



Expanding Wyoming's Flora

Digital Curator Ben Legler hadn't been at his new job for a whole month, when he discovered a species not previously documented from Wyoming growing just outside the RM. The patch of small nettles might not catch most people's eye, but Ben took a closer look—and discovered *Urtica urens* (dwarf nettle).



Urtica urens, plant and hair (inset)

Urtica urens is an annual herb native to Eurasia that is now widely introduced throughout much of the world, though essentially absent from the Rocky Mountain region. Although smaller than *Urtica dioica* (our native stinging nettle), *Urtica urens* is just as well armed with stinging hairs. Adding to the species' punch is its fecundity—a single plant can reach maturity in as little as 5 weeks and produce over 1,000 seeds, with the seeds reportedly remaining viable in the soil for several decades.

How did this nettle reach Wyoming? It turns out these plants grow directly beneath a cluster of spruce trees hosting a communal turkey vulture roost, in ground littered with their foul-smelling droppings. Thus far, Ben has not seen any other patches of nettles elsewhere in Laramie or on campus, except for a few plants under an adjacent clump of trees. This suggests *Urtica urens* recently hitched a ride to Wyoming as seeds on the feet (or in the excrement?) of vultures following their migratory routes north from Mexico and Central America and found fertile ground in the nitrogen-enriched soil beneath their roost.

Discoveries such as this nettle underscore the value of collecting to document Wyoming's dynamic flora. Collecting an herbarium specimen, as Ben did for the *Urtica*, ensures a permanent, verifiable, and publicly accessible record of notable finds.

Director's Note



Dr. Tank with a new species of *Castilleja*

I am so thankful for the very warm welcome that I've received from everyone in the Rocky



Mountain Herbarium and at the University of Wyoming. One of the clear strengths of the RM are the people that put their heart and soul into this collection. I want to give a BIG thank you to the Herbarium Management Team – Ernie Nelson, Greg Brown, Dorothy Tuthill, Bonnie Heidel, Larry Schmidt, and Kristina Hufford. Without their contributions to the herbarium over the years, I know I would be starting in a very different place, and I am very happy that they have all agreed to stay on board and continue their work with the RM. As you’ll note from this issue, our new RM Digital Curator, Ben Legler, is settling in too. For those that know Ben, true to form, he is already finding new state records to add to the flora of Wyoming...literally right out our back door!

As we move forward, I will use this space to update you on the things that I am most excited about. Here are a few to get us started:

- As of January 2021, the RM is now the 14th largest herbarium in the US, and the 4th largest at a public university...and we are close on the heels of the University of Wisconsin!
- Efforts to update and revamp our specimen database have revealed that the extensive specimen imaging and databasing efforts over the past several years have made the RM the largest digital data provider at the UW!

I am honored to build on the strong traditions at the RM that have brought us here. As we begin plans to reboot the RM floristics program and enhance our digital resources on the flora of Wyoming and the Rocky Mountains, there are exciting things to come, and we will continue to keep you updated!

Dave Tank, Director

RM Faces: Sienna Wessel

Helping hands are always welcome at RM! Botany graduate student Sienna Wessel found ways to spend time at RM during pandemic months by taking on a special project to help relabel the herbarium cabinet aisles, while she waited to learn if she would



be able to proceed with her thesis research in Jackson Hole. She also launched her own local floristics project collecting specimens for

submission to RM. As it turns out, everyone came out ahead – the RM has aisles clearly labeled by taxon and folder color, Curt Gowdy State Park has some of its flora documented, and Sienna herself gained a broader botany background before she finally set off to conduct her research. Thank you, Sienna!

RM Links

Wyoming Field Guide (fieldguide.wyndd.org) entries for plant Species of Concern are now linked to the Rocky Mountain Herbarium species search data. If you query Ute ladies’ tresses (*Spiranthes diluvialis* : <https://fieldguide.wyndd.org/?species=spirantes%20diluvialis>), and click on the RM link, it will include all RM specimens of *S. diluvialis* and not just those collected in Wyoming.



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