

## ROCKY MOUNTAIN HERBARIUM CELEBRATES CENTENNIAL

By Walter Fertig

Much ado has been made about 1993 being the one hundredth anniversary of varsity football at the University of Wyoming. Lost amid the gridiron hoopla is an event of perhaps greater interest to plant lovers across the state, namely the centennial of the founding of the Rocky Mountain Herbarium (RM). From its humble beginnings 100 years ago, the RM has grown to become the premier plant collection in the Rocky Mountain region and one of the twenty largest in the nation.

The herbarium at the University of Wyoming was established by Aven Nelson as a repository for about 300 specimens of native plants collected by B. C. Buffum for the Chicago World's Fair of 1892. Nelson had just recently received his Masters Degree in Botany from Harvard, but was still a neophyte plant taxonomist with an inadequate library or reference collection to use to identify plants. Nonetheless, the task of identifying, mounting, and storing the Buffum collection sparked an interest in taxonomy that ultimately led to Nelson becoming one of the leading taxonomists of his era.

The early growth of the RM collection can be attributed to the pioneering explorations of Aven Nelson and his early students, Elias Nelson (no relation) and Leslie Goodding. Initially, collecting efforts focused on the flora of Wyoming, but in time Nelson and his students expanded their forays to take in the entire Central Rocky Mountain region. To reflect this shift in emphasis, the collection was officially designated as the Rocky Mountain Herbarium by the University Board of Trustees in 1899.

Aven Nelson's stature as a botanist contributed to the growth and success of the RM in the first four decades of the 20th Century. Many distinguished scientists began their careers in Laramie as students of Nelson, including Edwin Payson, Francis Macbride, Louis Williams, Reed Rollins, Marion Ownbey, and Ruth Ashton (later Nelson's second wife). Through the collecting efforts of Nelson and his students, active trading of duplicates with other universities, and the donation of private herbaria (most notably 25,000

specimens from George Osterhout), the RM grew from 300 to 192,000 specimens by the time Nelson retired in 1942.

During Aven Nelson's career, the RM collection resided in the attic of the Science Building and, later on the fourth floor of the Engineering Building. In 1960, the RM moved to its current home on the third floor of the former campus library, renamed the Aven Nelson Building. At this time the collection numbered 265,000 specimens.

C. L. Porter succeeded Nelson as Curator in 1942 and continued in that post for 25 years. During his tenure, Porter authored "Contributions toward a flora of Wyoming" and later "A flora of Wyoming", both multi-part pamphlets with keys and descriptions of plants of the state. Until Dorn's 1977 "Manual of the Vascular Plants of Wyoming", these pamphlets were the main taxonomic references specific to the flora of Wyoming.

The RM has experienced its greatest period of growth under the direction of Ron Hartman, who replaced John Reeder as the collection's fourth curator in 1977. In the last 16 years over 130,000 specimens have been added to the herbarium as a result of intensive floristic surveys in the northern, central, and western parts of the state by Hartman, B. E. "Ernie" Nelson, and taxonomy graduate students from the University of Wyoming. The RM has also grown with the additions of the Solheim Mycological Herbarium in 1978 (50,000 fungi specimens) and the US Forest Service National Herbarium in 1982 (120,000 sheets). To help accommodate this growth, the RM added a movable storage system in 1986 that has nearly tripled the space available for the collection.

As the RM enters its second century, it remains an active and vibrant institution. The RM is currently in the midst of computerizing label information from the entire collection of over 600,000 specimens. These data are being used to generate plant distribution layers for Geographic Information Systems. In addition, RM scientists and collaborators are conducting on-going floristic and taxonomic research for the Flora of North America project and the proposed Flora of the Rocky Mountains effort. These are lofty goals and achievements for an herbarium that started with only 300 specimens 100 years ago!

# Wyoming Native Plant Society

Vol. 12 # 3  
OCTOBER 1993

## WNPS NEWS

**Annual Meeting:** The WNPS annual meeting was held at Devil's Tower National Monument on Saturday, 19 June 1993. Twenty-three members and guests enjoyed a beautiful summer day of botanizing in the Black Hills area.

A brief business meeting was held before festivities began. Lame-duck President Walter Fertig convened the meeting by announcing results of spring balloting. The following individuals were elected as 1993/94 officers of the Society: President, Phil White (Laramie); Vice President, Barbara Amidon (Rock Springs); Secretary/Treasurer, Walter Fertig (Laramie); 2-year Board Member, Jennifer Whipple (Yellowstone National Park). George Jones (Laramie) continues as the carry-over board member. The amendment formalizing procedures for establishment of chapters of the Society was passed and has become incorporated into WNPS's by-laws.

In new business, a suggestion was made to replace the existing membership renewal system (in which all renewals are due on the date of the annual meeting) with a 12-month membership system, where each member is responsible for dues on the anniversary of their joining the Society. After some discussion, members in attendance voted to keep the current renewal system in place.

Two sites were recommended for the 1994 field trip: the Ashenfelder Basin area in the Northern Laramie Range, and the Grand Tetons. After discussion of the merits of both, a vote was taken by the members present. The result was a tie! In a break with WNPS tradition, it was decided to hold field trips at both locations next year! More details on the trips will be in the next issue of the Newsletter.

With the formalities of the business meeting completed, field trip participants enjoyed a leisurely day exploring the Black Hills. Our first stop was a nature trail at the edge of prairie and ponderosa pine in sight of Devil's Tower. Although there were no rare plants to observe, we enjoyed keying out native cacti, milk-vetches and grasses, and nearly managed to get outside of viewing distance of the car pool after an hour of botanizing! Not a bad pace for two dozen botanists.

Our second stop was "The Summit" campground in the Bear Lodge Mountains east of Alva. Tour leaders Bob and Jane Dorn discussed the interesting floristic relationships of this site, where elements of the Rocky Mountain, northern boreal, and eastern deciduous forest floras are combined. The Dorns pointed out many of the rare and unusual species of this area, including Cornus canadensis, Ceanothus herbaceus, Viola pubescens, Corylus cornuta, and Aralia nudicaulis. The rarest plant of all that we located was Selaginella rupestris, the infamous "outhouse selaginella". Bob explained how he relocated this species at the steps of the campground outhouse, possibly the same location where it was first encountered in the state by C. L. Porter.

The last trip was made to Dugout Gulch, site of one of the richest communities of boreal and eastern deciduous forest disjuncts in Wyoming. The botanical attributes of Dugout Gulch were first brought to the attention of the Forest Service by WNPS in 1982. Thanks to the Society's efforts, this significant botanical area was spared from logging. On our field trip this year, we were able to observe several unusual species including Asclepias ovalifolia, Ostrya virginiana, Viburnum lentago, and Polygonatum biflorum. Our most significant find, however,

was a small population of Cypripedium calceolus var. pubescens, a species not previously reported from Crook County. WF



Cypripedium calceolus var. pubescens (W. Fertig)

**Treasurer's Report:** Balance as of 30 September 1993: General Fund \$421.86, Scholarship Fund: \$172.50. Total Funds: 594.36. WF

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Attention WNPS Members: Your articles about Wyoming native plants or illustrations are welcome in the newsletter! Deadline for the February issue is 15 January 1994.  
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### Wyoming Native Plant Society

President: Phil White  
Vice President: Barbara Amidon  
Secretary/Treasurer: Walt Fertig  
Board Members: George Jones  
Jennifer Whipple

Contributors to this issue:  
John Baxter; Jane Dorn; Robert Dorn (RD); Walt Fertig (WF);  
Robin Jones



## BOTANICAL BONERS

By John Baxter

More "botany boners" collected from student quiz and exam papers, reproduced exactly as originally written (and intended?).

**PLANT ANATOMY:** The cell wall is composed of plastic and cellulose. When water goes out through the perianth differential membrane of the cell, the cell is plasmolyzed. This is called plasmolysis. The cambium divides radially and forms xylem and phloem. The phloem is composed of sieve tubes and vessel fibers. In the leaf, most of the photosynthesis is carried on in the palisade layer. A saprophyte is a plant that stores sap. The Ohio buckeye is perennially veined and gametely palmated.

## BOTANIST'S BOOKSHELF

**Vascular Plants of Wyoming**, second edition, by Robert Dorn, ill. by Jane Dorn. Mountain West Publ., \$13.00, 340 pp., illus.

The single most authoritative reference on the flora of Wyoming has been revised. The second edition of **Vascular Plants of Wyoming** follows the format and philosophy of the original, but has been updated to include new taxa, nomenclatural changes, and new distribution records. Bob Dorn has also added a second, technical key to the willows, reflecting the latest developments in his on-going effort to bring clarity to the genus Salix!

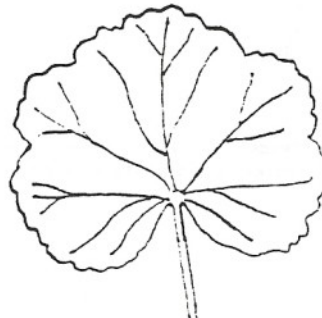
If this book is not available at your local bookstore, it may be purchased by mail from the publishers at P.O. Box 1471, Cheyenne, WY 82003 (Wyoming residents please add appropriate sales tax for your county). WF

### Family 18: Lamiaceae, Mint Family

This is the Eighteenth largest family of flowering plants in Wyoming with 31 species. The family is easy to recognize by the following characteristics: irregular corolla (an example is figured), 2 or 4 stamens, superior and 4-lobed ovary, simple and opposite leaves, square stems, and often aromatic. Some representatives include mint, catnip, horehound, dragonhead, sage (not sagebrush which is in the Asteraceae), and skullcap. A fair number of spices and herb teas are from this family. Our largest genera (Lycopus, Nepeta) have only three species each in Wyoming, so we have 20 genera representing our 31 species. Watch for plants with opposite leaves and square stems with irregular corollas. These should be mints.

### Family 19: Saxifragaceae, Saxifrage Family

This is the nineteenth largest family of flowering plants in Wyoming with 30 species. The family is closely related to the rose family and similar to it with respect to the variability making it difficult to characterize. As an example, the leaves can be opposite, alternate, or basal and simple or compound; the flowers are mostly regular but rarely irregular, in cymes, thyrses, racemes, panicles, or solitary; the petals are usually 5 but sometimes fewer or none at all and are usually separate; the stamens are usually 5 or 10; the ovary is superior to inferior; and the styles are 0-4. Perhaps the best way to recognize the bulk of the family is by the reniform to cordate or orbicular basal leaves (see figure), although other families may have these also. Some examples are saxifrage, our largest genus with 13 species, grass of parnassus, mitrewort, woodland star, and alumroot. Most of our species grow in moist or wet places so these habitats should be checked for representatives of the family. RD



Left: Stachys palustris flower (x 1.6). Right: Leaf of Heuchera (x 1).

Agoseris lackschewitzii, A NEW  
ADDITION TO THE FLORA  
OF WYOMING

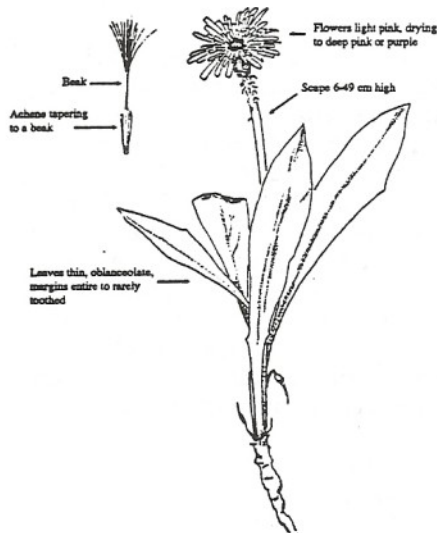
In 1990, pink agoseris (Agoseris lackschewitzii) was described as a new species by Doug Henderson and Anita Cholewa of the University of Idaho and Bob Moseley of the Idaho Conservation Data Center. At that time, it was known only from north-central Idaho and western Montana. Since then, Dr. Henderson has examined hundreds of specimens of Agoseris from the Rocky Mountain Herbarium (RM) and determined that this species also occurs in Wyoming. Two previously unrecognized specimens from the Beartooth Plateau were found in the RM collections, the oldest dating from 1951.

During general floristic survey work in the southwestern Wind River Range in 1991, Ron Hartman and I located several populations of an unusual Agoseris that we suspected might be A. lackschewitzii. These specimens were sent to Dr. Henderson, who confirmed our suspicions. With the addition of these collections, pink agoseris is now known from seven locations in the state.

In the field, pink agoseris is best recognized by its pink ray flowers and its occurrence in wet, poorly drained habitats. Other Agoseris species typically have yellow or orange rays (although these may turn pink at maturity) and are found in dry or well-drained sites. Pink agoseris is designated as Sensitive by Region 4 of the US Forest Service. The species was named in honor of contemporary Montana botanist Klaus Lackschewitz. WF

PINK AGOSERIS

Agoseris lackschewitzii Henderson, Moseley, and Cholewa  
Asteraceae (Compositae)



Illust. from USDA Forest Service. 1991. Threatened, Endangered, and Sensitive Species of the Intermountain Region.

BOTANICAL NOVELTIES

Thanks to the efforts of Bob Dorn, four previously undescribed plant species have been discovered in Wyoming since 1989. To date, none of these species has been found outside of the state. Each is currently a candidate for listing as Threatened or Endangered by the U.S. Fish and Wildlife Service.

Cirsium aridum Dorn (Cedar Rim Thistle). This member of the aster family was first discovered by Dorn on Cedar Rim (just E of Beaver Rim) in Fremont County in 1990. It has since been documented from three sites in the Green River Basin east of Big Piney. Cedar Rim thistle has 3-7 heads of lavender flowers at the tip of a densely woolly-hairy stem up to 30 cm tall. The spiny leaves are grayish woolly above and below and are decurrent on the stem. It is most readily confused with C. pulcherrimum, which differs in having greenish upper leaf surfaces and a prominent yellow apical collar on the achenes. C. aridum is found on barren, chalky hills and in fine textured, sandy-shaley draws.

Phlox opalensis Dorn (Opal Phlox). This new member of the phlox family was first collected in 1898 by Aven Nelson near Carter (Uinta County). Nelson, however, failed to recognize his specimen as a new taxon, and it remained in the collections of the Rocky Mountain Herbarium for over 90 years as P. bryoides (P. muscoides). Bob Dorn relocated the phlox in the wild near Opal in May 1990 and described it as a new species in 1992. Opal phlox is a perennial, loosely-matted herb with crinkly-hairy, narrow leaves (less than 1 mm wide) and large white flowers (corollas ave 12-16 mm in diameter). It is found on clay slopes and ridges only in Lincoln and Uinta Counties. Squarestem phlox (P. muscoides) closely resembles P. opalensis, but can be distinguished by its smaller flowers, more densely matted growth form, and preference for rocky, calcareous habitats.

Townsendia microcephala Dorn (Cedar Mountain Easter Daisy). This member of the aster family is known only from Cedar Mountain in Sweetwater County, where it was first observed by Dorn in July 1989. T. microcephala is distinctive in having very small flower heads (6-8 mm long and 4-8 mm wide), deciduous pappus, and glabrous achenes. This species is currently known from only one location, where it is found on rocky outcrops of the non-calcareous Bishop Formation. Its closest relatives, T. spathulata and T. condensata, differ in having larger heads, pubescent achenes and in occurring on calcareous substrates or high elevation ridges and talus slopes.

Yermo xanthocephalus Dorn (Desert Yellowhead). In June 1990 Dorn discovered an unusual yellow-flowered composite from the Beaver Rim area that proved to be not only a new species, but also a new, previously unrecognized genus! Dorn considers Yermo to be most closely related to Cacalia, a genus native to moist forests of eastern North America and Eurasia. Yermo is unique, however, in having yellow involucre bracts. Other diagnostic traits of this new species are its yellow disk flowers, thick taproots, and leathery lance-ovate leaves. The generic name is derived from a Spanish word for desert, accurately describing the plant's habitat of barren, white-silty clay outcrops. WF



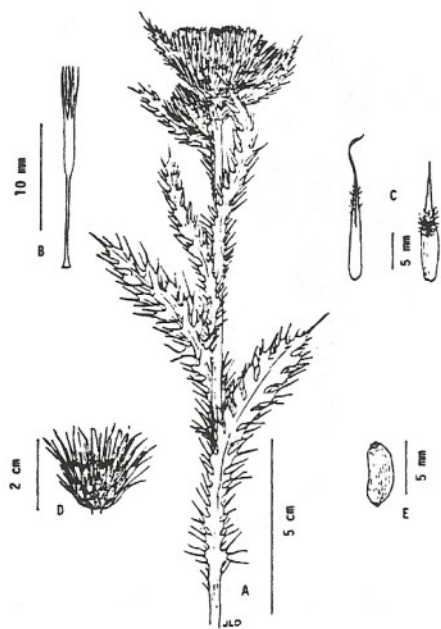


Figure. *Cirsium aridum*. A. Top half of plant. B. Corolla. C. Innermost (left) and middle (right) involucre bracts. D. Involucre. E. Achene.

Above and below: from Dorn, R. D. 1992. Vascular Plants of Wyoming, second edition. Illustrations by Jane Dorn

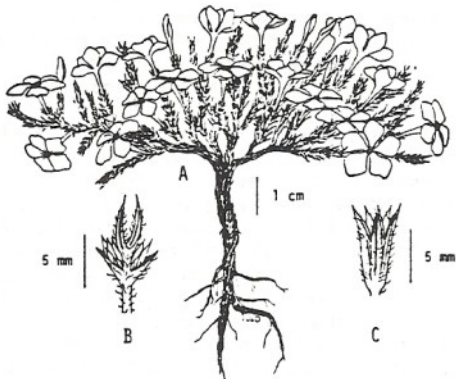


Figure. *Phlox opalensis*. A. Habit. B. Leaves. C. Calyx.

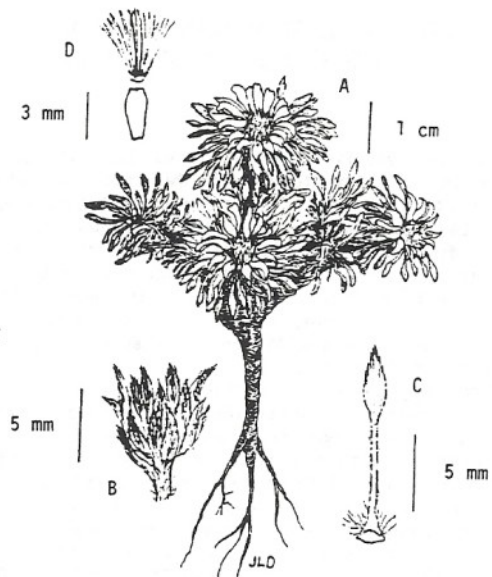


FIG. 1. *Townsendia microcephala*. A. Habit. B. Involucre. C. Leaf. D. Achene and pappus.

Above: from Dorn, R. D. 1992. *Townsendia microcephala*: A new species from Wyoming. Madrono 39: 189-192

Below: from Dorn, R. D. 1991. *Yermo xanthocephalus*: A new genus and species from Wyoming. Madrono 38: 198-201

Both illustrations by Jane Dorn



FIG. 1. *Yermo xanthocephalus*. A. Habit. B. Individual head in bud at left, top view of individual head in bud at right. C. Mature achene. D. Disk floret with pappus removed. E. Disk floret with pappus intact. F. Stigmas. G. Anther.

## BOTANICAL EXPLORATION OF THE OWL CREEK MOUNTAINS

by Robin Jones

During the 1991 field season, I had the opportunity to conduct a floristic inventory of the Owl Creek Mountains in southern Hot Springs County. This project was funded by the Bureau of Land Management (BLM) Grass Creek Resource Area. Additional funding was provided by a scholarship from the Wyoming Native Plant Society (WNPS). The Owl Creeks hold a special place in my heart, as I grew up in Thermopolis and spent much time exploring the area in my youth. I am grateful to the BLM and WNPS for the chance to return to this area and explore it again.

Before the coming of the highway and railroad, the conventional routes into the southern Bighorn Basin were the various wagon roads and trails over the Bridger and Owl Creek Mountains. To pass through the Bridgers, one could go over Cottonwood Pass, Bridger Pass, or Birdseye Pass. All of these had their dangers: rugged terrain, rattlesnakes, ticks, hostile natives, bears, wolves, and more.

The same hazards are present for crossing the Owl Creeks. Whether one chooses Mexican Pass or Blondy Pass, the traveler approaching this east-west trending range from the south is confronted with the task of finding passage through the steep and jumbled upthrown face of the large thrust fault that has shaped the topography of the sediments. Add to this intermixed normal faults that form the "keystone graben" along the backbone of the range and a crossing of the Owl Creeks by wagon is a formidable task.

The rigors of travel across the mountains may explain the delay in scientific exploration of the area. It was not until 1874 that the first scientific party crossed the Owl Creeks. This expedition left Fort Bridger on 12 June under the command of Captain William A. Jones, with Dr. Charles C. Parry along as botanist. After crossing the Green River Basin, ascending the western slope of the Wind River Mountains and subsequently crossing the Wind River Basin, the expedition arrived at the southern flank of the Owl Creeks. The main objective of the party was to reach the Yellowstone area. However, they were to map and investigate the previously uncharted country along the way.

The expedition began the climb up what is now known as Blondy Pass, smack dab in the heart of the Wind River Indian Reservation. They proceeded up Painted Rock Canyon and through what Capt. Jones called "extremely desolate and quite mountainous" terrain. They topped out on the pass and to their right encountered a large buttress with a limestone cliff running along its base. Capt. Jones called this massif Phlox Mountain (for reasons immediately obvious if one visits there in summer). Jones and Parry took a side trip up Phlox Mountain where Parry made the following discovery. "Here in rock crevices was found the charming dwarf columbine, which, in compliment to the enterprising commander of the expedition, and its first actual discoverer, I have named *Aquilegia jonesii*." Parry predicted that this new species "would no doubt prove highly ornamental in cultivation." In 1991, Hollis Marriott and I visited Phlox Mountain where we saw *A. jonesii* growing in cracks and pockets of large limestone boulders.

From Blondy Pass, the Jones expedition descended to the confluence of the South and Middle Forks of Owl Creek. They camped next to the Middle Fork, where they found the grass



Above: *Aquilegia jonesii* from Munz 1946

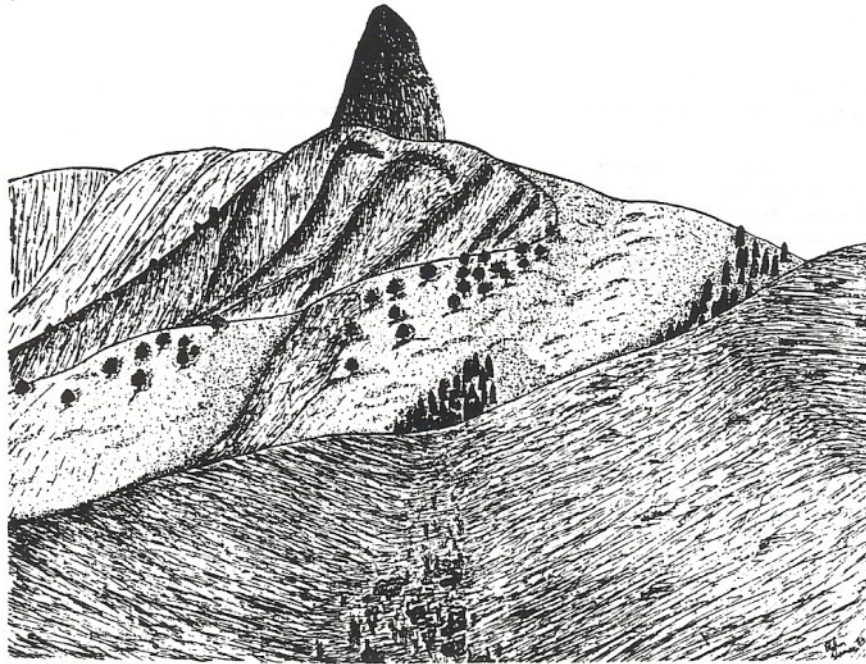
deep and plentiful for their livestock. In this regard, not much has changed since 1874. Their camp was at the border between the massive volcanic debris flows of the eastern flank of the Absarokas and the thrust faulted sediments of the Owl Creeks.

East of their camp toward the Big Horn River is a spectacular view of gently dipping sediments that form magnificent canyons. One of the finest of these is the canyon of Red Canyon Creek that I botanized with Ernie Nelson. The bluffs of this area are covered with Rocky Mountain juniper and limber pine with gentle slopes of sagebrush grassland.

Other large and deep canyons occur along broken, faulted sediments to the west until they are buried by volcanic debris of the Absaroka Mountains. One of the most notable of these is the canyon of the south Fork of Owl creek, which Capt. Jones called "the grand canyon of Owl Creek." This canyon is insanely rugged and steep, and provides habitat for grizzly bears and mountain lions. The stream itself is one of the only in the entire region that hosts a very healthy population of cutthroat trout. To catch these fish is well worth the steep and long hike into and out of the canyon.

West of the expedition's campsite were the frightfully enormous mountains called the Washakee and the Shoshonee Sierra during Capt. Jones' time, but known today as the Absarokas. These are often referred to as the most rugged mountains in the Rockies. It was at camp on the Middle Fork that Capt. Jones dispatched a topographical party to "Washakee's Needle", described by Jones as "simply frightful" and a "terrible crag". This peak is part of the headwaters cathedral of the South Fork of Owl Creek. A spectacular view of this mountain can be attained from Lime Mountain, on the boundary of older sediments and the overlying Eocene volcanic debris.





Above: "Washakie's Needle" by Robin Jones

During older times, the Washakie Needle country was territory of the Crow Indians. The area was full of the givings of the Great Spirit: plentiful buffalo, many berries and other plant foods, good water, and comfortable camping. This is evidenced by the numerous tipi rings and inordinate amounts of chippings in the South Fork area. Many of the areas in and around the forks of the Owl Creek are still considered sacred by American Indian leaders.

The Jones expedition continued to move on, skirting the high mountains, basically following along the eastern edge of the Absarokas. The path that they chose led them through what was to become one of the richest oil fields in Wyoming. Little did they realize that the desolate ridges that they crossed would yield several billion barrels of oil and natural gas at the Hamilton Dome and Grass Creek fields.

In his travels, Parry noted that "the lower mountain slopes are occupied by scattered groves of *Pinus ponderosa*". The only large stand of ponderosa pine that I observed was located west of Wagonhound Bench on a south-facing sandstone dip slope. This population is noteworthy because it is significantly disjunct from the nearest occurrence on the west slope of the Bighorn Mountains. The trees seem to be viable, with a good distribution of differing ages.

In the course of my field work in 1991, a total of 380 plant taxa were collected in the Owl Creek area. Several rare and unusual species were encountered, including Rocky Mountain twinpod (*Physaria saximontana*), Evert's waferparsnip (*Cymopterus evertii*) and Fendler rock cress (*Arabis fendleri*). Other rare plants known to occur in the limestone ridges of the Owl Creeks are sweet-flowered rock jasmine (*Androsace chaemajasma*), yellow spring beauty (*Claytonia lanceolata* var. *flava*), and Shoshonea (*S. pulvinata*). Future work in the area is justified to obtain additional distribution information for these sensitive species.

The Owl Creek Mountains have much to offer the naturalist. Desolate by first appearances, they are very beautiful and varied. I recommend them highly to anyone interested in spending time in wild land in the presence of the Great Spirit.

#### BOTANIST'S BOOKSHELF

**Handbook of Rocky Mountain Plants**, by Ruth Ashton Nelson, fourth edition revised by Roger L. Williams. Roberts Rinehart Publ., \$19.95; 444 pp., illus.

Nearly 25 years after it first appeared, Ruth Nelson's **Handbook of Rocky Mountain Plants** is back in a new, revised format. In crafting this new volume, Roger Williams has maintained the simplicity and clarity of Mrs. Nelson's original work, while expanding its focus to include a wider array of species. True to the original, the keys are written in non-technical "user-friendly" language, and the text is a readable mix of descriptive and natural history information. The excellent line drawings of Dorothy Leake nicely complement the keys and text.

Williams has introduced a few changes in the book. Families are now arranged by the Cronquist system, rather than the antiquated scheme of Engler and Prantl. Likewise, taxonomic nomenclature has been updated and Latin names are given equal billing with common names in the keys. These changes help make the book useful to the lay audience as well as advanced amateur and professional botanists. WF

**USFS REGION 2  
DESIGNATES SENSITIVE PLANTS**

In March 1993, Regional Forester Elizabeth Estill issued an interim directive designating 67 plant species as Sensitive in US Forest Service Region 2 (Rocky Mountain Region). The primary objective of the Region's new Sensitive species program is to develop and implement conservation programs aimed at protecting populations or habitat of species that might trend towards Threatened or Endangered status because of Forest Service activities.

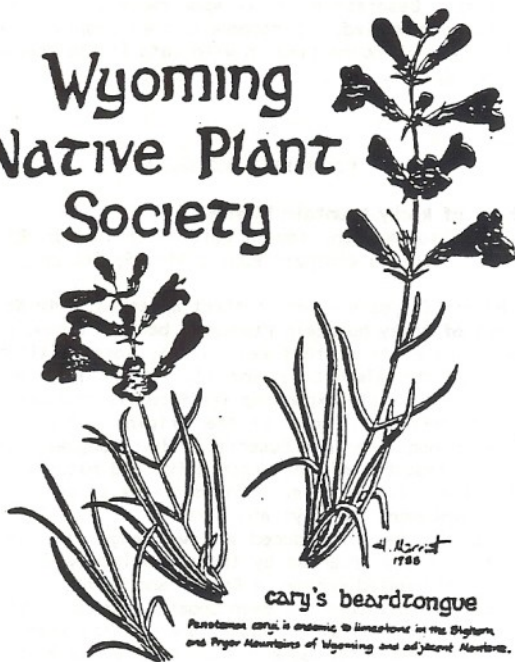
Species were chosen for Sensitive designation based on evidence of declines in population size, number of occurrences, or habitat quality, or if populations and habitat were stable but of limited extent. Selection of Sensitive plants was done in consultation with USFS scientists and botanists from Nature Conservancy state Heritage programs in the region.

Thirty-four plant species from Wyoming are currently designated by the region as Sensitive (these are listed below by Forest). In Wyoming, Region 2 includes Bighorn (B), Black Hills (BH), Medicine Bow (M), and Shoshone (S) National Forests and Thunder Basin National Grassland. WF

Adenocaulon bicolor	BH
Aletes humilis	M ?
Aquilegia laramiensis	M
Arctostaphylos rubra [Arctous r.]	S
Arnica lonchophylla	B
Asclepias uncialis	

Aster mollis	B
Botrychium ascendens	S
Botrychium campestre	BH
Carex alopecoidea	BH
Carex livida	S
Descurainia torulosa	S
Draba pectinipila	S
Epipactis gigantea	B
Equisetum scirpoides	BH
Erigeron lanatus	
Festuca hallii	B, M
Ipomopsis aggregata ssp weberi	M
Lycopodium complanatum	BH
Lycopodium dendroideum	BH
Machaeranthera coloradoensis	M
Muhlenbergia glomerata	BH, S
Orchis rotundifolia [Amerorchis r.]	S
Parrya nudicaulis	S
Parthenium alpinum	
Primula egalikensis	S
Rubus acaulis	B
Salix myrtilifolia	S
Salix serissima	M (BH in S. Dakota)
Scirpus atrocinctus [S. cyperinus]	BH
Scirpus pumilus [S. rollandii]	S
Shoshonea pulvinata	S
Sullivantia hapemanii var hapemanii	B
Townsendia condensata var anomala	S

# Wyoming Native Plant Society



**cary's beardtongue**

*Parthenium caryi* is endemic to limestone in the Bighorn and Pryor Mountains of Wyoming and adjacent Montana.

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