

Oxytropis nana Nutt., a Wyoming endemic collected by Thomas Nuttall on his journey across Wyoming in 1834

WYOMING NATIVE PLANT SOCIETY

Box 1471
Cheyenne, WY 82003

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Minutes of Annual Meeting - The 1987 annual meeting was called to order by President Phil White at the Blair Picnic Ground in the Laramie Range at 9:05 am on July 18. Sixteen members and three other interested persons were in attendance.

Nominations for new officers were called for. Phil White declined his previous re-nomination for President and nominated Hollis Marriott, seconded by Erwin Evert. Hollis was elected on a voice vote. Ernie Nelson, unopposed for Vice-President, was also elected on a voice vote. Hollis' election to President created a second vacancy for a board member. The two members running for the initial vacancy were both elected on a voice vote and a coin flip gave Erwin Evert a two-year term and Neil Snow a one-year term. A secret ballot was taken for the Secretary-Treasurer position and Bob Dorn was re-elected.

Old business was called for. Discussions ensued on member involvement in conducting field trips in different parts of the state, presenting programs at the State Parks, and assisting the Cheyenne Botanical Garden to develop a native plant section. A motion was made to help out the Botanical Garden and passed. Bob Lichvar agreed to follow up on the motion with the help of Erwin Evert, Jane Dorn, Virginia Wheeler, and Pat Pachuta. An additional motion was made to write up information on the society to be placed at the Botanical Garden. The motion passed and Phil White agreed to do the write up. Bob Lichvar will follow up on the State Park programs and provide information for the newsletter. A committee was formed to organize field trips around the state. Hollis will head the committee.

New business was called for. Bob Dorn indicated that the society had several requests from native seed dealers for our mailing list and for advertising in the newsletter. A discussion on the matter resulted in a motion by Hollis to not give out the mailing list, seconded by Jane Dorn. The motion passed. George Jones moved to accept advertising related to native plants, seconded by Bob Lichvar. This motion also passed. The Secretary-Treasurer will be responsible to determine rates and screen requests. The scholarship was next discussed. Dennis Knight moved that we establish a specific scholarship fund, seconded by Hollis. Motion passed. Hollis moved that we commit $200 to the fund and leave it open to any additional donations with the Board to decide how many scholarships to give out and in what amounts, seconded by Michele Potkin. The motion passed. George Jones moved that the President appoint a committee to look into a Wyoming Native Plant Society T-shirt, seconded by Hollis. The motion was approved. George then reported on the Intermountain Shrub Symposium which he had attended. Dennis Knight suggested that we look into the dues structure particularly with regard to eliminating the one-time $4.00 initiation fee and possibly increasing the dues or providing a place on a form for scholarship donations in addition to the dues. Ron Hartman moved that the next annual meeting be held in the Sierra Madre Mountains, seconded by Hollis. The motion passed. Ron moved to adjourn the meeting, seconded by Hollis. RD

Treasurer's Report - Balance as of May 15, 1987: $463.71; deposits $225.00; disbursements: Secretary of State annual fee $3.00, newsletter printing $14.55; new balance as of October 10, 1987: $671.16. RD

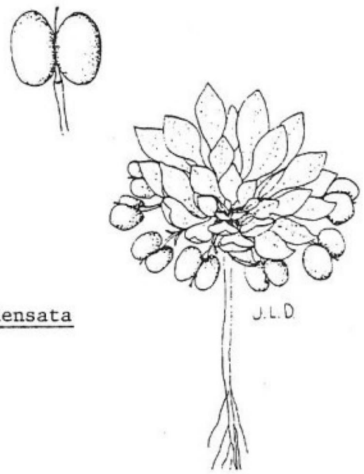
Botanical Novelties

Astragalus drabelliformis Barneby Bastard Draba Milkvetch

This member of the pea family was first collected by Edwin and Lois Payson near Cora in Sublette County on July 10, 1925. Rupert Barneby next collected it near Big Piney in 1961 and described it in 1964. The plant forms dense cushions about 4 inches across and about an inch high. The leaves appear simple (rare in our legumes). The pink-purple flowers are 1 to 4 per stem and each about ¼ inch long. Only the pods distinguish it from the more common A. spatulatus, although recent intermediate collections suggest that it may eventually need to be combined with that species. It is still known only from Sublette County where it grows on cobbley ridges and slopes and flowers in the spring.

Physaria condensata Rollins Tufted Twinpod

This member of the mustard family was first collected by Edwin Payson and George Armstrong on June 19, 1923, between Opal and Kemmerer in Lincoln County. It was next collected by Reed Rollins on Bridger Butte in Uinta County on June 24, 1938. Rollins described it in 1939. It usually forms a dense tuft of rosette leaves about 1-2 inches across and about an inch high. The petals are yellow and about ½ inch long. It grows on white shale formations in Uinta, Lincoln, and Sublette counties and flowers in the spring. This is one of about ten species of Physaria in Wyoming where the genus is still very actively evolving. Three of these ten species are known only from Wyoming and most of the others have restricted distributions into adjacent states. RD



Physaria condensata

BOTANICAL OUTREACH — In the October 1986 WNPS newsletter, Don Despain suggested that the Society do more in the way of educational programs to increase appreciation and concern for the state's native flora. Along the same lines, Wyoming Outdoor Council President J. P. Barlow recently pointed out that it's easier to get a kid to clean his room if you convince him that he likes to live in a clean room. In otherwords, if we could foster a greater appreciation for native plants, it would be easier to protect them, and besides ... field botany is fun and why not share this with others?

With this in mind, I contacted the National Park Service at Devils Tower National Monument last spring about giving a talk/walk as a representative of the WNPS. The Park Service cooperated wonderfully, providing a room and projection equipment, as well as "advertising " (through the famous Devils Tower grapevine). The program served as orientation for the Monument summer staff, and attracted interested locals as well. It consisted of a brief slide show on native plants and plant communities, followed by a walk on the Joyner Ridge Trail. The reception seemed enthusiastic--in any case, I had a good time. And I encourage other members to try their hand at similar projects. **HJM**

THE YELLOW SPRINGBEAUTY -- Springbeauty is a familiar plant to most Wyoming botanists, amateur and otherwise. It pops up in the spring in habitats ranging from semi-arid sagebrush-grasslands to mountain meadows below melting snowbanks. Claytonia lanceolata is a member of the Purslane family. It is a small perennial herb with somewhat fleshy leaves and stems, and white, 5-petalled flowers. The petals often are tinged with pink, and occasionally have a yellow spot at the base. Springbeauty is widely-distributed in western North America, from British Columbia south to southern California, and east to Alberta and New Mexico. It occurs throughout Wyoming with the exception of the northeast quarter and the southwest corner.

In 1899, Aven Nelson, Curator of the newly-named Rocky Mountain Herbarium, University of Wyoming, was botanizing at Henry's Lake in eastern Idaho, and collected a yellow-flowered Claytonia. He gave it the name Claytonia aurea, which was later changed (by Nelson) to C. flava, as the earlier name was already in use. In 1966, yellow springbeauty was reduced to a variety of the white-flowered species, becoming C. lanceolata var. flava. This variety is presently known from only three locations: Henry's Lake, Idaho, southwest of Anaconda, Montana, and the upper Waynes Creek drainage and vicinity in the Absaroka Mountains, Wyoming.

At the Waynes Creek site in the southern Absarokas northeast of Dubois, yellow springbeauty grows in abundance in a moist, broad drainage bottom surrounded by sagebrush-grassland. Elevational range is about 9200 to over 10,000 feet. The white-flowered variety also is present but is uncommon. In adjacent drainages, yellow flowers become less common, and white-flowered plants predominate. The two varieties appear to differ only in flower color, with no intermediates present. Flowers are either deep yellow, or white. Vegetative characters are not useful for separating the varieties.

We have little understanding of the relationship between these two closely-related plants. Is flower color in springbeauty simply a one-gene character, with the gene for yellow flowers extremely rare? Obviously, the machinery for making yellow pigment exists in the common white-flowered variety, as evidenced by the yellow spots that occasionally appear at the base of the petals. Chromosome counts by Walter Lewis of Washington University showed no differences between white- and yellow-flowered plants. Flavonoid and ribosomal gene studies are currently underway at Cornell under the direction of Jeff Doyle.

A similar situation exists for the common springbeauty of eastern North America, Claytonia virginiana (with white flowers). A population of yellow-flowered spring-beauty occurs in New Jersey, and controversy currently exists over whether to recognize the yellow-flowered plant as a full species or a form of the common species. The decision to list or not to list the eastern yellow springbeauty as Endangered will be based on the outcome of this taxonomic debate. **HJM**

Chenopodiaceous Shrubs in Wyoming - The sagebrushes are the most conspicuous plants in much of the Wyoming landscape. Except for the mountain areas, the next most conspicuous plants, especially in the western half of the state, are probably the chenopodiaceous shrubs. These are members of the Chenopodiaceae, the Goosefoot Family. They include the saltbushes, greasewood, winterfat, and hopsage.

We have three shrubby saltbushes: a spiny one, Atriplex confertifolia or shadscale, found on clay or sandy slopes and flats; a tall one, A. canescens or four-wing saltbush, most often found in sandy places; and a somewhat mat-forming one, A. gardneri or Gardner saltbush, characteristic of barren, clay slopes and flats. Four-wing saltbush is a popular species to plant on reclaimed areas. Unlike the other two, it is palatable to livestock and wildlife.

Greasewood, Sarcobatus vermiculatus, is characteristic of clay playas, low areas that collect water after rains. It is often the only species growing on such sites perhaps partly because it produces inhibitors and partly because these soils are so salty. It also grows in more upland areas often mixed with sagebrush. Livestock and wildlife do utilize it to some extent. It is probably more important for cover than for forage. Like shadscale, it is spiny, but its leaves are fleshy, cylindrical, and narrow rather than broad, flat, and non-fleshy as in shadscale, and it tends to be taller.

Winterfat, Ceratoides lanata, is a palatable subshrub that is low-growing and silvery in appearance. It is very hairy and many of the hairs are branched. It has been used for reclamation but the seed must be specially treated to get high germination.

Spiny hopsage, Grayia spinosa, is most frequently found in sandy places. Its leaves are broadish and somewhat fleshy but generally not gray or silvery scurfy as in shadscale. Another species, G. brandegei, has until recently been included in the genus. It has scurfy leaves very similar to the saltbushes. It is now considered by some to belong in the genus Zuckia which previously had only a single species from Arizona. Others think that both species of Grayia should be included with the saltbushes in the genus Atriplex. Grayia brandegei is common on the badlands of Washakie Basin in southern Sweetwater and Carbon counties.

Several other small subshrubs should be mentioned. Kochia americana, summer cypress, has narrow, fleshy leaves that are sparsely hairy. The similar appearing Suaeda nigra, sea blite, has similar leaves but they lack hairs. Both are found in salty and badland areas.

Like most sagebrushes, the chenopodiaceous shrubs flower and fruit in late summer and on into fall. The flowers are very inconspicuous (there are no petals) but the fruits generally are prominent. They tend to be more abundant to the southwest, especially in Utah and Nevada. Here they constitute the dominant element in what are called salt-desert shrub ranges. The following publication provides a good summary of our knowledge of these ranges: Blaisdell, J. P. & R. C. Holmgren. 1984. Managing Intermountain rangelands -- salt-desert shrub ranges. USDA Forest Service General Technical Report INT-163. RD

RESTORING THE EARTH • 1988 The first national gathering to consider the restoration of all natural resource types and the redesign of urban areas will be held on January 13–16 at the University of California, Berkeley. The conference is organized by the Restoring the Earth project of The Tides Foundation, San Francisco, and cosponsored both by the College of Natural Resources and the Center for Environmental Design Research of the University of California, Berkeley. It will bring experts in natural resource restoration and management together with a broad selection of academic, government, industry, foundation, labor, public health, and environmental representatives. Participants will help create new solutions to the nation's environmental problems, through restoration of damaged resources.

Topics to be covered include restoration of coastal ecosystems and estuaries; rivers and lakes; streams and fisheries; rangelands, prairies, mined lands, forests and wildlife; atmosphere and climate; dry lands and agricultural lands; urban environmental planning; and control of toxic wastes. Formal refereed papers will be presented at scientific and technical sessions. Non-technical sessions will include accounts of restoration successes and discussions of policy issues, legislation, litigation, trends, and resource conflict resolution. The program also includes keynote panels, plenary sessions, workshops, films, and exhibits.

Information is available from: *Restoring the Earth Conference, 1713 C Martin Luther King Jr. Way, Berkeley, CA 94709,* or telephone (415) 843-2645.

Contributors This Issue - RD = Robert Dorn, HJM = Hollis J. Marriott.



1987 Annual Meeting Attendees - left to right, 1st row: Louis Williams, Robert Dorn, Gail Chance, Jane Dorn, Virginia Wheeler, Marlene Juday, Michele Potkin; 2nd row: Neil Snow, Dennis Knight, Erwin Evert, Ronald Hartman, Rick Juday, Ernie Nelson; 3rd row: Larry Cook, George Jones, Pat Pachuta, Hollis Marriott. Photo by Phil White.

From Laramie Daily Boomerang, July 17, 1987.

Ruth Ashton Nelson, 90, a former Laramie resident, died Saturday in Colorado Springs.

She was born Nov. 29, 1896 in Roxbury, Mass. She later moved to the Rocky Mountain region where she began a serious study of western plants and obtained her M.A. in botany from Colorado State University.

In November 1931 she was married to Dr. Aven Nelson, one of the great Rocky Mountain botanists, professor of botany and curator of the herbarium at the University of Wyoming. Together, they spent many summers collecting plants and the winters working in the herbarium.

Mrs. Nelson published four books on plants in the Rocky Mountain Region.

Survivors include her nieces Susan Gentle, Cheyenne; Kathryn Reynolds, Greshan, Oregon; her nephew Rodney Ashton, Woodenville, Wash., and her step-brother, Alfred Ashton, of Hemet, Calif.

She was preceded in death by her husband.

Memorial contributions can be made to the Horticultural Library, 1438 North Hancock Ave., Colorado Springs, Colo.

No services were held.

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