



This newsletter is long overdue, we know. We have been waiting to share some very big news with you, and hope you find the wait worthwhile. We're so excited!

### *Director's Note*

It has been quite the start to the year! We kicked things off in January with a celebration to mark the 100<sup>th</sup> anniversary of the Aven Nelson Memorial building – the long-time home of the Botany Department and Rocky Mountain Herbarium. If you missed it, you can download a booklet [here](#) that highlights the specimen exhibit that was part of the event.

Important offseason work in the RM included comprehensive updates by Ernie and Ben to the [Checklist of Wyoming Flora](#). I am happy to report that after some disagreements about the validity of several taxa, they are still friends!

Finally, the big news: while most of the department moved to the new Science Initiative Building last summer, I am pleased to say that the RM will continue the tradition of Botany in the Aven Nelson building by expanding our footprint onto the 2<sup>nd</sup> floor. This summer we will start a 3-year project funded by the National Science Foundation to make this happen (read more below!).

We are looking forward to the upcoming field season and hope to see you out botanizing somewhere soon!

*Dave Tank*, Director

May 17, 2023

### **Major award supports RM expansion**

The RM has been awarded over \$900,000 from the National Science Foundation to expand on to the second floor of the Aven Nelson Memorial building.

With over 1.3 million specimens, the herbarium has outgrown its space on the third floor of the Aven Nelson Building and is long overdue for expansion. With a grant from the National Science Foundation (NSF) and support from the University of Wyoming, we are excited to announce that the herbarium will be expanding on to the second floor. This three-year NSF-funded project will result in the addition of over 200 herbarium cabinets, allowing us to secure the more than 400,000 specimens that have been largely inaccessible to the research community while stored in hopper boxes on the tops of existing cabinets.



Unhoused specimens are currently stored on top of full cabinets. This photo was included in the proposal to NSF.

Importantly, we will also be able to update the organization of the collection to accommodate the many name changes that are associated with modern classification



systems and reorganize the collection to allow for more efficient use and our continued growth. As part of this project, we will also move and incorporate the 45,000 specimen Central Wyoming College Herbarium (CWC) – an important regional collection that is currently in storage and inaccessible.

While we are moving and reorganizing specimens, a key piece of this project will be to image all the remaining mounted specimens that have not yet been imaged. Many of these represent historical collections from outside of Wyoming, so this will greatly increase the taxonomic and geographic coverage of our digitized specimens that are accessible through the RM's online specimen portal (<http://rmh.uwyo.edu>).

Finally, while these are significant impacts to the physical and digital infrastructure of the RM, this project will also serve as a platform for a summer Rocky Mountain Herbarium Internship for UW students that will launch summer 2024. This internship will provide the next generation of herbarium scientists with a foundational knowledge of herbarium management, curation, and research through a directed, hands-on experience.



## Updated Wyoming Flora Checklist

Just in time for the field season, the Rocky Mountain Herbarium published a 2023

update to its [Wyoming Flora Checklist](#). This major update to the Wyoming Flora Checklist can be downloaded as a pdf file or spreadsheet and provides:

- A list of all Wyoming plant species growing in the wild,
- Up-to-date taxonomy and nomenclature based on the professional review of the authors,
- A cross-reference to names in Dorn (2001) and other literature, where they differ,
- An indication of exotic and noxious species,
- An indication of “Wyoming plant species of concern” based on the list maintained by the Wyoming Natural Diversity Database (WYNDD).

The list is organized alphabetically by plant family within each of the four commonly recognized vascular plants groups (ferns and lycophytes, gymnosperms, monocots, and dicots). Each entry includes notes and references to literature or vouchers where relevant. Species are included in the checklist only if vouchered with verified specimens at RM or another public herbarium, or if reported in specimen-based literature such as *Flora of North America* (1993-present). The checklist incorporates changes to family and generic circumscriptions published in recent literature, and includes additions to the state's flora as we become aware of their discovery.

This update follows on the heels of our recent partnership with WYNDD to develop better ways of sharing each other's data and create new online resources. Specifically, we have migrated the RM checklist into a relational database and are coordinating with WYNDD to maintain consistent taxonomic checklists through linkages between our respective





databases. Synchronizing RM and WYNDD taxonomies allowed us to provide RM's specimen data in geospatial format, and WYNDD can now integrate RM data into their mapping applications for the first time.

Other exciting developments that build off the checklist include our upcoming Flora of Wyoming website and updates to the RM specimen search pages—look for more about these in an upcoming newsletter!

Recommended citation:

Nelson, B.E. and B.S. Legler. 2023. Checklist of the Wyoming Flora. Rocky Mountain Herbarium, University of Wyoming. Laramie, WY. <https://www.rockymountainherbarium.org/index.php/research/checklists>.

### RM Faces: Ewa Chilson



Ewa is a plant enthusiast! Until about 20 years ago, Ewa lived in Poland, and admired the diversity of plants she found there. Now a resident of Laramie, she admires the diversity of Wyoming's flora, which is so much different from Poland's. She and her husband enjoy driving all around the state, with frequent stops to check out the plants. Ewa also grows a few of our natives in her garden, including bitterroot and buckwheats (not easy, but rewarding, she says). When she learned at a Curatorial Techniques Night May 17, 2023

that the RM was looking for volunteers, she accepted the invitation because "I just like plants and am glad to help." Thank you, Ewa!



A beautifully mounted specimen of fringed gentian, collected in 2008 by then graduate student Laura Lukas.

### Up-coming events

Join RM in the field this summer!



**Wyoming BioBlitz, June 9-11, Medicine Lodge State Archaeological Site.** Wyoming BioBlitz provides a hands-on opportunity to learn from experts as we build a species list for the park and vicinity. RM will conduct plant identification workshops on Friday afternoon and lead surveys Saturday.

[Registration required.](#)

**Wyoming Native Plant Society Wildflower Weekend, June 16, 17, 18, Clark, WY.** Join RM personnel and native plant enthusiasts from the state and region, as we explore the spectacular landscapes of NW Wyoming. Dr. Tank will be the featured speaker Saturday



evening. Information and registration at [www.WYNPS.org](http://www.WYNPS.org).