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

WYOMING NATIVE PLANT SOCIETY
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634-9629

NEWSLETTER VOL. 1 #4

New Members: Since the last newsletter (Vol. 1 #3) we have gained 8 new members from around the country. They are: Lily Mayer (Sheridan), Howard Hunt (Cheyenne), Dennis Knight (Laramie), Mariah Associates (Laramie), Patricia Jackson (Sheridan), Bill Romme (Kentucky!), Alan Beetle (Laramie), Lisa Enbretson (Cheyenne), and Brett Hall (California).

We would like to welcome all of you and hope to see you at our annual meeting. Mariah Associates is our first corporate member in the society. We hope they are leading the way for other organizations to follow. Also, the WNPS recieved its first donation. Dennis Knight upon joining the society donated $3.00 towards our goals. Remember these fees and donations are tax deductible.

Total number of members to date is 52. RWL

Treasurer's Report: Our current balance is $311.20. Since our last report we have taken in $84.00 in membership fees and have spent $12.00 on stamps and $1.95 for xeroxing. Our new balance is $297.25.

Rocky Mountain Regional Rare Plant Conference: The Colorado Native Plant Society hosted the Rocky Mountain Regional Rare Plant Conference at the Denver Botanical Gardens in Denver, Colorado, on November 5 and 6, 1981. Additional sponsors included the Denver Botanical Gardens, Utah Native Plant Society, Wyoming Native Plant Society, National Park Service, Native Plant Society of New Mexico, Association of Western Native Plant Societies, and the U.S. Fish and Wildlife Service. More than 200 participants from Federal and State agencies, universities, and industry attended.

Key topics discussed included: Why Save Rare Plants?; Rocky Mountain Overview; The Endangered Species Act; Recovery; Section 7; Federal Policies, Programs, and Regulations; State Policies, Programs and Regulations: Information Sources; Industry Policies and Programs; and Field Inventory Methods. Work groups were held on Regulations, Data Gathering, Consultation, Mitigation, Recovery, and Funding. Information about obtaining the conference proceedings will be provided when they become available.

Four members from our Society gave presentations at this conference. They were: Lillian Mayer, Field Programs; Ron Hartman, Status of Rare Plants in the Rocky Mountain Region; Robert Dorn, State Policies, Programs, and Regulations; and Robert Lichvar, Information Sources. RWL

Annual Plant Meeting: At this early stage it appears our annual meeting will be held sometime in July in the Black Hills. Two possible meeting places have been proposed. They are: Sand Creek and the summit between Alva and Aladdin. I vote to stay at Sand Creek because of the uniqueness of the deciduous forest communities in the area, not to speak of the fishing. Please send in your comments. RWL

News That's Making News: We hope everybody recieved their fliers from the Natural Resources Defence Council (NRDC), Washington, D.C. We recieved ca. 1000 of these fliers here in Cheyenne and passed them on to all the members. The strongest comment I can make about the flier is to write letters to your Congressmen and Senators. Following is a paragraph from NRDC's bulletin;

Species Losses

Humans are causing extinctions at rates that are unprecendented since the beginning of life on this planet. From 1600 to 1900, approximately 75 mammal and bird species went the way of the dodo, at the rate of 1 every 4 years. From 1900 to the present, about 75 have vanished--nearly one each year. In addition to mammals and birds, numerous other vertebrates, invertebrates, and plants have been lost. Some biologists estimate that 1 to 3 extinctions are now occurring daily and the rate will increase to 1 per hour by the late 1980's. It is likely that over one million species will be lost in our lifetimes, most of which have never been named, much less studied.

Washakie Wilderness: In early January the board members agreed upon making a comment pertaining to oil and gas leasing in Washakie Wilderness. Because of our young age as a society and lack of resources, our input was tailored to fit those facts. However, one of the Society's main goals is to better understand Wyoming's flora and the Washakie Wilderness is obviously under-inventoried in this area. With that in mind R. Lichvar was interviewed by Phillip White (a WNPS member) of the Casper Star Tribune for comments. The main statement of the 18 January article

is as follows:

"Saying wild plants are resources for the future, the president of a new organization of Wyoming plant defenders Friday called for an inventory of the Washakie Wilderness prior to any development." RWL

Field Work 1981: Both E.F. Evert (Chicago, Ill. on Wapiti, WY) and Dave Martin (Worland) have submitted a summary of their 1981 field census. If you have some information dealing with your field work, please send it in so our information network can grow. Note all the new species!

E.F. Evert (student of the flora of North America): Fieldwork in 1981 uncovered two new state records: Mentha spicata west of Cody and Cryptantha spiculifera atop Cedar Mtn. A possibly undescribed Astragalus sp. of the Orophaca group was growing with the Cryptantha. Three stations of Erigeron humilis, heretofore known from only two collections--Bighorns and Beartooth Butte, were discovered in the Absarokas. Also from the Absarokas several new stations of the rare Carex incurviformis were detected. Several other uncommon Carex-C. bipartita, C. brunnescens and C. capillaris were collected in the Bighorns. Finally, the Holly Lake area in the Tetons yielded Carex saxatilis and C. scopulerum both previously uncollected in the park.

Dave Martin (BLM): The following discussion is dealing with a new species to science that Dave discovered.

The Squaw Teats Umbel finally came into our awareness this year. I began visiting its home in 1979: The Squaw Teats Road is part of a route along which I have been studying rangeland plant phenology for the past four years. In '79, I started checking the Andropogon scoparius that grows on sandy hill-slopes with limber pine and Utah juniper. I also helped run a SVIM vegetation transect in the immediate neighborhood. The results from the transect later caused consternation: little bluestem isn't supposed to mingle with Idaho fescue on shallow loamy range sites in the 10-14" precipitation zone! In 1980, I did some plant collecting in the area. In April 1981, we gave a tour of the country west of Worland for some remote sensing people from the EROS Data Center, Sioux Falls. The little bluestem site on Squaw Teats Road happened to be a convenient site for a quick stop, and lo! the umbels were already flowering, along with Phlox hoodii. Ron Hartman saw a specimen about a month later and was immediately excited.

I think the umbel is restricted to the Lance and/or Meeteetse Formations. It should be rather widespread around Little Buffalo Basin, Grass Creek Basin, and Prospect Creek (which has Ponderosa pine on some sandy sites). RWL

Antennaria endangerii: No further news has developed on Antennaria arcuata since the last newsletter. Don Shute made the only comments about the proposal to purchase mining claims. He felt that we might be reading the reg's too loosely and suggested an intense investigation of mine claims. Phyllis Roseberry (Cheyenne), who initiated this great idea, will do a follow-up analysis. Hopefully, we will have a presentation by Phyllis concerning this problem at the annual meeting so members can vote upon it. The first step of protecting the flora of Wyoming is an active involvement. RWL

Wyoming Rare Plant Bill: Ann Aldrich has prepared the initial bill for plant protection in Wyoming. Because of its extreme length we felt it was to much to mail (5 pages). All those interested in obtaining a copy should contact R. Lichvar.

We hope to kick this around at the annual meeting so it possibly could be introduced in 1983. Because of the Fed's backing out of everything, this bill may be some of the last light left in the tunnel-unless we turn into "The Monkey Wrench Plant Gang". RWL

Mascot Plant: As you probably noticed we have chosen Oxytropis nana Nuttall as our 'mascot plant'. Eight additional species from Wyoming were proposed besides the four original candidates. Because Oxytropis nana (Wyoming locoweed) was an endemic and we also had access to a excellant sketch (provided by the Dorn's) it was chosen. The Wyoming locoweed was first collected by Thomas Nuttall on his journey across Wyoming in 1834. It was published in "The Flora of North America" by Torrey and Gray, 1838, Vol 1:340. This species is easily distinguished by its inflated calyx when in flower. RWL

Wyoming Outdoor Council: We as a Society could have more political clout if we joined WOC as a supporting group. Please think this over and we can discuss it at the annual meeting. Their definition is as follows: Supporting Group Status: Cost is $50/ year. These groups have access to WOC mailings and information, especially during the legislative session. They have no Board representation, and their priorities are determined by the Annual Operating Plan insofar as they coincide with WOC's.

Watch List: In an appendix to this newsletter is a list of species in Wyoming that are considered rare. Rare species were selected from three categories: (1) known from one county and not common in that county, (2) known from more than one county but extremely uncommon in those counties, and (3) state endemics. Active involvement as a Society should include observations and expansion of data on these species. This is the official list of The Nature Conservancy's-Wyoming Natural Heritage Program. Further background information on each of these species can be obtained from Robert Lichvar at 634-9629 or at the WNHP address. RWL

Botanical Novelties:

John Charles Fremont, a topographical engineer with the U.S. Army, led an expedition into Wyoming in 1842. Their destination was the Wind River Mountains which they successfully scaled to the top. On the return trip, they launched an inflatable rubber boat in the Platte River at the mouth of the Sweetwater. They went through several canyons which proved to be treacherous. After successfully shooting numerous rapids and dodging rocks, their confidence soared. While they sang in the excitement, the boat struck a concealed rock (in the present Fremont Canyon) and whirled it over in an instant. The entire contents was dumped into the raging river. A few items were subsequently recovered downstream. Some of the plant collections were lost but they did return with the present state flower, Castilleja linariaefolia (Indian Paintbrush) which was collected at the north end of the Laramie Range. RDD

The Gordon Expedition As Fremont was exploring the basins of the West, the "West's first dude expedition" was getting underway. Sir William Drummond Stewart was accompanied by four collectors. Their journey will always be remembered as Wyoming's last expensive field trip. Sir Stewart who was a Scottish adventurer sold his estate, the Murthy Castle, for over 1 million dollars for the funding of this expedition.

The route followed the Oregan Trail in Wyoming. Some of the collectors returned after reaching Green River, Wyoming, others branched off into Montana, while only a few made it to the Oregan country. But these four collectors were not the only ones invited along on this 'luxury expedition'.

Audubon was also in St. Louis at the same time preparing to explore the upper Missouri River. Sir Stewart must not have been well liked because Audubon stated, "I was offered $10,000 and I won't go". But even without the support of Audubon, the color and clamour of this expedition couldn't be tarnished.

With staggering luxuries, paided quests, full newspaper publicity, this pleasure party left St. Louis in their crimson painted wagon tops to discover the West. The four collectors on this journey in 1843 included Charles Mersch, Fredrich Lüders, Alexander Gordon, and Karl Geyer.

Two of these collectors are remembered in science. Karl Geyer compiled the first ecological description of this area in the West. While Mr. Gordon is famous for his collection of Atriplex gardneri. Because of poor hand writing, C.H.B.A. Moquin-Tandon could not read the label. But A. Gorgon probably was not uncomfortable about the outcome. He, along with the others, and their crimson tents and Persian carpets, dined royally each nite in the basins of Wyoming on meals prepared for them by the servants.

Cronquist, A. et al. 1972, Intermountain Flora. Hafner Publishing Co. Inc. Vol. 1, p. 48.

Deveto, B. 1952, The course of Empire. Houghton Mifflin Co., Boston.

McKelvey, S.D. 1955. Botanical exploration of the trans-Mississippi West, 1790-1850. Arnold Arboretum of Harvard University. Jamaica Plains. RWL

Please send in any address changes.

We would like to thank Lisa Engbretson who in the passed has typed the newsletter. This go around we paid to have it typed. As they say, "time is of the essence".

RWL= Robert W. Lichvar
RRD= Robert D. Dorn

APPENDIX I

RARE SPECIES

Albany County - Aletes humilis, Antheropeas wallacei, Aquilegia laramiensis, Arabis perennans, Bahia dissecta, Besseya plantaginea, Carex arapahoensis, Carex brunnescens, Carex egglestonii, Carex paupercula, Chionophila jamesii, Eriogonum acaule, Haplopappus pygmaeus, Haplopappus wardii, Hemicarpha micrantha, Lysimachia thyrsiflora, Oreoxis alpina, Paronychia jamesii, Polypodium vulgare, Prenanthes racemosa

Big Horn County - Asclepias incarnata, Carex limosa, Epipactis gigantea, Erigeron humilis, Penstemon caryi, Teucrium canadense, Townsendia nuttallii

Campbell County - Cyperus acuminatus, Linaria canadensis, Navarretia intertexta, Oenothera laciniata, Potentilla rivalis, Psilocarphus brevissimus, Verbesina encelioides

Carbon County - Androstephium breviflorum, Arabis crandallii, Arnica paniculata, Asclepias subverticillata, Astragalus leptaleus, Astragalus simplicifolius, Chaenactis stevioides, Crataegus erythropoda, Eriogonum acaule, Grayia brandegei, Haplopappus croceus, Haplopappus wardii, Machaeranthera coloradoensis, Mimulus rubellus, Oxytropis nana, Phacelia incana, Physaria vitulifera, Potentilla rivalis, Selaginella mutica, Solidago occidentalis

Converse County - Aquilegia laramiensis, Bromus pubescens, Cuscuta plattensis, Oxytropis nana, Palafoxia macrolepis, Pectis angustifolia

Crook County - Anemone virginiana, Asclepias ovalifolia, Asclepias stenophylla, Campanula aparinoides, Carex bebbii, Carex blanda, Carex granularis, Carex retrorsa, Carex richardsonii, Carex stipata, Carex tenera, Ceanothus herbaceus, Celastrus scandens, Cirsium drummondii, Elymus innovatus, Elymus villosus, Geum canadense, Halenia deflexa, Helianthemum bicknellii, Hymenopappus tenuifolius, Lonicera dioica, Navarretia intertexta, Oenothera laciniata, Oryzopsis pungens, Pellaea atropurpurea, Phryma leptostachya, Polygala senega, Polygonatum biflorum, Potamogeton diversifolius, Prenanthes racemosa, Scirpus atrocinctus, Selaginella rupestris, Solidago speciosa, Stipa spartea, Tradescantia bracteata, Viburnum opulus, Viola pedatifida, Viola pubescens

Fremont County - Antennaria arcuata, Artemisia parryi, Artemisia porteri, Astragalus simplicifolius, Botrychium lanceolatum, Eriastrum wilcoxii, Erigeron tweedyi, Glandularia bipinnatifida, Juncus biglumis, Lesquerella fremontii, Oxytropis nana, Penstemon paysoniorum, Phacelia demissa, Poa lettermanii, Townsendia nuttallii

Goshen County - Astragalus mollissimus, Carex crawei, Celtis occidentalis, Coreopsis tinctoria, Eragrostis trichodes, Haplopappus annuus, Leersia oryzoides, Leptochloa fascicularis, Liatris lancifolia, Lobelia siphilitica, Monarda pectinata, Oenothera canescens, Shinnersoseris rostrata

Hot Springs County - none

Johnson County - Arnica lonchophylla, Cypripedium montanum, Townsendia nuttallii

Laramie County - Bahia dissecta, Bouteloua simplex, Lithospermum multiflorum, Psoralea linearifolia, Selaginella mutica

Lincoln County - Astragalus molybdenus, Astragalus robbinsii, Eriogonum acaule, Hesperochiron pumilus, Lesquerella multiceps, Poa curta, Senecio atratus

RARE SPECIES

Natrona County - Artemisia porteri, Astragalus simplicifolius, Chenopodium subglabrum, Haplopappus wardii, Oxytropis nana

Niobrara County - none

Park County - Antennaria flagellaris, Carex bigelovii, Carex bipartita, Carex deweyana, Carex incurviformis, Carex leptalea, Castilleja nivea, Deschampsia danthonioides, Draba glabella, Draba pectinipila, Eritrichium howardii, Festuca baffinensis, Gentianella propinqua, Haplopappus carthamoides, Helictotrichon hookeri, Juncus biglumis, Kobresia macrocarpa, Linanthus harknessii, Orchis rotundifolia, Oxytropis podocarpa, Phippsia algida, Poa lettermanii, Potentilla uniflora, Ranunculus verecundus, Salix barrattiana, Senecio indecorus

Platte County - Agalinus tenuiflora, Cuscuta plattensis, Cuscuta umbrosa, Dalea aurea, Euphorbia exstipulata, Euphorbia hexagona, Mentzelia oligosperma, Stephanomeria pauciflora, Stipa neomexicana, Triodanis holzingeri

Sheridan County - Carex brunnescens, Carex sartwellii, Carex stipata, Cypripedium calceolus, Cypripedium montanum, Eragrostis hypnoides, Eritrichium howardii, Geum canadense, Polygonum spergulariiforme, Sambucus cerulea, Triodanis leptocarpa

Sublette County - Abronia mellifera, Astragalus drabelliformis, Callitriche heterophylla, Erigeron radicatus, Eriophorum scheuchzeri, Oryzopsis swallenii, Oxytheca dendroidea, Phlox diffusa, Trifolium wormskjoldii

Sweetwater County - Abies concolor, Balsamorhiza hispidula, Brickellia microphylla, Ceanothus martinii, Chamaechaenactis scaposa, Cryptantha scoparia, Cuscuta occidentalis, Eriastrum wilcoxii, Erigeron uintahensis, Eriogonum acaule, Eriogonum corymbosum, Forsellesia meionandra, Galium coloradoense, Grayia brandegei, Loeflingia squarrosa, Penstemon acaulis, Penstemon mucronatus, Penstemon paysoniorum, Phacelia demissa, Phacelia incana, Philadelphus microphyllus, Phlox diffusa, Pinus edulis

Teton County - Adiantum pedatum, Agrostis oregonensis, Arenaria stricta, Aspidotis densa, Astragalus robbinsii, Astragalus terminalis, Carex leptalea, Chenopodium chenopodioides, Clarkia pulchella, Draba borealis, Epipactis gigantea, Erigeron tweedyi, Eriophorum gracile, Froelichia gracilis, Haplopappus macronema, Heterocodon rariflorum, Hieracium scouleri, Listera caurina, Luzula glabrata, Lycopodium selago, Melica smithii, Melica subulata, Najas guadalupensis, Paeonia brownii, Pedicularis pulchella, Potamogeton obtusifolius, Potamogeton zosteriformis, Puccinellia fernaldii, Pyrola picta, Scirpus subterminalis, Sedum stenopetalum, Spirodela polyrhiza, Townsendia florifer, Veronica scutellata, Viola orbiculata, Viola renifolia, Xerophyllum tenax

Uinta County - Antennaria rosulata, Atriplex saccaria, Eriogonum divaricatum, Hesperochiron californicus, Lathyrus lanszwertii, Leersia virginica, Lesquerella prostrata, Lomatium juniperinum, Penstemon paysoniorum, Penstemon watsonii, Townsendia florifer

Washakie County - none

Weston County - Aristida curtissii, Cirsium drummondii, Dalea enneandra, Froelichia gracilis

RARE SPECIES

Yellowstone Park - Aster scopulorum, Botrychium simplex, Castilleja crista-galli, Equisetum fluviatile, Erigeron tweedyi, Eriophorum chamissonis, Festuca occidentalis, Gayophytum humile, Haplopappus macronema, Horkelia fusca, Isoetes lacustris, Lonicera caerulea, Lysichiton americanum, Melica subulata, Montiastrum lineare, Oxalis violacea, Polemonium micranthum, Polygala verticillata, Pyrola picta, Ranunculus occidentalis, Salix monochroma, Scolochloa festucacea, Sedum stenopetalum, Senecio megacephalus, Tillaea aquatica, Trautvetteria caroliniensis

Big Horn Mountains - Rubus acaulis

Green River Basin - Stephanomeria exigua

NW Wyoming - Cirsium canovirens

W Wyoming - Collomia grandiflora

Wyoming - Erigeron coulteri, Orobanche multiflora, Bouteloua eriopoda

Federally Proposed Species

Sphaeromeria simplex (E) Albany Co.

Agrostis rossiae (E) Yellowstone

Gaura neomexicana ssp. coloradensis (E) Laramie Co.

Physaria condensata (T) Lincoln and Uinta cos.

P. dornii (T) Lincoln Co.

Rorippa calycina (T) Hot Springs, Washakie, and Carbon cos.

Penstemon sp. nov. (in ed.) (T) Sweetwater Co.

Antennaria arcuata (T) Fremont Co.

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