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WYOMING NATIVE PLANT SOCIETY NEWSLETTER, Vol 1 #3

Newspaper Article-New Members: The article printed in the last issue of the Newsletter was sent to about 15 newspapers throughout the state. As a result, we gained 12 new members. They are: Catherine Kieffer, John Person, William Brenneman, Bob Giurcevich, Michele Marlowe, Gale Fonken, Barry and Joanne Johnston, Frances Holbrook, Karin Cyrus-Strid, William Barlow, and The Nature Conservancy. PR

Treasuer's Report: Our present balance is $220.20. Since our last report we have taken in $67.00 in membership fees and spent $10.00 on stamps. PR

New Member Interests: Our new members have varied interests in native Wyoming flora. For example, Catherine Kieffer is an ardent herb grower and William Brenneman has a special interest in lichens. We also have several botany students from the University of Wyoming as new members. We welcome all of you and hope to see you at our next annual meeting. PR

Rocky Mountain Regional Rare Plant Conference: The third Rocky Mountain Regional Rare Plant Conference, entitled "Energy Development and Rare Plants: Planning for the Future" will be held November 5th and 6th at the Denver Botanical Gardens, 909 York Street, Denver. The Conference, which promises to be both informative and action oriented, is sponsored by the Botanical Gardens in conjunction with the Native Plant Societies of the region.

It will provide information on federal regulations affecting rare plants, sources of rare plant data, and methods to reduce or eliminate potential conflicts surrounding the development of natural resources and the retention of rare plants or unique ecosystems. In addition, representatives from each of the states will give an update on activities in their state.

The different roles of professionals collecting rare plant data in industry, federal government, state government, and consulting firms will be explored. Areas of common interest and areas where cooperative agreements may prove to be mutually beneficial will be examined. In addition, conference participants will identify existing or potential problems that may affect the effectiveness of the rare plant effort. Some solutions may be developed at the conference while others may require additional study. Data compatibility, storage, and retrieval needs will also be discussed.

Pre-registration is requested to the Colorado Native Plant Society, Rare Plant Conference, P.O. Box 200, Fort Collins, CO 80522. The registration fee is $10 for general admission and $5 for Denver Botanical Garden or Native Plant Society Members and PR Students.

For a list of motels, prices, and phone numbers call Robert Lichvar at 634-9629.

Annual Plant Meeting: In Vol. 1 #2 of our newsletter we gave a list of five locations to vote for our next annual meeting, they were; North Fork of the Shoshone River, Black Hills Laramie Peak, South Pass, and Flaming Gorge. From the seven responses received the Black Hills won by getting 4 votes.

The 1st annual meeting was held on June 26, 27 1981, which was the last weekend of the month. If you would like to suggest another time or weekend, send your suggestions soon. RWL

News that's making news: The status of the Endangered Species Act will be reconsidered this coming March by Congress. Untill the Act is reauthorized, the volume of species listed will be essentially zero. The game plan is reauthorization= low profile.

Until the Act gets reauthorized in March the Fish and Wildlife Services is attempting some alternative methods to protect candidate species. The most recent is a Memorandum of Understanding (MOU). An agreement is made between the landowner(s) of the critical habitat of a particular species and the FWS concentrating on a viable management plan for the species. Examples could be no spraying for noxious "weeds" in the critical habitat, etc. However, this approach has some major pitfalls. All Acts or previous laws can override a MOU. For example, the hard rock mining act of 1872 would have precedence over a MOU. In short, the MOU has no legal status. An analog to this could be; this is how the Indians must have felt after a treaty signing with their new piece of white paper. RWL

R. Dorn-1981 Field Work

Primary fieldwork involved surveying with Bob Lichvar populations of Astragalus proimanthus (Precocious Milkvelch) and Lesquerella macrocarpa (Large-fruited Bladderpod) which were candidates for threatened status. Several new populations of each were found resulting in a recommendation to remove both from consideration as threatened. Several rarities were picked up in the Black Hills including Polygala verticillata (previously known from Yellowstone Park), Viburnum opulus or High-bush Cranberry (known from an early collection by Aven Nelson in the same county), and Lycopus uniflorus, a new state record. Aralia nudicaulis, previously known from the Black Hills, was found in LaBonte Canyon in northern Albany County. RD

Antennaria endangerii: Recently while Robert Lichvar was returning from the Honeycomb Buttes he drove through Antennaria arcuata Cronq. (Meadow Pussytoes) country. In Wyoming this species is known from the South Pass area. It is also known from one county in each of the states of Nevada and Idaho. This following story is an example of how rapidly a situation can change.

The Meadow Pussytoes was one of the original proposed candidate species for the Endangered Species Act. From 1976 until 1979 only five small populations were known. Then in 1980 Russ Holmes (BLM) and R. Lichvar located another seven populations. No threats existed at the time so it was proposed that it be withdrawn from federal concern.

Then late in August of 1981 while R. Lichvar traveled through the area he noticed active gold mining operations. Some activity was within a mile or so of the habitat. The main concern is that the mining is occurring in the exact same type of habitat required by the Antennaria.

Requests were made to the Wyoming Department of Environmental Quality (DEQ) and the BLM on the status of the land. The areas that are being mined are under filed permits at DEQ. However, many of the known locations of these species have claims already filed upon them. The now active mining and existing claims have prompted us to repropose Antennaria arcuata as threatened. RWL

Under the regulations covering surface management of public lands under U.S. Mining Laws, prospectors or miners causing disturbance of less than five acres per year are required to file a notice of intent which does not require approval or bonding. Disturbance of more than five acres per year requires the filing and Federal approval of a plan of operations. The goal of these regulations is to protect Federal lands from unnecessary and undue degradation. This means surface disturbance greater than what would normally result when mining is done by a prudent operator in usual, customary and proficient operations. So, in laymen's terms, this means regardless of the size of the mining activity (less than 5, greater than 5 acres), if the operator is conducting a normal mining operation, the Federal government can do nothing to protect a non-listed species unless the operator voluntarily protects it. PR

At first the BLM and FWS prepared a Memorandum of Understanding designed to protect Antennaria. However, BLM determined that under the Surface mining regulations all they could do was request the operator to avoid crucial habitat. If the operator decided to deny this request, there would be no legal recourse for the BLM. So, given the immediate nature of the threat, the BLM has written a letter to FWS explaining the constraints of an MOU and requesting an emergency listing for the species. The threat is real because there are current mining claims filed on identified plant sitings and habitats. Verbally, the FWS has stated their intent to pursue emergency listing for this plant. Hopefully, this procedure can be completed by Spring '82 before mining activity is reinitiated.

Perhaps we should spend some Native Plant Society money to file claims on endangered species habitats. It only costs $10 to file and the maximum acreage one group can file on is 160 acres. However, you must spend $100 per year to maintain the claim's viability. Give it some thought! PR

Wyoming's Plant Bill: Several members of the Society would like to introduce a bill during the Wyoming legislature in 1983 to create an official state list of rare plant species. Such a bill would assist state and federal agencies as well as private entities (us!) in recognizing and protecting uniqueness and rarity of these species. Bob Lichvar has requested copies of other states' statuates (e.g. California, Nebraska, Colorado) to use as format examples for our bill. If you have any thoughts or ideas or would like to volunteer some assistance in this effort, please contact Bob Lichvar, Phyllis Roseberry, and Ann Aldrich at the society address. AA - PR

Candidate Mascot Plant: It has been suggested by R. Dorn that our society should have a mascot plant (U.S.M.C. bulldog, etc.). This plant should represent the uniqueness of the flora of Wyoming. To adequately represent the state we thought an endemic species would be a priority. Any member may propose a mascot plant, to do so please follow the format used below. Otherwise, vote on one of the following four species as soon as possible so we can get letter heads made.

Lesquerella macrocarpa Aven Nelson is a Wyoming Endemic first collected by A. Nelson near Bush Ranch in 1900. This species is restricted to clay-bentonite beds in the northwest part of the Red Desert. Due to the isolated location this species went unobserved until 1977. This plant recently dubbed the "Red Desert Cabbage" represents the type of situations that face several members of the state flora. The habitat of this species is rich with oil and gas leases, bisected by roads, and not well understood scientifically. This species may hold the key to the future for dry land agriculture in Wyoming. RWL

Penstemon paysoniorm Keck is a state endemic that is known from Uinta, Sweetwater, Lincoln, and Fremont counties. The narrow-elongate leaves and it's restriction to calcareous clay hills makes it readily distinguishable from other Penstemons. Paysons Bearded Tongue is named in honor of Edwin Payson a Wyoming botanist. Payson within several years made numerous collections in uncollected areas in the state. This species represents several unique situations. 1) The species is representative of habitats usually inhabitated by Wyoming endemics, i.e. wind swept calcareous knolls. 2) Just as Payson found numerous undescribed species, in Wyoming today new species are still being found. Thus, Payson's Bearded Tongue represents the vastness that remains to be discovered by the adventurous. RWL

Astragalus simplicifolius (Nuttall) Gray- Bun Milkvetch. This attractive cushion plant was collected by Thomas Nuttall on his journey across Wyoming in 1834 on "summits of high hills in the Rocky Mountain range toward the sources of the Platte." It is restricted to Natrona, Carbon, and Fromont counties growing on windswept knolls and slopes. It has bright pink-purple flowers which rarely are pure white. These barely exceed the leaves which rarely reach more than 2 inches above the ground. This is a representative plant of Wyoming's high, cold, windswept desert. RD

Aquilegia laramiensis A. Nelson- Laramie Columbine. This rare columbine looks like a miniature Colorado Columbine, Colorado's state flower. It was first collected by Aven Nelson near Laramie Peak in 1895. It is restricted to the Laramie Range in Albany and Converse counties growing in crevices of granite boulders and cliffs. It could possibly be the same as a species which grows in northern Colorado. RD

Botanical Novalities: At the end of the botanical novalties section in the last issue we left J. Townsend and T. Nuttall (Mr. N.) in Missouri just beginning their journey across the Rocky Mountains in 1834. Each of these naturalists kept a journal of their crossing half the continent. Between the two journals the one written by J. Townsend is a little more lively (Townsend, J. 1976; Graustein, J. 1967).

Townsend comments frequently about Mr. N. who had a sober personality and how serious he took his botanical interests. On one such occasion in western Missouri, Townsend arose earlier in the morning to go deer hunting. His comment in his journal as he left was, "I rose this morning at daybreak and left Mr. N. dreaming of weeds..." These two naturalists continued across the Rockies following the route which later became the Oregon Trail. Only several pages in both journals are devoted to Wyoming.

Among some of the interesting plants collected by Nuttall, many of them are regional endemics. Some of these species are: Bolophyta alpina Nutt., Oxytropis nana Nutt., and Townsendia spathulata Nutt. The wanderlust of Nuttall may have made him forfeit his position at Harvard University (being replaced by Asa Gray), but he will always be remembered as a keen field botanist who's deep understandings reflected field observations. RWL

Graustein, J. E. 1967. Thomas Nuttall, Naturalist. Harvard Univ. Press, Cambridge, MA.

Townsend, J.K. 1978. Narrative of a Journey across the Rocky Mountains to the Columbia River. Univ. Nebraska Press, Lincoln, NB.

John McLeod was probably the only fur trapper who collected plants for botanical studies. He learned collecting techniques from Dr. William Tolmie, a physician at Ft. Vancouver. In 1837 McLeod attended the annual fur trappers rendezvous on the Green River in Sublette County. He collected a number of plants along the Green and its tributaries. Some of the new species were described by Hooker and Arnott in The Botany of Captain Beeckey's Voyage in 1839. Tolmie sent the plants to Hooker in England and received credit for the collections as evidenced by the plant Orthocarpus tolmiei Hooker and Arnott. RD

Next time we will find out who lost their large collection of plants in an attempt to raft a narrow canyon on the Platte in the present Natrona County in the 1840's.

Things for you to do:
1) Vote on mascot plant or send in your proposal for another species.
2) Suggestions about the scheduling time for our next annual meeting.
3) Comments about mining claims for Antennaria arcuata.

Things to Come:
1) A discussion on Wyoming's proposed candidate species.
2) Rare or interesting species in the Wyoming flora.
3) Distribution patterns in the state flora.
4) Technical jargon to understand the Endangered Species Act.

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