

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

WYOMING NATIVE PLANT SOCIETY

WYOMING NATIVE PLANT SOCIETY NEWS LETTER, Vol. 3 #1 November 1983

NOTICE: The 1983 dues were due by the 4th of July passed. Only 14 of the 58 members from last year renewed their dues. If your name has a black spot behind it on the address label, you need to renew your membership with $3.00. This will be the last notice. RWL

Minutes of 1983 Annual Meeting: R. Dorn called the meeting to order on 3 July 1983 along the Sweetwater River at WY Rt. 28 (relocated the night before because of rain). Members in attendance were R. Dorn, J. Dorn, D. Martin, E. Evert, A. Aldrich, V. Wheeler, and R. Lichvar. Based on paid dues only 3 members were needed for a quorum. The 1982 minutes were approved as published.

The officers reported the following news: Vice President A. Aldrich had none; Secretary/Treasurer R. Lichvar reported $281.60 currently in society checking account and only 14 members had renewed their dues.

Old news was discussed next. Dugout Gulch was highlighted by R. Dorn. In doing so, he reviewed Barry Johnston's recommendations to the USFS (which were middle of the road) and the involvement of The Nature Conservancy. R. Lichvar added to the Conservancy discussion. This unique area and others were discussed in more detail later. Other topics such as Rare and Uncommon Areas and Conservation Committees were also discussed. The members felt that a society that was strictly a network of data exchange was a flop. Only a well planned and active involvement could save some Wyoming native species or landscapes.

The following were elected the 1983-84 officers: President E. F. Evert, Vice President M. Stromberg, Secretary/Treasurer V. Wheeler, Board Member A. Aldrich.

The next topic was new business. Many members in attendance felt our relaxed meetings were worthless. Some points brought up were: better maps to meeting sites, better logistics, more things on the agenda (cash bar), organized field trips, and at least a 3 day annual meeting.

A vote was then taken on the next year's meeting place. The following places were voted on: Beartooth Plateau 7 votes, Big Horn Mts. 0 votes, and Minnie's Gap 0 votes. The Beartooths won and will be hosted by the northwestern Wyoming alpine expert himself, E. F. Evert. He will be aided by D. Martin and R. Lichvar. Evert will plan an intense 3 day annual meeting on the Beartooths next August.

The next topic was the newsletter. The following topics were discussed: Beartooths, an introduction to the next annual meeting; botanical collectors, keep writing in newsletters; disjuncts and rare species, discussion of life history of these species in Wyoming; unique plant communities, same as rare species; fieldwork, keep publishing in newsletter; references, on Wyoming plants; odd balls, like Lysichiton americana and Rhododendron albiflorum in Wyoming and what is the real story behind these reports; more UW input, more news from the Rocky Mountain Herbarium so we don't think someone put them in the jar with Bessey; and finally a more active conservation effort from the society.

A motion to adjourn was made and the meeting then adjourned. RWL

Treasurer's Report: The last balance was $253.60. Deposits = $63.00; Cost of Newsletter 2(4) = $16.00. New balance = $300.60. RWL for VW

Draft EIS for the MX: In the recently released DEIS for the MX missile system in southeast Wyoming and western Nebraska, a candidate endangered plant species has been identified as being significantly and adversely affected by the development of the system. This plant, Gaura neomexicana ssp. coloradensis (Colorado Butterfly Plant), is located within and adjacent to Warren Air Force Base and will be impacted by new roads being built to transport the missiles from the storage area to the deployment area. In section 1-14 to 1-20 of the DEIS, three proposed alternatives for new roads are given. They are: proposed action R2, a new road through the habitat; alternative R1, to use existing roads but two overpasses have to be dug beneath to get transports under I-25; alternative R3, move roads to the north and south to avoid overpasses but still put the new road through the habitat.

We would like everyone to write to: Major Peter Walsh, AFRCE-BMS/DEV, Norton AFB, CA 92409. In doing so (as a member of the society), please explain that bisecting the habitat of this species would adversely affect its habitat. Some reasons for this are: restricted distribution of the species, alteration of stream flow, changing water saturation levels in the soil during germination periods, siltation, permenent removal of known habitat, unknown water requirements could be changed during growing season, and the species may require natural flooding of habitat which could be eliminated through flood control to protect these roads.

The society chooses alternative R1 which doesn't put new roads through the habitat and, if possible, to adapt alternative R3 to avoid overpass problems. If a road is necessary through the habitat, then further studies need to address the above mentioned problems. We do not wish to stop the road but only protect the species. Again, everyone must write. RWL

System of Natural Areas Needed for Wyoming : Wyoming has been fortunate. Less than 1%, only 7 species, of its vascular plants are considered endangered or threatened. Furthermore, since the state's inception, no vascular plant species are known to have suffered extinction. Wyoming has ostensibly untouched wide open spaces, magnificent forests, and majestic alplands--all still basically intact. Will Wyoming continue to be so fortunate?

Experience with older states in more advanced stages of development-degradation suggest otherwise. The state of Illinois furnishes an example, with about the same number of vascular plant species in its indigenous flora as Wyoming; Illinois has 14% of its vascular plants, about 370 species, on its threatened and endangered list and 2%, about 50 species, have been extirpated. Of course, development and degradation has elapsed over a much longer time in Illinois than in Wyoming so these figures are not surprising. Clearly, Illinois has not been as fortunate as Wyoming. However, Illinois implemented in 1963, perhaps too belatedly to do much good, a preservation system. The Illinois Nature Preserve System was established to secure, of what remained, the benefits of land in its natural condition. Certainly, Illinois is not unique in this regard. We all know that scores of states have established similar systems. Wyoming, on the other hand, despite increasing population and development has not seen fit to create any such system for the preservation of its natural diversity. Must Wyoming compile statistics comparable to the Illinois situation before it acts? I hope not. Certainly nothing will be gained by waiting. I would think that most of us would agree that there is certainly a need, perhaps urgent need, for the establishment of state mandated natural or scientific areas to insure the continued existence free from development and exploitation of unusual, significant, or outstanding examples of Wyoming's natural environment.

Future issues of the WNPSNL will be devoted in part to exploring ways by which the WNPS and its members can be instrumental in bringing some sort of preservation system into existence and will also focus on various lands that are worthy of inclusion in such a system. Your comments and suggestions on candidates for inclusion in the system and how to effectively go about implementing and shepherding legislation for this worthy endeavor are needed. Hopefully, some sort of forum can be fostered on these pages concerning these issues. EFE

Botanical Novelties: The last episode left F. V. Hayden returning from the Raynold's Expedition in 1860. This was the last major exploring expedition in the West conducted by the Army Corps of Topographical Engineers. The Civil War broke out in 1861 and in the midst of it, the Corps was legislated out of existence. Western botanical collecting came to a virtual standstill until about 1867. At this time there began a political struggle between civilian geologists and the Army for the action in the West. Clarence King, a civilian, somehow obtained money from Washington in 1867 for geological exploration of the 40th parallel. William Bailey was appointed botanist but he took sick after about 9 months and was forced to return to the East. He was replaced by Sereno Watson, one of the camp workers. Watson visited southwest Wyoming in 1869. His results were published in 1871 as Part 5 of King's "Report of the Geological Exploration of the Fortieth Parallel." Watson described many new species including Cymopterus longipes and Orogenia linearifolia. He is remembered for Penstemon watsonii, Cryptantha watsonii, and others. Not bad for the camp dish washer!

Hayden got back in action in 1869 as United States Geologist conducting the United States Geological Survey of the Territories. In 1869 and 1870 he covered the area from Cheyenne to the Uintas. In 1871 and 1872 he worked in the Yellowstone-Teton area. Hayden was now concentrating on geology but had with him in 1871 and 1872, John Coulter and Thomas C. Porter, respectively, to collect plants.

Coulter is remembered for his Manual of the Botany of the Rocky Mountain Region, 1885, the first such work covering the area. He actually described very few species and few were named after him (like Erigeron coulteri). But as editor of the Botanical Gazette, he was extremely helpful in getting Aven Nelson well on his way to a successful career in botany. He ultimately asked Aven to revise his 1885 Manual. The "New Manual" (popularly known as Coulter & Nelson) was printed in 1909.

Porter (not to be confused with C. L. Porter who was at Laramie in later years) was a Professor of Botany at Lafayette College, Pennsylvania. He also collected out of Ft. Bridger in 1873. He described Trifolium haydenii and Anemone tetonensis and is remembered for Ligusticum porteri and Porterella carnosula.

The Hayden expeditions, as they were called, continued in other western states and returned to Wyoming in 1877 when they visited the Red Desert, the Wind Rivers, the Green River Basin, and the western edge of the state. The Yellowstone-Teton country was visited again in 1878. Botany became of lesser importance and political battles between the civilian geologists, primarily Hayden and John Wesley Powell, resulted in Congress consolidating the various geological surveys into one in 1879 with Powell arranging for Clarence King to be the new director. King resigned a year later and Powell replaced him. Botany had one last fling in the "Survey" as we will see in a later episode. RDD

Some Notable Collections for 1983: Continuing field work in the N. Fk. Shoshone River drainage uncovered the following interesting material: Hedeoma drummondii and Juncus interior--first collections west of the Bighorn Mts.; Carex diandra, Listera borealis, Arabis microphylla, Muhlenbergia andina, Adoxa moschatellina and Sparganium angustifolium--seldom collected in the state or new for Park Co.; Eragrostis pectinacea--a range extension from the se. part of the state; Artemisia arbuscula--the most easterly collection to date for this species; and two new stations for the rare Carex incurviformis. A trip into the seldom botanized overly "seismosized" Kerwin mining area (Wood River drainage) yielded a spate of interesting species so far not collected either this far east, west, north, or south in the Absarokas; these included Erigeron leiomerus [Editor's note: collected there in 1980 by RWL and RDD], Potentilla brevifolia, Angelica roseana, Aquilegia caerulea, Primula parryi, Crepis elegans, Erigeron humilis, Carex incurviformis, and Carex bipartita. Also in the Absarokas, Dave Martin and I managed to find among the hordes of sheep on Carter Mtn. the seldom collected Thalictrum alpinum, Helictotrichon hookeri, and Viola canadensis (we managed to find them before the sheep did).

A two day field trip on the other side of the Bighorn Basin produced the following new records for the Bighorn Range alpine zone: Juncus biglumis, J. castaneus, Isoetes bolanderi, Carex vesicaria, Eleocharis pauciflora, Kobresia bellardii, Poa lettermanii, Agrostis borealis, Gentianella tenella, Gentiana prostrata, Draba apiculata, Salix rotundifolia, and Saxifraga cernua. With additional collecting, the Bighorn alpine (certainly under-collected) is looking less and less depauperate each year. The Beartooths on the other hand, certainly have had their fair share of collecting and thus display one of the richest documented alpine floras in the state; nevertheless, the following first collections were taken: Arnica rydbergii, Gaultheria humifusa, Juncus parryi, Parnassia kotzebuei, Polygonum douglasii, Poa arctica, and Vaccinium scoparium.

Finally, a trip through Yellowstone Park and into the Togowotee-Bonneville Pass area brought to light Deschampsia danthonioides and Juncus filiformis--both new for the park and Kobresia bellardii, Draba crassa, Luzula wahlenbergii and Ranunculus pedatifidus--these four previously uncollected in the Togowotee area. EFE

RWL=Robert W. Lichvar
VW=Virginia Wheeler
EFE=E. F. Evert
RDD=Robert D. Dorn