

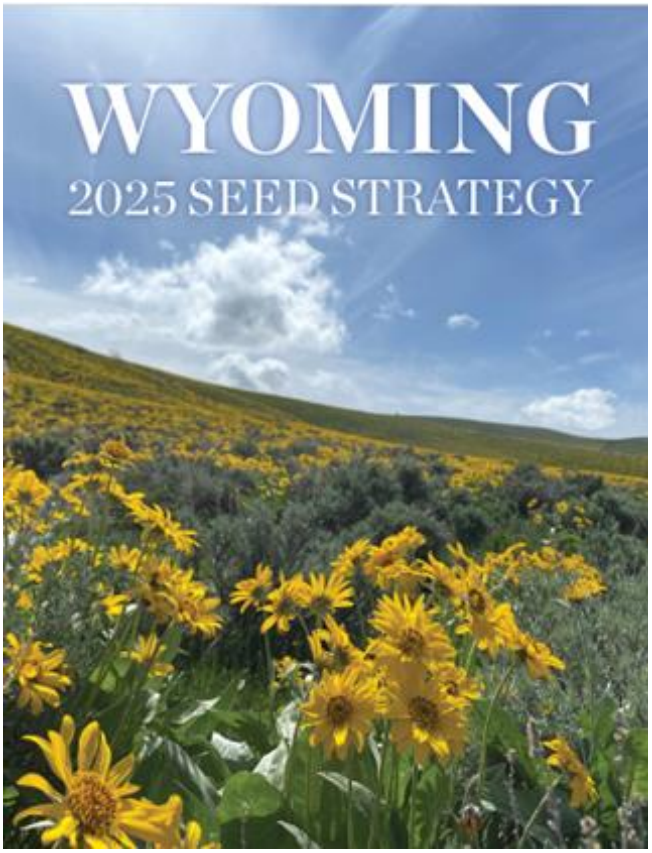
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Publication of the Wyoming Native Plant Society

December 2025, Volume 44(4)

Posted at www.wynps.org



Wyoming Seed Strategy

Maggie Eshleman, The Nature Conservancy

This summer Wyoming published its first Wyoming Seed Strategy. Wyoming is known for its effective partnerships and the Seed Strategy reflects the joint efforts of federal land management agencies, state and local governments, university researchers, growers/producers and non-profits. The Strategy aims to expand local seed production, ensure diverse and high-quality seed is available for reclamation, and support reclamation success through education.

The development of the Strategy was spurred by an acknowledgement within the (cont. p. 4)

Triple Trouble for Ancient Whitebark Pine

By Jared Friedman

Whitebark pine (*Pinus albicaulis*) is Wyoming's high-elevation specialist and a keystone tree species in subalpine forests across the state's mountainous regions. The species is able to withstand up to –50 °C and functions as a rare food source for forests birds, grizzly bears, and red squirrels in the subalpine. In 2023, whitebark pine was federally listed as threatened under the Endangered Species Act, with large populations of the species throughout the Rockies experiencing mass-mortality (>75% mortality in many stands) (Macfarlane et al., 2013; Logan et al., 2010). Much of this die-off has occurred as a combined result of increasing bark beetle (*Dendroctonus ponderosae*) populations and the proliferation of the invasive fungus white pine blister rust (*Cronartium ribicola*) (Bentz et al., 2010; Tomback and Achuff, 2010). Rapidly warming temperatures at high elevations have strengthened both threats: warmer and longer summers can support a second beetle generation in a single year, while milder conditions extend the infection window of blister rust (Keane et al., 2012; Dudney et al., 2020).

Historically, water stress has not been considered a major limitation for trees this high on the landscape, where deep snowpacks typically supply reliable moisture well into the growing season (Millar and Rundel, 2016; Dudney et al., 2023). Today, however, warmer winters and springs are melting the snowpack earlier (Barnett et al., 2005). As soils dry earlier in summer, whitebark pine increasingly faces mid-season water deficits, and drought-stressed trees are less able to produce the resin that is their primary defense against bark beetles. (cont. p. 3)

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WYNPS News

Check it out: Look for an insert in this issue with the ballot for the 2026 WYNPS Board elections, and announcement of 2026 scholarships and grants. Please vote by mail or online at the wynps@wynps.org so that your vote arrives by 18 January. This is also the best time to renew your membership. Thank you!

Mark your calendars: The 2026 Wyoming Native Plant Society Annual Meeting and Wildflower Weekend will be in and around the Flaming Gorge Natl Recreation Area at the end of May. See p. 8.
Look for more information in the March newsletter.

WYNPS Board – 2025
Co-Presidents: Joyce Evans (wyoslp@yahoo.com) and Mike Evans (iroxranch@yahoo.com), newly-settled in Veteran, WY!
Vice-President: Kathy Lichtendal, Clark (kathylich@yahoo.com)
Sec.-Treasurer: Dorothy Tuthill, Laramie (dtuthill@uwyo.edu)
Board-at-large: Ben Legler, Laramie (blegler@uwyo.edu) (2024-'25)
Board-at-large: Kim Wahl, Cheyenne (kwahl@blm.gov) (2025-'26)

Other Contacts:
Editor: Bonnie Heidel (bheidel@uwyo.edu)
Webmaster: vacant
Sublette Chapter: Jill Randall, President (subwynps@gmail.com)
Conservation Committee: Bonnie Heidel (wynps@wynps.org)
Teton Plants: Amy Taylor, Treasurer; (tetonplants@gmail.com). Check the chapter homepage (https://tetonplants.org/) for events.

Treasurer's Report: Balance as of 2 Dec: Scholarship = $885; General = $12,177; Total = $13,062.

Next issue: Please send articles and announcements for the next newsletter by 15 March to: WYNPS, P.O. Box 2449, Laramie, WY 82073 (Or email wynps@wynps.org)

SAVE THE DATE: The Black Hills Area Botany & Ecology Workshop will be **Friday, March 13, 2026**, at the Outdoor Campus West in Rapid City. Contact: blackhillsbotecol@gmail.com



Northern lights, By Mike Evans

Message from the Co-Presidents

We forego the insecurities and chaos that chatter at us daily, and in our last Co-Presidential message to you we emphasize all the positives. We find them in the people and native plants in our lives, and wonders such as the Northern Lights. Thank you all for taking the time and showing the interest in this huge and complex world we share. Your support, involvement, and work as amazing members, have made this tenure as Co-Presidents a delightful experience for us. We know that the next President will be able to enjoy the same support. We look forward to seeing you in 2026!

~Joyce & Mike Evans

The Wyoming Native Plant Society is an all-volunteer organization with approximately 150 members spread across the state and country, with two chapters. Our mission is to promote interest and appreciation of Wyoming's native plants, share information about them, and to promote their preservation. Members are the means and the end of our lofty goals. What did we accomplish in 2025?

- Advanced Society goals through the Markow Scholarship/Small Grants Fund
- Sponsored or collaborated on over 10 fieldtrips for members and the public
- Promoted Wyoming Native Plant Month
- Organized a statewide native plant poster contest for junior high students with winning entries displayed in six community libraries
- Launched a Conservation Committee to advance native plant and vegetation conservation
- Published four issues of Castilleja full of news and features, also running Facebook and Instagram posts

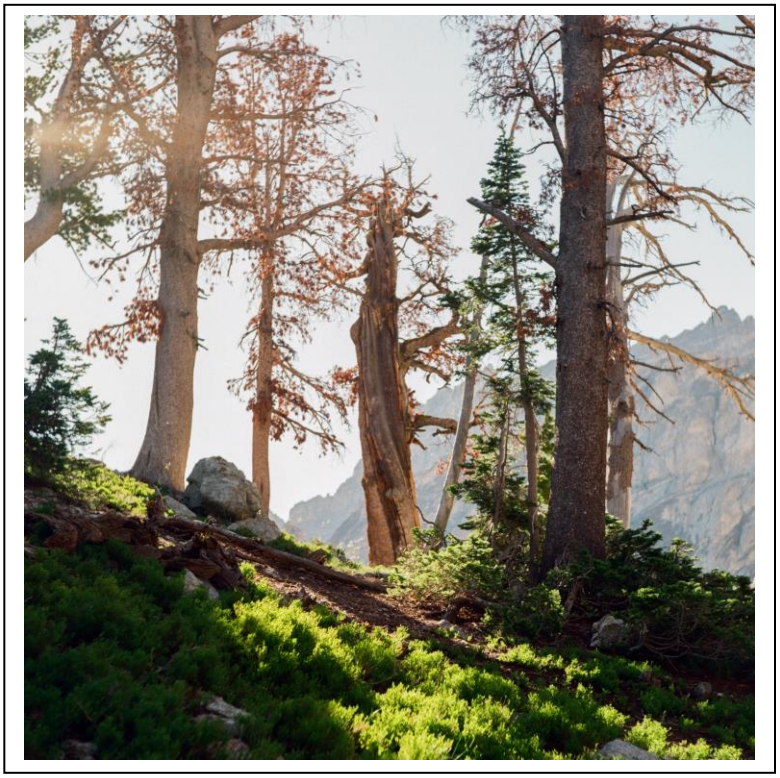


Figure 1. Photograph of a recently deceased, ancient whitebark pine in the research plot. By Jared Friedman

Whitebark Pine - Continued from p. 1

My research investigates how the interacting pressures of a warming climate, shifting snow regimes, drought stress, and beetle attacks have changed over time, ultimately contributing to the widespread whitebark pine mortality seen across the Rocky Mountains. To understand how these trees have survived past climatic variability, and why they are failing now, I've collected more than 80 core samples from recently dead whitebark pines in Grand Teton National Park. Using an increment borer, I extract a narrow cylinder of wood from bark to pith, revealing the complete sequence of annual growth rings without any need to cut the tree down. These rings can be precisely dated and measured, allowing for the construction of a multi-century tree-ring chronology that is compared to historical climate records. In sampling dead whitebark pines in our research plot, I have dated the *oldest whitebark pine core on record*, counting more than 1,270 annual growth rings. While the recently dead tree was likely *not* the oldest whitebark pine, it is currently the oldest whitebark pine core sample dated with standard tree-ring methods (Perkins and Swetnam, 1996).

Results from climate–growth analysis show that mature whitebark pines in the GYE are also experiencing water stress in ways that are uncharacteristic of other comparable high-elevation forests (Perkins and Swetnam, 1996; Kichas et al., 2023). For the first ~45 years of available Snow Water Equivalent (SWE) data, tree growth was largely insensitive to snowpack. That begins to change in the early 1990s, when a strong, positive relationship emerges between June SWE and ring width. Higher June snowpack now leads to greater growth, and low June SWE corresponds to reduced growth. This shift likely reflects the earlier and earlier disappearance of snowmelt, which leaves trees with fewer water reserves during the early part of their growing season. Over the past several decades, whitebark pine has become increasingly dependent on the remaining pockets of late-season snow to sustain growth, heightening its vulnerability to mid-summer drought and bark beetle attack.

While analyzing annual ring widths provides insight into when trees became sensitive to drought, it does not capture the specific anatomical mechanisms of water stress or how they change within each growing season. To address this, I am now quantifying patterns in wood anatomy across individual growth rings. In conifers, tracheids, the cells primarily responsible for water transport, change their size and wall thickness in response to drought. Under water stress, tracheids often become narrower with proportionally thicker cell walls, which helps prevent cavitation (the formation of air bubbles that block water flow) (Fonti et al., 2010; Rossi et al., 2016). By measuring these intra-ring anatomical shifts, we can identify precisely when during the growing season drought stress occurred, how severe it was, and how it has intensified through time. This higher-resolution record provides a direct window into the physiological struggles these trees face as the climate in Wyoming's subalpine ecosystems warm.

References:

Barnett, T.P., Adam, J.C., Lettenmaier, D.P., 2005. Potential impacts of a warming climate on water availability in snow-dominated regions. Nature 438, 303–309.

Bentz, B.J. et al. Climate Change and Bark Beetles of the Western United States and Canada: Direct and Indirect Effects. BioScience 60,

Dudney, J.C., et al. 2020. Compounding effects of white pine blister rust, mountain pine beetle, and fire threaten four white pine species. Ecosphere 11, e03263.

Dudney, J.C., et al. 2023. The energy–water limitation threshold explains divergent drought responses in tree growth, needle

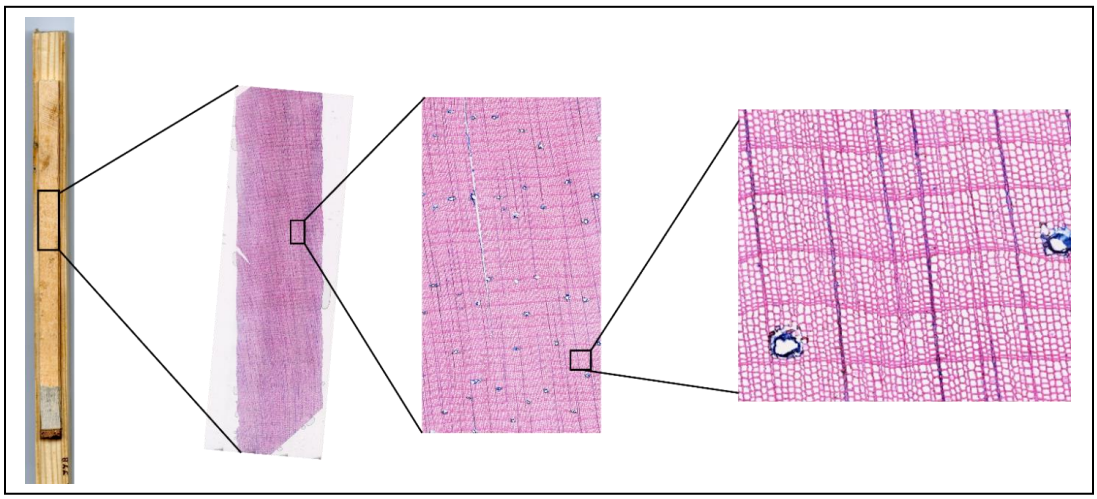


Figure 2 (left). Whitebark pine core wood anatomy, from original tree core to slide, 1x to 40x magnification.

Whitebark Pine - Continued, from p. 4)

length, and stable isotope ratios. Global Change Biology 29, 4368–4382.

Fonti, P., et al. 2010. Studying global change through investigation of the plastic responses of xylem anatomy in tree rings. New Phytologist 185, 42–53.

Keane, R.E., et al. 2012. A range-wide restoration strategy for whitebark pine (*Pinus albicaulis*). Gen. Tech. Rep. RMRS-GTR-279. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 108 p. 279.

Kichas, N.E., et al. 2023. Increased whitebark pine (*Pinus albicaulis*) growth and defense under a warmer and regionally drier climate. Front. For. Glob. Change 6.

Logan, J.A., Macfarlane, W.W., Willcox, L., 2010. Whitebark pine vulnerability to climate-driven mountain pine beetle disturbance in the Greater Yellowstone Ecosystem. Ecological Applications 20, 895–902.

Macfarlane, W.W., Logan, J.A., Kern, W.R., 2013. An innovative aerial assessment of Greater Yellowstone Ecosystem mountain pine beetle-caused whitebark pine mortality. Ecological Applications 23, 421–437.

Millar, C.I., Rundel, P.W., 2016. Subalpine forests. In: Zavaleta, E.; Mooney, H., eds. Ecosystems of California. Berkeley, California: University of California Press: 579-611. Chapter 28. 579–611.

Perkins, D., Swetnam, T.W., 1996. A dendroecological assessment of whitebark pine in the Sawtooth–Salmon River region, Idaho. Canadian Journal of Forest Research.

Rossi, S. et al., 2016. Pattern of xylem phenology in conifers of cold ecosystems at the Northern Hemisphere. Global Change Biology 22, 3804–3813.

Thoma, D.P., Shanahan, E.K., Irvine, K.M., 2019. Climatic Correlates of White Pine Blister Rust Infection in Whitebark Pine in the Greater Yellowstone Ecosystem. Forests 10, 666.

Tomback, D.F., Achuff, P., 2010. Blister rust and western forest biodiversity: ecology, values and outlook for white pines. Forest Pathology 40, 186–225.

Wyoming Seed Strategy, continued from p. 1

restoration and reclamation community in Wyoming that we don't have the seeds necessary to meet the demand to restore high quality habitat after disturbances. In 2022, The Nature Conservancy conducted a survey of seed users to understand the barriers to having adequate seed. Seed users identified the lack of availability and the cost of native seeds as the biggest barriers to seed mix development. As disturbances like wildfire are expected to increase we need to be proactive to address those barriers to achieve improved restoration and reclamation outcomes. The wildfire seasons in 2024 and 2025 have illustrated the urgency behind this effort.

This Strategy is focused around three main goals:

1) Increase the demand for genetically suitable seeds, defined as native plant materials adapted to a restoration site that are likely to establish, persist and promote community and ecological relationships.
2) Improve the supply of genetically suitable seeds
3) Improve the use of genetically suitable seeds

Fortunately, there are efforts underway across Wyoming to improve the availability of native seeds, including efforts like the Seeds of Success program, which had its first collection in Wyoming in 2002. This Strategy works to coordinate disparate efforts, identify the remaining gaps and put resources toward addressing persistent barriers. It is exciting to have this Strategy coordinating and bringing all of the state's work on native seeds together to ensure we maintain quality habitats into the future. The Wyoming Seed Strategy was developed with funding from the Bureau of Land Management.

Wyoming Native Plant Society – Renewal and Ballot for 2026

Return to: Wyoming Native Plant Society – P.O. Box 2449 – Laramie, WY 82073 - **by 17 January!**

Name _____ Date_____
Address _____
Email _____

Please check all appropriate boxes:

[ ] New member
[ ] Renewing member

[ ] Check here if this an address change

[ ] Annual membership with email notification of newsletters: $10
[ ] Annual membership with mailed newsletters: $12
[ ] Annual membership with scholarship support and email notification of newsletters: $20
[ ] Annual membership with scholarship support and mailed newsletters: $22

[ ] Life membership with email notification of newsletters: $300
[ ] Life membership with mailed newsletters: $300

In addition to the statewide organization, we have two chapters. Membership in chapters is optional; chapter members must also be members of the statewide organization.

[ ] Teton Plants Chapter annual membership: $5
[ ] Sublette Chapter annual membership: $5

[ ] Additional donation of $_____

Total enclosed: _____

Please write checks to:

Wyoming Native Plant Society

2026 WYNPS BALLOT – Please mail for arrival by **January 18** or email your vote to: wynps@wynps.org

Please vote for one person for each Officer position, and for the vacant At-Large position:

President ___Kelsey Smith (Pinedale)
Vice President ____ Kim Wahl (Cheyenne)
Secretary/Treas. ___Dorothy Tuthill (Laramie)
At-Large (2-yr term) ___Ben Legler (Laramie)

Write-in candidate: _____ ***Thank you*** *to Mike & Joyce Evans for Board and President contributions in 2023-2025 and to Kathy Lichtendahl for Board and Vice-President contributions in 2024-2025!*

Candidate Biographies

Kelsey Smith is a restoration ecologist and plant nerd with the BLM out of Pinedale, Wyoming. Her work has centered around sagebrush steppe habitat management, watershed restoration, facilitating native seed collection, and vegetation monitoring in Utah, Colorado, Nevada, and Wyoming. In her free time, she loves hiking, foraging, and landscaping with native plants.

Dorothy Tuthill has been secretary/treasurer since 2018. Her retirement from the University of Wyoming gives her time to pursue more travel adventures. Her creative and intellectual passions still include the Wyoming Master Naturalist Program, the Rocky Mountain Herbarium, Wyoming Bioblitz and Wyoming Native Plant Society; leading associated hike events and workshops.

Kim Wahl serves as the Botanist for the Wyoming BLM, leading the Plant Conservation and Restoration Program with focus on rare plant conservation and native plant materials development for restoration. Weeds are also in her domain, and she spearheaded a Tamarisk mapping project on Hutton Lakes National Wildlife Refuge for Wyoming Native Plant Society in 2025.

Ben Legler is curator in the Rocky Mountain Herbarium at UW, where he oversees the digital resources and databases of Rocky Mountain Herbarium, promotes accessibility and innovation, and contributes to studying the flora of Wyoming, including an alpine focus, and the Rocky Mountains in general.



Wyoming Native Plant Society

2026 MARKOW SCHOLARSHIP/SMALL GRANT

Applications are due February 15, 2026. Awards will be made in April, 2026.

Electronic copies of this application are also posted on the WYNPS homepage at: www.wynps.org

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The Wyoming Native Plant Society promotes appreciation, understanding and conservation of native plants and plant communities through its annual scholarship/small grants program. For scholarships, thesis research may address any aspect of botany including floristics, taxonomy, ecology, genetics, plant geography, range science, paleontology, pollination biology, physiology, and mycology. For small grants, projects such as botany curriculum development, public native plant gardens, and other forms of outreach will be considered. **This competition is open to all grad students who conduct research in Wyoming, residents of Wyoming or members of WYNPS.**

Proposals must pertain to native plants/vegetation of Wyoming. Preference will be given to proposals expected to generate research data or promote public understanding. Up to $1,000 may be covered for a scholarship proposal, and up to $500 for a small grant proposal. *Awards defray direct project costs, excluding labor or conferences*. Eligible expenses include:

1. Direct costs of travel, meals, and lodging for research or education projects.
2. Supply and service expenses used for the sole purpose of the project (e.g., consumable supplies such as laboratory chemicals, soil and nursery stock, and services such as phone and computer time).

The deadline for proposals is February 15. Awards will be announced in April. The proposal should be no longer than three pages and include the following:

- Applicant's name, mailing address, telephone number (land &/or cell as appropriate), and email address.
- Name, mailing address, contact person's name & phone number for any organization that will be directly involved with the applicant in executing the proposal.
- Short abstract of the study or project (2-5 sentences).
- Description of the study or project: objectives, methods, description of final product, and short description of past similar work (if applicable). Garden proposals should include plant lists, an educational component, and explicitly address long-term maintenance plans.
- Description of how the study or project will benefit native plants or plant conservation in Wyoming.
- Overall budget showing amount requested from WYNPS ($1,000 or less for scholarships; $500 or less for grants), the intended purpose of the funding, and other funding sources.
- Timeline for completion of the major components of the study or project.
- Brief statement of applicant's qualifications or biography.
- Name, address, email address or phone number of two people as references.

Successful scholarship or grant recipients will be required to submit a final report (due February 15, 2027) as an article about the study or project, printed in our *Castilleja* newsletter.

Please send completed applications to: Wyoming Native Plant Society, P.O. Box 2449, Laramie, WY 82073; or www.wynps@wynps.org .

Natural Areas in Wyoming

Bonnie Heidel, Conservation Committee

Natural areas, their appreciation and perpetuation, are central to the plant conservation mission and activities of the Wyoming Native Plant Society. The Castle Gardens Petroglyph Site that lured visitors for a thousand years also lured the first WYNPS annual field trip participants in 1981 (BLM Lander Field Office in Fremont County). The following year, WYNPS ventured to the Black Hills where Dugout Gulch evoked keen botanical interest plus concern over proposed logging and road construction (Black Hills National Forest in Crook County). In 1984, WYNPS printed some "suggested scientific-natural areas for Wyoming", that included Dugout Gulch as described by Robert Lichvar, and Sawtooth Palsa and Preacher Rock Bog-Swamp complex as described by Erwin Evert.

It's time to take stock! What natural areas exist in Wyoming having a plant conservation purpose? We are fortunate that large areas of Wyoming have intact ("natural") landscapes. This article addresses those exemplary sites that are formally designated to maintain highly-significant botanical and ecological features, among a range of resources and protection levels[1]. There have been three main agencies or organizations participating in plant conservation-based natural areas of Wyoming to date. They formally recognized sites and established binding terms for their continued management (Table 1).

Research natural areas (RNAs) and designated nature preserves may be established for express purposes of conserving botanical and vegetation (ecological) features (Table 1). Collectively, RNA and the following represent the highest level of land management for conservation, also referred to as Gap Category 1 in "Gap Analysis" (Fertig 2011, 2024). Similar protection levels are found in National Park Service lands such as national parks and monuments maintained in a natural state, wilderness areas designated to maintain wild/natural landscapes (BLM and USFS lands in Wyoming), and national wildlife refuges (U.S. Fish & Wildlife Service).

The next highest protection level, Gap Category 2, is ascribed to Areas of Critical Environmental Concern and Special Interest Areas (Table 1) among others. Special Interest Areas can be designated for plants (Botanical Areas) or for other resource values. There's not a state government system for recognizing natural areas in Wyoming, nor an independent one. Also, other state native plant societies joined an international initiative in recognizing "Important Plant Areas" (IPAs), analogous to the Important Bird Areas ("IBAs") of Audubon.

Table 1. Natural Areas Overview - Wyoming

Agency or Organization	Designation	No. of Wyoming Sites Designated
Bureau of Land Management (BLM)	Area of Critical Environmental Concern	3 ACECs with botanical/ecological basis (1 of which has 4 separate areas)
Forest Service (USFS)	Research Natural Area (RNA) and Special Botanical Area (SBA)	6 RNAs and 8 SBAs in Region 2, 4 RNAs and 2 SBAs in Region 4 (i.e., 16 total, between 8 national forests in the state)
Nature Conservancy (TNC)	Nature Preserve[2]	4 Nature Preserves with botanical/ ecological basis
TOTAL		27 designated natural areas

By current tallies, there are 27 designated natural areas in Wyoming with plant conservation purposes (Tables 2-4). Of these, 14 have Gap 1 Category levels of protection and 13 have Gap 2 Category levels. Many have also been the destinations of WYNPS field trips and subjects of newsletter articles. An overview of RNA program objectives is presented in Evenden et al. (2001).

Table 2. BLM Areas of Critical Environmental Concern (ACECs)

Area Name	BLM Field Office	Newsletter articles and Field Trips
Beaver Rim ACEC	BLM Lander FO	1992, 2016 Field Trips
Blowout penstemon ACEC	BLM Rawlins FO	Blomquist 2009 28(4): 3; 2007, 2012 Field Trips
Special Status Species ACEC	4 scattered areas of BLM Rock Springs FO; treated under this single name	Fertig 1997 16(4): 4

[1] This compilation is a work-in-progress and represents the information we could retrieve to date.

[2] This does not include easements on private property, which are not open to the public and may not address plant conservation.

Table 3. USFS Research Natural Areas and Special Botanical Areas (RNAs and SIAs)[3]

Area Name/ Designation	Region/ Forest	Newsletter articles and Field Trips
Afton Front RNA	R4/ Bridger-Teton NF	-
Ashenfelder SBA	R2/ Medicine-Bow NF	-
Big Fall Creek Thermal Area SBA	R4/ Bridger-Teton NF	Fertig 1997 16(4): 5
Bull Elk Park RNA	R2/ Bighorn NF	-
Cinnabar Park SBA	R2/ Medicine-Bow NF	-
Dugout Gulch SBA	R2/ Black Hills NF	Lichvar 1982 2(2)1-2, 1983 2(3): 2, 1984 3(2); Dorn 2007 26(4): 3; Burkhart 2011 30(2): 7-8, 1982 Field Trip
Gros Ventre RNA	R4/ Bridger-Teton NF	-
Hay Creek RNA	R2/ Black Hills NF	Monks 2013 32(1): 7
Kendall Warm Springs SIA	R4/ Bridger-Teton NF	Fertig 1995 Vol. 14(3): 1,5
Kettle Ponds SIA	R2/ Medicine-Bow NF	-
Leigh Creek RNA	R2/ Bighorn NF	-
Line Creek Plateau RNA	R2/ Shoshone NF - *and* R1/ Custer-Gallatin NF	Fertig 2001 29(1): 6-7; Shelly 2003 22(3): 1, 1984 and 2013 Field Trips
Medicine Bow Peak SBA	R2/ Medicine Bow NF	Fertig 1994 13(1): 5-7; 1996 Field Trip
Osborn Mountain RNA	R4/ Bridger-Teton NF	-
Ribbon Forest SBA	R2/ Medicine-Bow NF	-
Shell Canyon RNA	R2/ Bighorn NF	-
Snowy Range RNA	R2/ Medicine-Bow NF	-
Sunken Garden SIA	R2/ Medicine-Bow NF	-
Swamp Lake SBA	R2/ Shoshone NF	1989 and 2013 Field Trips
Swift Creek RNA	R4/ Bridger-Teton NF	Fertig 1994 13(4): 6-7
Total	10 RNAs (6 in Reg 2, 4 in Reg 4); 10 SIAs (8 in Reg 2, 2 in Reg 4)	

We can be glad for these designated RNA sites but roughly 20 more additional sites were formally proposed for RNA designation in Forest Plans. Some were proposed over 20 years ago. Their final paperwork languished as needed for designation. Work is underway - stay tuned!

Table 4. The Nature Conservancy Nature Preserves

Area Name/ Designation	County	Newsletter articles and Field Trips
Heart Mountain Ranch	Park	2002, 2022, 2023 Field Trips
Red Canyon Ranch	Fremont	2009, 2014 Field Trips
Sweetwater River Preserve	Fremont	-
Tensleep Preserve	Washakie	2001, 2011 Field Trips

Another ten or so additional areas that have been proposed for SIA designation have yet to be designated. They include the cases of two proposed for RNA designation (one championed by Erwin Evert in 1984 and another at about the same time by Richard Scott) both of which got moved to Special Geological Interest Area categories, and neither of which are yet designated to the best of our knowledge.

The WYNPS Conservation Committee is exploring ways to support natural areas programs and designation of proposed natural areas that remain in limbo. We are commenting on the BLM Rock Springs Resource Management Plan, which has a Special Status Species ACEC. Meanwhile, we have many more natural areas to explore in our fieldtrips and to showcase in this newsletter. Working compilations of "in limbo" natural areas are available on request. Clearly, we have our work cut out for us.
(See next page for references)

[3] The ecological evaluation reports for some of the USFS natural areas was prepared and posted by WYNDD. Query by the natural area name in the report title.

References
Evenden, A. G.; Moeur, M.; Shelly, J. S.; Kimball, S. F.; Wellner, C. A. 2001. Research Natural Areas on National Forest System Lands in Idaho, Montana, Nevada, Utah, and Western Wyoming: A Guidebook for Scientists, Managers, and Educators. Gen. Tech. Rep. RMRS-GTR-69. Ogden, UT: U.S. Department of Agriculture. Posted at: https://www.fs.usda.gov/rm/pubs/rmrs_gtr069.pdf
Forest Service, Rocky Mountain Research Station. 84 p.
Fertig, W. 2011. Strategies for plant conservation in Wyoming: Distributional modeling, Gap analysis, and identifying species at risk. Doctoral Dissertation, University of Wyoming Department of Botany, Laramie, WY. 451 pp.
Fertig, W. 2024. How well are plant species protected in Wyoming? Paying Attention to the Gaps. *Castilleja* 43(2): 1, 4-8.

Look for conservation-themed articles or else announcements in future newsletter issues. Members are invited to send news at any time, and to join the Committee. Please direct communications to: wynps@wynps.org, and include ATTN: Conservation Committee.

Ethnobotany - Part 16

Nettle (*Urtica dioica*)

By Meredith Taylor, Certified Wyoming Naturalist

Stinging Nettle (*Urtica dioica*) is native throughout most of North America from Canada to Mexico. It is a dicotyledonous, perennial plant of the Nettle family found in moist habitats of Wyoming from sagebrush desert to deep woods, including disturbed sites.

Nettle leaves are 1.5 - 3" (1-5 cm), simple, opposite and with a network of branching veins. The stem is square-stemmed and 12-72"(30 cm – over 2 m) tall. It emerges in May and June. The inconspicuous, wind-pollinated nettle flower blooms later with parts in multiples of four or five. Nettle reproduces both sexually and asexually by seed germination and root suckering. The leaves have stinging hairs that can cause immediate skin irritation on contact, so it is wise to wear gloves when picking the leaves. Dock (*Rumex* spp.) is one antidote that has been crushed to use as a poultice antidote. The young leaves are most popular to eat, boiled, with a flavor that resembles spinach. The older tall plants are often harvested to be spun as cordage to make ropes and nets.

Nettle has long been considered a valuable edible and medicinal plant by Native Americans as an anti-inflammatory and anti-oxidant blood purifier for arthritis, thyroid, digestion and gout. Nettle leaves may also be boiled and drunk as tea for a delicious source of protein, Vitamins A, C and K and to help regulate blood glucose for diabetics. They are also a food source for bears and ungulates in the spring.



Above: Nettle (*Urticia dioica* is widespread across Wyoming, especially at lower elevations. By Ben Legler (Photo Gallery).

References:
Dorn, Robert, 1988, Vascular Plants of Wyoming, Cheyenne, WY, Mountain West Publishing.
Elpel, Thomas J., 2014, Foraging the Mountain West, Hops Press LLC, Pony, MT.
Kershaw, Linda, 2000, Lone Pine Publishing, Auburn, WA.
Phillips, H. Wayne, 2003, Plants of the Lewis and Clark Expedition, Lone Pine Publishing Co, MT.
Moerman, Daniel E., 2000, Native American Ethnobotany, Timber Press.

This article is for educational purposes and does not condone collecting of plants that readers can't identify with certainty. The ethics of wild plant collecting is to tread softly through the plant's habitat and only pick the occasional leaf or flower to protect plant sustainability. Check directly with the agency about their policy if you want to harvest native plants on public land.

2026 Annual Meeting Alert! The 2026 Wyoming Native Plant Society Annual Meeting and Wildflower Weekend will be in and near the Flaming Gorge National Recreation Area, May 29-31 (Friday-Sunday). Activities will be based out of the Fire Hole Canyon Campground, 30 miles south of Rock Springs. Nearby destinations include brilliant cushion plant mosaics of color, and visits to one of Wyoming's narrow endemics, Green River greenthread (*Thelesperma caespitosum*). Attendees will also have an option of an *extremely* deep look at Green River country, with a trona mine tour 1700 feet belowground as an early Friday morning option that will require arriving by Thursday night (May 28). The same Green River Formation that yields trona deep belowground is uplifted above ground and seen in the towering sandstone pillars surrounding the Flaming Gorge with its colorful associated flora. *Look for the itinerary, registration and campground reservation information in the March newsletter.*

WYOMING NATIVE PLANT SOCIETY MEMBERSHIP FORM

Date _____

Name _____

Address _____

Email _____

Please check all appropriate boxes:

[ ] New member

[ ] Renewing member

[ ] Check here if this an address change

[ ] Annual membership with email notification of newsletters: $10

[ ] Annual membership with mailed newsletters: $12

[ ] Annual membership with scholarship support and email notification of newsletters: $20

[ ] Annual membership with scholarship support and mailed newsletters: $22

[ ] Life membership with email notification of newsletters: $300

[ ] Life membership with mailed newsletters: $300

In addition to the statewide organization, we have two chapters. Membership in chapters is optional; chapter members must also be members of the statewide organization.

[ ] Teton Plants Chapter annual membership: $5

[ ] Sublette Chapter annual membership: $5

[ ] Additional donation of $_____

Total enclosed: _____

Please write checks to **Wyoming Native Plant Society**

Wyoming Native Plant Society
P.O. Box 2449
Laramie, WY 82073