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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Treasurer's Report - Balance as of May 10, 1986: $440.98; deposits: $63.00; disbursements: newsletter printing $11.76, stamps $22.00, Secretary of State $6.00; new balance as of October 10, 1986: $464.22. RD

Minutes of Annual Meeting - The 1986 annual meeting was called to order by President Don Despain at 9:00 am, July 4, at the mouth of the Big Firehole Canyon. Additional members present were Tom Wolf, Hollis Marriott, Robert and Patty Lichvar, and Robert and Jane Dorn. No additional nominations for officers were received. Bob Dorn moved that the slate be approved as presented in the newsletter, seconded by Hollis. Motion was approved. New officers are Phil White, President; Ernie Nelson, Vice-President; Bob Dorn, Secretary-Treasurer; and Hollis Marriott, Board Member (carryover Board Member is Ann Aldrich). The annual scholarship was discussed since no applications were received this year. Bob Lichvar moved that upto two scholarships of $100 each be offered next time (applications due by February 1987), seconded by Tom. Motion passed. A meeting place for next summer was discussed. Jane moved that it be in the Laramie Range between Cheyenne and Laramie, seconded by Hollis. Motion passed. Tentative date is mid July, 1987. The Secretary of State required a formal resolution for change of agent and/or address. Bob Dorn moved for such a resolution to include the agent and address presently being used, seconded by Hollis. Resolution was approved. Additional discussion centered around newsletter contributions and new activities for the society. It was agreed to try soliciting articles by postcard. Short field trips might also be tried at other times of the year, especially in conjunction with other groups. Hollis moved to adjourn, seconded by Bob Lichvar. RD

Annual Meeting Field Trip - The members present at the business meeting were joined by three others for the field trip. We first went to Little Firehole Canyon and saw Forsellesia meionandra, Brickellia microphylla, Arabis selbyi, and the desert cottonwood community. On Little Mountain we found Abies concolor and Erigeron nanus. Our first attempt to reach Richard's Gap was unsuccessful as a shower muddied the road enough to make it impassable. The other route was dry, so we arrived and looked at Draba juniperina, Galium coloradoense, Eriogonum corymbosum, and Pinus edulis. While looking at ponderosa pine and pinyon pine here, Don Despain spotted a lone lodgepole pine elevationally below the other two species. Tongue-in-cheek speculation was that it was a pleistocene relict. Don proceeded to take a few photographs since he knew nobody would believe his story. We next proceeded to Minnie's Gap and observed Pinus edulis and Philadelphus microphyllus. Here we discovered a first state record, Physocarpus alternans. At our camp that night and the next morning we found Leucelene ericoides and Ephedra viridis. We then crossed Flaming Gorge Dam and visited the Black Mountain area to see Chamaechaenactis scaposa. At Cedar Mountain we observed Ceanothus martinii and Thelesperma pubescens and near McKinnon we saw Penstemon acaulis and Astragalus proimanthus. RD

Society Objectives - The following note was received too late to include in the previous newsletter but it is still pertinent.

> Off and on during my tenure as president of this August Scientific Society I have contemplated the aims and objectives that we espouse or should espouse. (Which seems to be the major responsibility of my office.) Botany and flowers are not often highly regarded in the macho cowboy culture that is often the hallmark of our state. The recent cultural additions of "energy workers" has not improved the situation. On the other hand, there must be a few more souls out there that have the innate curiosity and inborn wonder at the world they live in to be willing to invest the necessary time and mental energy to learn about the plants around them. Are there things that our Society should be involved in to help these people in their efforts? Can we fan the sparks into flames that will broaden the support for preservation of Wyoming's native flora and support the aims of our organization? Can we offer field trips once or twice during the summer in the areas in which we live? At our annual meetings can we have an afternoon of extension service offered to the people of surrounding communities? Can we submit articles to local newspapers that tell people interesting things about the flora of their surroundings? I am sure the answers to these questions are yes, no, and sometimes, but I feel some effort should be made by the Society to make botany available, in all connotations of that word, to the public at large. Perhaps that can be discussed at our annual meeting. Or perhaps someone would like to volunteer to do something for that meeting. If you would like to do something along these lines, let me know. I hope to see most of you this summer at the meeting. In the meantime, "It ain't easy being green." Don Despain

Botanical Novelties

Sphaeromeria simplex (A. Nels.) Heller Laramie False Sagebrush

This member of the sunflower family was discovered by Aven Nelson on the limestone hills east of Laramie in 1898. He last collected it there in 1907. In the early 1970's it was thought to be extinct but was rediscovered in 1978. More recently it has been discovered at several other localities in southeast Wyoming. It flowers in spring. The plants average about 7 inches high with a single head of yellow disk flowers on each stalk from a loose mat of short silvery leaves. It was first described by Aven Nelson as Tanacetum simplex in 1899. Amos Heller transferred it to Sphaeromeria in 1900.

Eriogonum lagopus Rydb. Rabbit Wild Buckwheat

This member of the buckwheat family was collected by Frank Tweedy near Dayton in Sheridan County in September of 1899. It was described by Per Axel Rydberg in 1917. The plant is a perennial about 10 inches high with small yellow flowers about ¼ inch across in a much-branched inflorescence. It looks like the widespread but more southerly E. brevicaule. Rydberg described the perianth as glabrous but the type specimen has some flowers with glabrous perianths and some with hairy perianths. Tweedy's collection is the only one known from the east side of the Big Horn Range. On the west side is an extensive population of plants with hairy perianths but occasional individuals have glabrous perianths. These plants normally flower from late May to early July. Susan Stokes described them in 1936 as E. multiceps ssp. canum based on a specimen from Custer, Montana. James Reveal transferred these to varietal status under E. pauciflorum in 1967. I placed ssp. canum under E. brevicaule in 1979. It is still not certain if the Tweedy collection belongs with the plants on the opposite side of the Big Horns. Until additional material is found on the east side, there will likely be disagreement on the status of the Tweedy plant. So if you are in the Dayton area and see a plant in flower that looks like Eriogonum brevicaule, be sure to get a specimen and carefully note the location. Tweedy gave the elevation as 4000 feet which is likely very close since he was a member of a surveying party. Dayton is at 3926 feet. RD

Contributors This Issue: DD = Don Despain, RD = Robert Dorn, HJM = Hollis J. Marriott.

Sphaeromeria simplex (A. Nels.) Heller Laramie False Sagebrush

WHAT'S ON TOP? Devils Tower, in northeast Wyoming, is a rock monolith that stands over 800 feet above the surrounding landscape. Its origin remains a subject of controversy. According to the most recent geologic speculation, the Tower is a 50 million year old volcanic plug, exposed by erosion of the softer overlying sedimentary rocks. Native American legend says the Tower began as a magic stone that grew to immense proportions to save seven brothers from a giant bear. But any local will tell you that Devils Tower is really one of the Pumpkin Buttes of Campbell County, stolen by some Crook County boys way back (the scar they left as they drug the rock eastward now forms the channel of the Belle Fourche River).

Whatever its beginnings, Devils Tower is spectacular to behold. About a mile in circumference at the base, it tapers to an area of roughly a football field at the summit, and the sides are sheer and fluted with vertical cracks. In 1892, two local ranchers built a

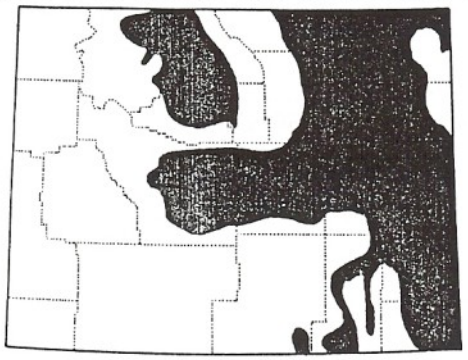
wooden ladder up one side, becoming the first to address the question, "What's on top?". When Rogers and Ripley reached the summit on July 4th, they unfurled Old Glory and noted that the top was covered with rocks and sagebrush. A few plant samples were brought down by early technical rock climbing parties in the 1940's and '50's, but no systematic plant collecting was done until 1980-81 when associates of the Rocky Mountain Herbarium repeatedly defied gravity in the name of science.

And what's on top? The summit looks like a very rocky rounded hilltop dominated by sagebrush. Many other plants grow there as well, most of which are found in sagebrush communities some 5 air miles to the west (the area immediately around the Tower is covered with grassland and pine forest). The plants on top look no different from individuals of the same species on the ground, indicating that the summit is not as isolated as it might appear as far as plants are concerned. Wind, birds and the chipmunks that run up and down the sides, are the most likely sources of seeds. A list of 27 taxa has been compiled for the top of Devils Tower, including sego lily, prickly pear cactus, harebell, gooseberry, cinquefoil, broomrape, several ferns and a number of grasses. For the wildflower enthusiast, late June through early July is the best time for a visit to the top. HJM

For those advocates of "sagebrush is the result of overgrazing," explain the presence of sagebrush on top of the Tower. RD

Sagebrush - Sagebrush belongs to the sunflower family in the genus Artemisia. There are about 300 species of Artemisia throughout the temperate regions of the world. In Wyoming there are about 24 species. About half of these 24 are herbaceous, about 5 are subshrubs, and the remaining 6 or so are woody shrubs. These latter 6 are usually those referred to as sagebrush. They belong in the section Tridentatae which is endemic to western North America. Sagebrush was widespread in western North America as early as the Miocene 12 million or more years ago. Each species tends to have different ecological requirements so they generally grow in different habitats. Some of the species have not yet diverged greatly from each other so there has been much disagreement on how they should be treated taxonomically. Much of the pioneering work on these plants was done by Alan Beetle of the University of Wyoming. The two most conspicuous and widespread species in Wyoming are A. tridentata, big sagebrush, and A. cana, silver sagebrush. Big sagebrush occurs in most of the state except the extreme eastern edge. It is estimated to cover about 30,000 of Wyoming's 98,000 square miles. Silver sagebrush is found mostly in the eastern grasslands but also occurs in the western mountain areas. It is estimated to cover 11,000 square miles in Wyoming. More information can be obtained from the publication "Sagebrush in Wyoming" by Alan A. Beetle and Kendall L. Johnson, University of Wyoming Agricultural Experiment Station Bulletin 779, July 1982, and the many references they list therein. The following maps are from their publication. RD

Dues - Dues are overdue. If you are not paid up, a black dot appears next to your name on the address label. Initial membership is $7.00. Renewals are $3.00. Students and persons 65 or over are half the preceding rates. RD



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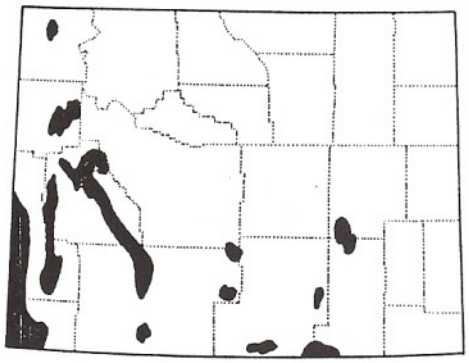

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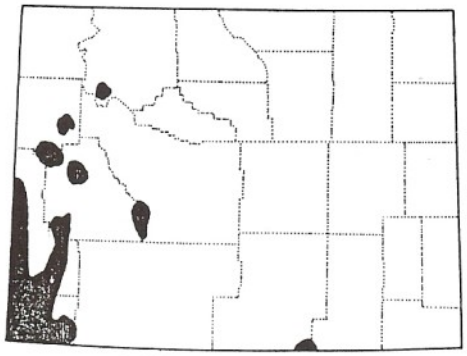

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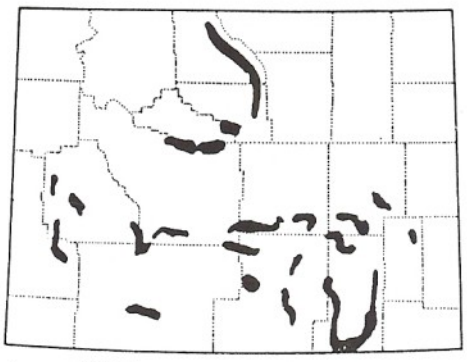

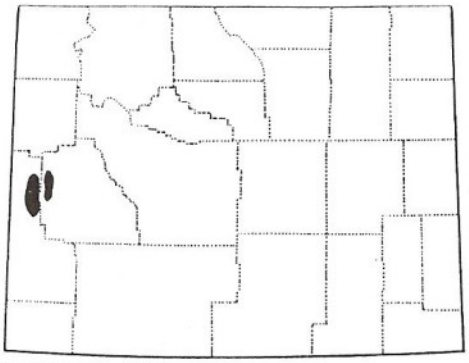

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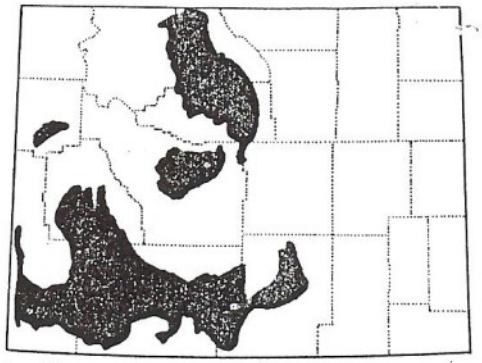

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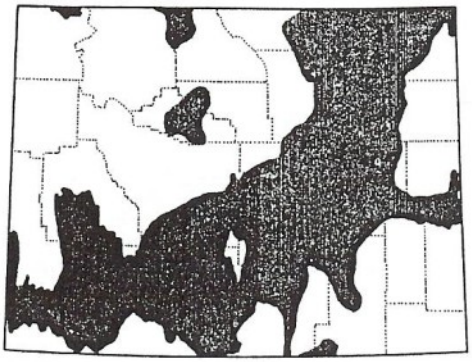
A. tridentata subsp. *vaseyana* (11,000)



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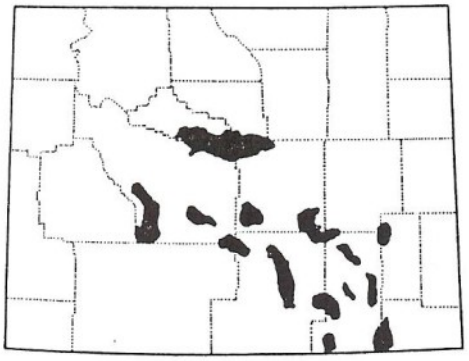

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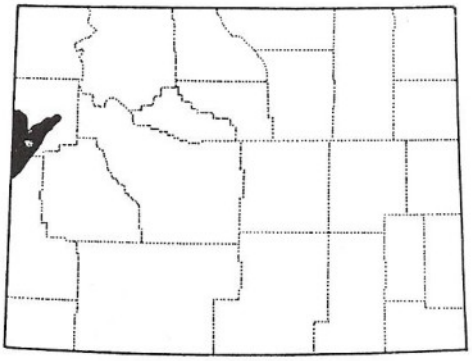

A tripartita subsp. *tripartita* (1,000)

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