)	86	?
<u>Ben Franklin</u> (Utah Natural Heritage Program)		
BRY	129	?
UT	18	?
UTC	83	?

Total herbaria searched (as of 3/5/90)	34	
Total records	1971	
Total time (not including travel)	163	
Search team members	16	

DISCUSSION

The enormous amount of occurrence records resulting from the search have been sorted and are currently being processed by the Heritage Program. As of February 1990, all locations for federal candidates have been entered into the data base, as have most other federal agency-designated sensitive species. The remaining records, largely for other state-rare species will be processed in the coming months.

It should be realized that the total number of records resulting from the search does not represent 1971 new locations for rare plants in Idaho. There appears to be considerable duplication, resulting from: (1) duplicate specimens deposited at more than one herbarium, and (2) Heritage Program data base records did not have the herbarium information associated with a previously recorded location.

While a significant number of new locations were discovered for candidates and other agency-designated sensitive species, it appears that the greatest amount of new information was generated for the little-known or newly-recognized rare species. These plants fall largely in the Review category of the Idaho Native Plant Society list.

Several small herbaria remain to be searched in 1990:

Palisades RD	Council RD
Priest Lake RD	Bonnors RD
Salmon SO	North Idaho
Salmon BLM	Mackay RD
Sawtooth NRA	Leadore RD
Avery RD	

REFERENCES

- Henderson, D. 1974. Rare and endangered plants of Idaho. Pages 99-104 in: Research natural area needs in Idaho: A first estimate. Report of the Natural Areas Workshop, April 24-25, 1974, Boise, Idaho, C.A. Wellner and F.D. Johnson, compilers. Published by the College of Forestry, Wildlife and Range Sciences, University of Idaho, Moscow.
- Holmgren, P.K., W. Keuken, and E.K. Scofield. 1981. Index Herbariorum, edition 7. Regnum Vegetabile, Volume 106, Part 1. W. Junk, Boston. 452 p.
- Johnson, F.D., and R.W. Steele. 1974. A tentative list of uncommon plants in Idaho. Pages 105-123 in: Research natural area needs in Idaho: A first estimate. Report of the Natural Areas Workshop, April 24-25, 1974, Boise, Idaho, C.A. Wellner and F.D. Johnson, compilers. Published by the College of Forestry, Wildlife and Range Sciences, University of Idaho, Moscow.
- Rare and Endangered Plants Technical Committee, Idaho Natural Areas Council. 1977. Endangered and threatened plants of Idaho: A summary of current knowledge. Bulletin Number 21. University of Idaho, Forest Wildlife and Range Experiment Station, Moscow. 72 p.
- Rare and Endangered Plants Technical Committee of the Idaho Natural Areas Council. 1981. Vascular plant species of concern in Idaho. Bulletin Number 34. University of Idaho, Forest Wildlife and Range Experiment Station, Moscow. 161 p.
- Wellner, C.A., and F.D. Johnson, compilers. 1974. Research natural area needs in Idaho: A first estimate. Report of the Natural Areas Workshop, April 24-25, 1974, Boise, Idaho. Published by the College of Forestry, Wildlife and Range Sciences, University of Idaho, Moscow. 179 p.

ACKNOWLEDGEMENTS

Many people contributed to the enormously successful outcome of this project, especially members of the search team (and their employers) listed in the Results section. A special thank you goes to Ann DeBolt for her extraordinary ability to scan several thousand herbarium specimens in a short period of time, compile an incredible amount of information on rare species in an organized manner, and still manage to (barely?) keep her sanity. All this just days before entering graduate school.

I am particularly indebted to the curators of several regional herbaria for maintaining large and valuable collections of Idaho plants and for allowing us free access to the information contained in them. Thanks go to Joy Mastroguiseppe (Marion Ownbey Herbarium, Washington State University), Pat Packard (Harold M. Tucker Herbarium, College of Idaho), Doug Henderson (University of Idaho Herbarium), and Karl Holte (Ray J. Davis Herbarium, Idaho State University).

This project would not have happened at all without financial support from the Idaho State Office of the Bureau of Land Management and Regions 1 and 4 of the U.S. Forest Service. Their continuing contributions to the accumulation of knowledge on Idaho's rare flora is greatly appreciated.

Appendix 1

List of Idaho's rare flora included
in the 1989 search.

Adiantum pedatum var. nov.
Agoseris lackschewitzii
Agrostis oregonensis
Allium aaseae
Allium anceps
Allium madidum
Allium tolmiei var. persimile
Allium tolmiei var. platyphyllum
Allium validum
Allotropia virgata
Andromeda polifolia
Antennaria arcuata
Arnica alpina var. tomentosa
Artemisia packardiae
Artemisia papposa
Asclepias cryptoceras
Asplenium trichomanes
Asplenium viride
Aster jessicae
Astragalus amblytropis
Astragalus amnis-amissi
Astragalus anserinus
Astragalus aquilonius
Astragalus atratus var. inseptus
Astragalus atratus var. owyheensis
Astragalus beckwithii var. sulcatus
Astragalus bisulcatus
Astragalus bourgovii
Astragalus camptopus
Astragalus ceramicus var. apus
Astragalus conjunctus
Astragalus drummondii
Astragalus eucosmus
Astragalus gilviflorus
Astragalus jejunus
Astragalus kentrophyta var. jessiae
Astragalus leptaleus
Astragalus microcystis
Astragalus mulfordiae
Astragalus newberryi var. newberryi
Astragalus oniciformis
Astragalus paysonii
Astragalus platytropis
Astragalus purshii var. ophiogenes
Astragalus riparius
Astragalus salmonis
Astragalus scaphoides
Astragalus spatulatus
Astragalus sterilis
Astragalus tetrapterus
Astragalus vallis
Astragalus vexilliflexus var. nubilus
Astragalus yoder-williamsii
Bacopa rotundifolia
Betula pumila var. glandulifera
Blechnum spicant
Blepharidachne kingii
Botrychium ascendens

Botrychium crenulatum
Botrychium lanceolatum var. lanceolatum
Botrychium lunaria
Botrychium minganense
Botrychium montanum
Botrychium pedunculatum
Botrychium pinnatum
Botrychium simplex
Bouteloua gracilis
Calamagrostis tweedyi
Calandrina ciliata
Calochortus macrocarpus var. maculosus
Calochortus nitidus
Camassia cusickii
Camissonia palmeri
Camissonia pterosperma
Campanula scabrella
Cardamine constancei
Carex aboriginum
Carex aenea
Carex angustata
Carex breweri var. paddoensis
Carex buxbaumii
Carex californica
Carex chordorrhiza
Carex comosa
Carex flava
Carex hendersonii
Carex idaho
Carex lenticularis var. impressa
Carex lenticularis var. lenticularis
Carex leptalea
Carex livida
Carex paupercula
Carex sheldonii
Carex straminiformis
Carex tumulicola
Castilleja angustifolia var. flavescens
Castilleja christii
Castilleja oresbia
Castilleja pulchella
Ceanothus prostratus
Chaenactis cusickii
Chrysothamnus albidus
Chrysothamnus nauseosus ssp. graveolens
Chrysothamnus nauseosus ssp. nanus
Chrysothamnus nauseosus ssp. nauseosus
Chrysothamnus parryi ssp. montanus
Cicuta bulbifera
Claytonia lanceolata var. flava
Cleomella plocasperma
Collomia debilis var. camporum
Collomia heterophylla
Cornus nuttallii
Corydalis caseana var. hastata
Coryphantha missouriensis
Coryphantha vivipara
Crepis bakeri ssp. idahoensis

Cryptantha breviflora
Cryptantha propria
Cryptantha simulans
Cryptogramma stelleri
Cuscuta denticulata
Cymopterus acaulis var. greeleyorum
Cymopterus corrugatus
Cymopterus davisii
Cymopterus douglassii
Cymopterus ibapensis
Cyperus rivularis
Cypripedium calceolus ssp. parviflorum
Cypripedium fasciculatum
Dasynotus daubenmirei
Dimeresia howellii
Dodecatheon dentatum
Dodecatheon hendersonii
Douglasia idahoensis
Draba argyraea
Draba daviesiae
Draba fladnizensis
Draba maguirei
Draba trichocarpa
Dryopteris cristata
Eatonella nivea
Eburophyton austiniae
Elaeagnus commutata
Epilobium palustre
Epipactis gigantea
Erigeron humilis
Erigeron latus
Erigeron radicans
Erigeron salmonensis
Eriogonum brevicaulis var. laxifolium
Eriogonum desertorum
Eriogonum dougalsii var. douglassii
Eriogonum meledonum
Eriogonum salicornioides
Eriogonum ochrocephalum var. sceptrum
Eriogonum shockleyi var. packardiae
Eriogonum shockleyi var. shockleyi
Eriophorum viridicarinatum
Erythronium grandiflorum ssp. nudipetalum
Festuca subuliflora
Frasera albicaulis var. idahoensis
Gaultheria hispidula
Gentiana propinqua
Gentiana tenella
Gilia polycladon
Glyptopleura marginata
Grindelia howellii
Gymnosteris nudicaulis
Gymnosteris parvula
Habenaria obtusata
Hackelia davisii
Hackelia ophiobia
Halimolobos perplexa var. lemhiensis
Halimolobos perplexa var. perplexa

Haplopappus aberrans
Haplopappus bloomeri
Haplopappus hirtus var. sonchifolius
Haplopappus insecticruris
Haplopappus integrifolius ssp. integrifolius
Haplopappus liatririformis
Haplopappus racemosus var. glomerellus
Haplopappus radiatus
Haplopappus resinosus
Haplopappus spinulosus var. spinulosus
Haplopappus uniflorus ssp. howellii
Howellia aquatilis
Hulsea nana
Hydrophyllum occidentale var. watsonii
Hymenoxys richardsonii
Hypericum majus
Ivesia tweedyi
Juncus effusus var. pacificus
Juncus hallii
Juncus kelloggii
Kobresia simpliciuscula
Ledum groenlandicum
Lepidium davisii
Lepidium montanum var. papilliferum
Leptodactylon glabrum
Leptodactylon pungens ssp. hazeliae
Lesquerella kingii var. cobrensis
Lesquerella paysonii
Lewisia kelloggii
Lobelia kalmii
Lomatium dissectum var. dissectum
Lomatium rollinsii
Lomatium salmoniflorum
Lomatogonium rotatum
Lotus humistratus
Ludwigia polycarpa
Lupinus cusickii ssp. cusickii
Lupinus lyallii ssp. alcis-temporis
Lupinus lyallii ssp. subpandens
Lupinus uncialis
Lychnis apetala var. montana
Lycopodium inundatum
Lycopodium sitchense
Machaeranthera laetevirens
Machaeranthera shastensis var. latifolia
Machaerocarpus californicus
Maianthemum dilatatum
Malacothrix glabrata
Malacothrix torreyi
Mentzelia mollis
Mentzelia torreyi var. acerosa
Mertensia bella
Mimulus clivicola
Mimulus patulus
Mimulus ringens
Mimulus washingtonensis ssp. ampliatus
Mirabilis macfarlanei
Muhlenbergia glomerata

Muhlenbergia racemosa
Nemacladus rigidus
Nymphaea tetragona
Oenothera psammophila
Oryzopsis sp. nov.
Oryzopsis swallenii
Oxalis trilliifolia
Oxytheca dendroidea
Oxytropis besseyi var. salmonensis
Papaver kluanense
Parnassia kotzebuei var. kotzebuei
Pediocactus simpsonii var. robustior
Penstemon elegantulus
Penstemon idahoensis
Penstemon janishiae
Penstemon lemhiensis
Penstemon leonardii var. leonardii
Peraphyllum ramosissimum
Petasites sagittatus
Peteria thompsoniae
Phacelia inconspicua
Phacelia lutea var. calva
Phacelia lyallii
Phacelia minutissima
Phlox idahonis
Physaria didymocarpa var. lyrata
Pityrogramma triangularis
Polypodium glycyrrhiza
Polystichum kruckebergii
Potamogeton diversifolius
Prenanthes alata
Primula alcalina
Primula incana
Primula wilcoxiana
Psilocarphus brevissimus var. brevissimus
Psilocarphus oregonus
Psilocarphus tenellus
Psoralea physoides
Ranunculus gelidus
Ranunculus pygmaeus
Rhinanthus crista-galli
Rhynchospora alba
Ribes howellii
Ribes sanguineum
Ribes velutinum var. nov.
Ribes wolfii
Romanzoffia sitchensis
Rubus bartonianus
Rubus spectabilis
Salicornia rubra
Salix candida
Salix farriae
Salix glauca
Salix pedicellaris
Sanicula graveolens
Sanicula marilandica
Saxifraga adscendens var. oregonensis
Saxifraga bryophora var. tobiasiae

Saxifraga cernua
Scheuchzeria palustris
Scirpus cyperinus
Scutellaria nana var. nana
Sedum borschii
Sedum lanceolatum var. rupicolum
Senecio streptanthifolius var. laetiflorus
Silene scaposa var. lobata
Silene spaldingii
Solidago spectabilis
Stellaria calycantha var. calycantha
Stipa pinetorum
Stipa viridula
Stipa webberi
Streptopus streptopoides var. brevipes
Stylocline filaginea
Synthyris platycarpa
Tauschia tenuissima
Telesonix jamesii
Teucrium canadense var. occidentale
Thalictrum dasycarpum
Thelypodium laciniatum var. streptanthoides
Thelypodium repandum
Thelypteris nevadensis
Thlaspi aileeniae
Tofieldia glutinosa ssp. absona
Tofieldia glutinosa ssp. brevistyla
Townsendia scapigera
Trientalis arctica
Trientalis latifolia
Trifolium microdon
Trifolium multipedunculatum
Trifolium owyheense
Trifolium plumosum var. amplifolium
Vaccinium oxycoccos
Viburnum opulus var. americanum
Viola sempervirens
Waldsteinia idahoensis