Minnesota Plant Press

The Minnesota Native Plant Society Newsletter

The Minnesota Native Plant Society – *A non-profit organization dedicated to the conservation and appreciation of Minnesota's native plants and plant communities* through education *and public awareness.*

Volume 40 Number 1 **April 2025**

Snow White & the Dwarfs

by Stephen Saupe

The recent controversy about the new Disney live-action version of "Snow White" has reminded me how much I wish I had a magic mirror. Unlike Snow White's stepmother, I wouldn't care who was the most beautiful person. But just imagine what you could learn with a magic mirror! "Mirror, mirror, on the wall. Which plant is the fairest one of all?"

I'd be willing to bet that the mirror's answer would have been dwarf, or snow, trillium (*Trillium nivale*).

Much like Snow White's seven companions, snow trilliums are rather diminutive. In fact, they are the smallest of the trilliums, growing about 4-5 inches tall (see **Figures 2** & **3**).

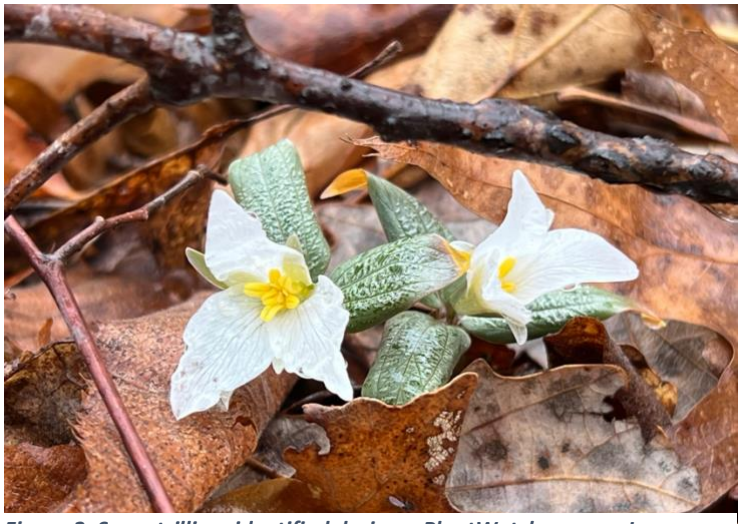

Figure 2. Snow trillium identified during a PlantWatch survey. Image courtesy S. Saupe.

Snow White gets her name, in part, from her milky complexion. In contrast, snow trilliums are named for their amazing ability to emerge through the snow, and then flower when the ground is still partly frozen or barely thawed.

Figure 1. Franz Jüttner (1865–1925): Illustration from Sneewittchen, Scholz' Künstler-Bilderbücher, Mainz 1905. From Wikipedia, in the Public Domain.

Snow trillium is one of the earliest blooming spring ephemerals. A quick check of records from the Bell Museum *Biodiversity Atlas* shows that it is not uncommon for them to flower as early as April 1st!

How can these plants grow in such cold conditions? At first glance, snow trilliums seem to lack any specialized adaptations for cold survival such as a prolific covering of hairs like in Pasqueflower (*Anemone patens* var. *multifda*). Interestingly, there is speculation that snow trillium may, as do Snow White, her dwarf friends, and homeotherms in general, make its own heat.

This may expl-ain why the snow melts around the plants making them appear to grow in a shallow well. By itself, this is not particularly good evidence for having a heat source, since the same phenomenon occurs around rocks or trees in a snowy forest. These objects absorb sunlight and then re-irradiate the energy as heat, which melts the surrounding snow.

However, Andrews (1921) excavated plants under the snow and observed a dome-shaped space above them. This certainly suggests that perhaps the warmth was generated by the plants themselves.

Whether snow trillium produces its own heat is still not clear. However, this remarkable ability does occur in other plants. For example, the spadix (fleshy flower stalk) of skunk cabbage (*Symplocarpus foetidus*), another early bloomer, can reach

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The *Minnesota Plant Press* is the newsletter of the Minnesota Native Plant Society. The newsletter is published quarterly, in January, April, July, and October. The deadline for contributions, which are welcome, is the first day of the publication month. Send articles, photos, suggestions, etc. to the co-editors, Brian Johnson & Steve Saupe at editors@mnnps.org. The Society officers are listed below:

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temperatures of 15 – 35 °C above ambient levels (Knutson, 1974). The heat is a byproduct of a special metabolic pathway, cyanide resistant respiration, that metabolizes sugars to generate heat, much like burning a log in a fireplace.

If you want to see a snow trillium, head to the southern half of Minnesota. They prefer mesic hardwoods areas along the Minnesota and Mississippi Rivers. According to the *Flora of North America* (Vol 26), "*Trillium nivale* occurs primarily at the southern edge of Pleistocene glaciation and shuns humus, leaf deposits, and much plant competition."

Unfortunately, they are relatively uncommon and were listed in Minnesota as a species of special concern in 1984. Like many woodland plants, snow trillium is threatened by habitat loss and invasive species including European buckthorn, garlic mustard, white-tailed deer, and earthworms.

By the time you receive this newsletter, there should still be time to take a field trip to find some of these amazing little plants in bloom. And don't be surprised if, on your drive home, you find yourself singing, "Heigh ho, heigh ho, it's home from work we go."

Figure 3. Snow trilliums growing near Mankato on April 2, 2024. Images courtesy S. Saupe.

The Plant Press Returns

This spring, perhaps after one too many hard ciders, Steve Saupe and Brian Johnson decided to resurrect the *Plant Press* newsletter of the MN Native Plant Society. They both recently retired after a combined 80 years of teaching at St. John's University and the College of St. Benedict, with Steve in the biology department and Brian in the chemistry department.

In addition to teaching botany courses, Steve manages the CSBSJU Herbarium and is involved with the St. John's maple syruping operation

Brian is an amateur botanist who has volunteered with the DNR and is also the president of the St. Cloud Chapter of Wild Ones, a national organization dedicated to the use of native plants in landscaping. Both of them are enthusiastic (***cont'd p. 3***)

members of *PlantWatch*.

Steve and Brian want to emphasize that while they are the editors, it is really YOUR newsletter. Please contact them with your comments, story ideas, or even better, your contributions. For example, anyone who has a favorite site to visit could submit a Destination Botany article. We look forward to hearing from you!

In order for this to be a sustainable and useful publication, your contributions will be vital. Please submit items for publication (editors@mnnps.org). Here is some information that will help the process work smoothly. You may wish to save this document for future reference.

1. We plan to publish in January, April, July and October. We are aiming to send out the electronic version of the document on about the 15th of each month. If you would like to submit something, please send it to us (editors@mnnps.org) by the first of the publication month to allow time to prepare the newsletter.

2. Submissions of any length will be appreciated! Think of a full-length article as being 500-1000 words, but shorter ones are great, too. Send the submission as a Word document. Feel free to include 1-3 figures (pictures, maps, graphs, etc.). Each should have a short descriptive caption and any credits as applicable.

3. Here are some possible ideas for stories. Hopefully one or more of these will resonate with you!
   a) Describe a favorite place to botanize.
   b) Describe a plant or an unusual plant characteristic.
   c) Describe a new discovery or result from the field. (Some of these might be either similar to or summaries of the DNR Biodiversity Highlights presentations.)
   d) Are there any legislative, political or other issues that will be of interest to our members?
   e) Do you have any field /research projects or other professional projects that might be of interest to our members? (Projects need not be complete or of professional publication level to be published here.)
   f) A summary of a professional journal article that might be of interest to the general readership.
   g) Are there any new books of interest to our readership? Articles published by members? Awards to members or to others in our area that are relevant?
   h) Other???

We welcome your submissions, comments on the publication or willingness to help with some aspect of this project. Contact us at editors@mnnps.org. We look forward to hearing from you.

Figure 4. Co-editors Steve Saupe (left) and Brian Johnson preparing for a day in the field with PlantWatch. Image courtesy Deanna Leigh.

President's Column – *Exposure, Experience, and Inspiration*

by Scott A. Milburn

It's a given that all members of the Minnesota Native Plant Society developed an interest or passion for plants through some past experience. This could have been by means of a visit to a museum, an influential instructor, or simply being outdoors. We all likely have shared values regarding conservation and the environment. I think that it is important for each of us to reflect on what that past experience was and how those experiences may not be possible for many in our society. I reflect back on my own experience, owing much of my conservation mindset to my high school French teacher. Although the focus of the class was on learning nouns and verb conjugation, there was an exterior discussion where my instructor touched upon various issues such as water and energy conservation. This was also a period where the news of the day focused on the Exxon Valdez disaster, ozone depletion, and the catastrophic fires at Yellowstone National Park. The (**continued p. 4**)

(*President's column continued from p. 3*) culmination of these experiences and events directed me towards having a strong interest in conservation and ultimately resulted in a career focused on native plants.

Had it not been for that one teacher, I likely would have had a far different trajectory in life. That makes me ponder if kids today will be in a position to have similar exposure or experiences that, at minimum, make them conservation-minded. There appears to be a greater disconnect today from the environment, with too much exposure to social media, fueling consumerism and other negative issues. We are also at a critical point in time where we all need to step up and contribute back to society. I often think of President Kennedy's well-referenced inaugural address in 1961, where he said so famously, "And so, my fellow Americans: ask not what your country can do for you--ask what you can do for your country." It was a call for all of society to do its part to work towards peace. But, I also see these words as a call for personal service for the betterment of mankind. With that said, each of us can make a difference if we act. And cumulatively, we can have a much greater impact on society and perhaps be that person who sparks that interest for someone else.

With all that said, this is a good reminder that we are an all-volunteer organization dedicated to the conservation and appreciation of Minnesota's native plants and plant communities through education and public awareness. I would like to both highlight and thank Brian Johnson and Stephen Saupe for stepping up and taking on the role of co-editors of our newsletter, the *Plant Press*. It has been a number of years since we had an official editor, the last being Gerry Drewry, who served in the position for years. Gerry Drewry was a very inspirational person, having a career in print journalism as well as serving as former Governor Jessie Ventura's campaign spokeswoman. In keeping with tradition, the format in general is very similar to what Gerry originally established.

Speaking of volunteering, we are seeking your involvement as well. This can be as simple as speaker ideas, leading field trips around the state, or taking writing to your state representatives in support of native plants and plant communities.

Minnesota Wildflowers Plant of the Month: *Lomatium orientale*

by ***Katy Chayka, MN Wildflowers (www.mnwildflowers.org)***

Family: Apiaceae (carrot)
Common names: Oriental desert parsley, Salt-and-pepper, Northern Idaho biscuitroot
Life cycle Perennial
Plant height: 4 to 8 inches
Bloom season: April-May
Habitat: Open prairie and rock outcrops

Figure 5. Lomatium orientale. © Katy Chayka. Used with permission. More images available at https://www.minnesotawildflowers.info/flower/northern-idaho-biscuitroot

Chayka – Plant of the Month (*continued*)

Plant Description

Flowers: Flowers are in a flat to dome-shaped cluster (umbel), 2/3 to 1+ inches (1.6 to 3 cm) diameter, at the tip of a long, finely hairy stalk arising from a leaf axil, each umbel made up of 4 to 16+ smaller clusters (umbellets), each umbellet tightly packed with up to 30 tiny flowers. Flowers have 5 white to pinkish petals that are tightly curled in to the center, and 5 longer stamens protruding from the center tipped with white to deep purplish-pink anthers. At the base of each cluster are usually 4 to 10 hairless, lance-linear bracts up to 1/6 inch (1.5 to 4 mm) long, though bracts may be absent altogether.

Leaves and stem: Leaves are mostly basal, forming an irregular rosette, sometimes with a single stem leaf sheathing the stem. Leaves are lanceolate to egg-shaped in outline, 1 to 4+ inches (2.5 to 11 cm) long, 3/8 to 2¾ inches (1 to 7 cm) wide, 2- or 3-times compound, the leaflets divided into narrow segments creating a lacy, fern-like appearance. Color is blue-green to gray-green from fine, soft hairs. Stems are short, spreading to ascending to erect, covered in fine, soft hairs and often tinged purple.

Figure 6. rock outcrop habitat, taken at Morton Outcrop SNA in Renville County. © Peter M. Dziuk. Used with permission.

Fruit: The umbels can expand to nearly twice their flowering width as fruit develops. Fruit is a dry seed, up to ~3/8 inch (5 to 10 mm) long, compressed oval-elliptic, with a few distinct ribs and a pale wing .6 to 1.6 mm wide all along the outer edge.

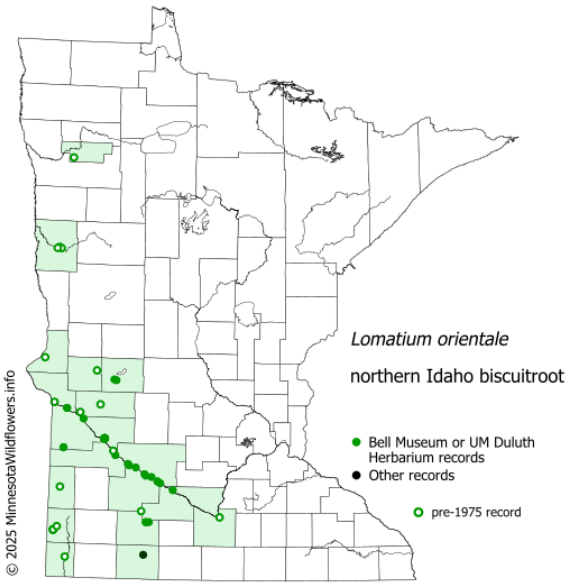

Figure 7. Minnesota county distribution map © Minnesota Wildflowers Information. Used with permission

Notes

Lomatium orientale is widespread in the Great Plains and reaches the eastern edge of its range in Minnesota, with most populations concentrated in or near the Minnesota River Valley. The first collection in the state was in 1890 from a prairie near Appleton in Swift County. While not considered rare here, it is by no means common as it is found only in dry prairie and rock outcrop habitats, which have diminished greatly in both quantity and quality due to agriculture, fire suppression, invasive species and gravel mining. Even where it is known to exist, it is often missed due to its very early flowering period, after which it quickly sets seed and goes dormant for the season, well before most hikers and plant explorers are out and about in the field. I consider it a true harbinger of spring, even beating Pasqueflower to the punch. And as one of the earliest spring bloomers on the prairie, it is an important food source for pollinators emerging from their winter slumber.

According to the Native American Ethnobotany Database (naeb.brit.org), the roots were eaten by the Lakota and Navajo, and the Cheyenne used roots and leaves to treat various gastrointestinal conditions and ailments.

Minnesota Wildflowers Website:
https://www.minnesotawildflowes.info

Destination Botany: Bonanza Prairie SNA

By Brian Johnson

Located on the "bump" on the western border of Minnesota, Bonanza Prairie SNA is an example of a gravel hill prairie. It is adjacent to the Bonanza unit of Big Stone State Park, and consists of 115 acres of prairie interspersed with ravines of oak savanna. The climb to the top of the hill yields a sweeping view of Big Stone Lake, a 26-mile-long body of water formed by the draining of glacial Lake Agassiz and serving as the headwaters of the Minnesota River (**Figure 8**).

Figure 8. The view of Big Stone Lake from the SNA. ©Kelly Randall. Used with permission.

A visit to Bonanza Prairie is enjoyable at any time of year. In the late spring or early summer, the hoary puccoon, white beard tongue, prairie turnip and bearded birdfoot violet will catch your eye. An array of asters, goldenrods, and sunflowers will be your reward in late summer. Rare or unusual plants at the site include the Missouri milk-vetch, slender milk-vetch, and prairie moonwort, although it will take an eagle eye (and luck) to find them. The plant list on the DNR's webpage for this SNA was updated in 2024, so you can use it to get a more complete idea of what you might see there. You might want to be on your toes during your visit—there are some fallen logs as part of management near the intersections of the prairie and ravines that can make walking difficult, as well as some poison ivy.

Figure 9. Liatris aspera. ©Kelly Randall. Used with permission.

Bonanza Prairie SNA was the site of a *Bioblitz* in August 2024. Despite temperatures approaching the mid-nineties with high humidity, a group of more than twenty locals, master naturalists, and DNR personnel gathered for the event. In addition to the botanical group led by Fred Harris, there were birders and a spider team. Kyle Johnson of the DNR also searched for butterflies and moths, although they were hard to find, possibly due to the weather.

If you do make a trip out to western Minnesota to visit the Bonanza Prairie SNA, plan to extend your stay by stopping at other sites of botanical interest in the area. The Clinton Prairie SNA is a mesic blacksoil prairie which produces a nice display of white camas, Carolina delphinium and downy gentian. In the Big Stone National Wildlife Refuge there is an excellent hiking trail that meanders through rocky outcrops, which are home to a number of rare plants. Finally, to the south is Yellow Bank Hills SNA, which contains populations of listed plants including the yellow prairie violet, Missouri milk-vetch, and cutleaf ironplant. Enjoy your trip to western Minnesota!

MN DNR Scientific & Natural Areas Website:
https://www.dnr.state.mn.us/snas/index.html

Summary of the April Meeting Talk: *A Dozen "Charming" Minnesota Plants*

by *Stephen Saupe*

Alexius Hoffmann, OSB, a monk at Saint John's Abbey (Collegeville, MN), wrote: "A state as far north as Minnesota might be supposed to be unfavorable to the development of a fascinating flora – yet even this corner of "God's country" has its charms, modest though they be when compared with other countries" (*Natural History of Collegeville*, 1934). This is one of my favorite quotes and was the inspiration for the plant stories that I shared at the April 2025 meeting. What follows is a brief summary of the presentation that featured a dozen plant stories that I think are especially "charming."

1. **Anachronistic Plants** – Consider honey locust (*Gleditsia triacanthos*) and Kentucky coffee tree (*Gymnocladus dioica*). If you look around the base of these trees in the autumn there is usually a heap of pods. Though a few squirrels, deer or rabbits may disperse the fruits, these species appear to be good examples of plants whose natural dispersal agent, is now extinct. They are considered to be 'botanical anachronisms,' of which there are many other examples including ginkgo and avocado.

2. **Jack-in-the-pulpit** (*Arisaema triphyllum*) – Like European buckthorn and hemp, these plants are dioecious, meaning there are separate male (Jack's) and female (Jill's) plants. The coolest thing is that the type of flowers is determined by the growth conditions of the previous season. For example, a good growing season results in a large corm which yields female flowers. Jack-in-the-pulpit is also poisonous. Like many aroids, including skunk cabbage, wild calla, and many house-plants, they embed needle-like crystals, called raphides, in their tissues making a very irritating meal for an herbivore.

3. **Strawberries** (*Fragaria virginiana*) – A common misconception is that "strawberry is the only fruit with the seeds on the outside." The reason that this is false is because each "seed" is actually a separate botanical fruit that contains a single seed. A strawberry is an example of an aggregate fruit that is derived from a flower with multiple pistils.

4. **Shepherd's purse** (*Capsella bursa-pastoris*) – is named for the shape of the fruit which is reminiscent of the scrotal sac of a sheep. Frugal shepherd's presumably made purses from the abundance of raw materials after castration season. There is a suggestion (probably false) that the seeds, which release mucilage when wetted, may be carnivorous.

5. **Tamarack** (*Larix laricina*) – As we know from Welby Smith's outstanding book, *Trees of Minnesota*, tamarack was the most common tree in Minnesota at the time of settlement. This was learned by studying the land survey records from the 1850's and onward.

6. **Quaking aspen** (*Populus tremuloides*) – This is now the most common tree in Minnesota. It's a shame that the leaves of this tree are not featured in the design for the new Minnesota flag because these trees are found in every county and the leaves flutter like a flag in the slightest breeze due to their flattened petiole. Did you ever wonder why a cloth flag frays but the leaves of quaking aspen and other trees don't? That's because the leaf cells are glued together with pectins more tightly than the woven fibers of a flag, a waxy cuticle surrounds the leaf, and because leaves will deform in high winds into shapes with less drag.

7. **White snakeroot** (*Ageratina altissima*) – This plant produces a poison that passes into the milk of a cow that eats it. Drinking tainted milk killed many settlers in the Midwest during the westward expansion. Nancy Hanks Lincoln, Abe's mother and a distant relative of actor Tom Hanks, was among the victims of milk sickness.

(continued p 8)

Figure 10. Fr. Alexius Hoffmann, OSB., author of Natural History of Collegeville. Image courtesy Saint John's Abbey Archives.

8. **Wild leeks** (*Allium tricoccum*) – Did you know that Chicago is named after the Native American word for "skunk," referring to the garlic-odor of these plants that grew abundantly on the southern side of Lake Michigan?

9. **Rusty woodsia** (*Woodsia ilvensis*) – When moisture is available, these ferns of rocky outcrops grow happily. However, during a drought, the plants dry up and show no signs of life. However, once moisture is again available, they will green-up and spring back to life, which makes them an example of a resurrection plant. Other species that possess this remarkable ability include baker's yeast and the fairy ring mushroom (*Marasmius oreades*).

10. **Hog peanut** (*Amphicarpaea bracteata*) – Above ground, this amazing plant produces "normal," pea-like flowers that develop into small legumes. However, hog peanut also produces underground, cleistogamous flowers. These flowers, which never open for pollination, produce single-seeded pods that look like a garbanzo bean. The proportion of above and below ground flowers is determined by the growth conditions – the more sun the great number of above-ground flowers that set fruit.

11. **Plants with Binary Weapons** – About 10% of all plants produce cyanogenic glycosides which are a type of binary weapon. They are non-toxic until mixed with a digestive enzyme that causes them to release hydrogen cyanide. To avoid poisoning themselves, plants store the toxins in one part of the cell and the digestive enzymes in a different place. The two are mixed when a hungry herbivore takes a bite.

12. **Mayapple** (*Podophyllum peltatum*) – Though the ripe fruits are reported to be edible, be cautious because all other parts of the plant, including the unripe fruits, contain podophyllotoxin which is a potent cell division inhibitor which is used to 'chemically" burn-off warts. The sap can cause serious burns if you are not careful when handling the plant.

These plants are just a small sample of Minnesota "charmers." Would any of these make your list of favorite Minnesota stories?

Notes from the Herbarium

by Tim Whitfeld *(Collections Manager of the Bell Museum Herbarium at the University of Minnesota)*

Not everyone knows that on the 8th floor of the Biological Sciences building on the St. Paul campus of the University of Minnesota there are nearly 1 million dried plant, fungi, lichen, bryophyte, and algae specimens. These are the collections of the University of Minnesota's Herbarium, a library of botanical diversity that has been in existence since 1875.

Originally, the collection was in the Department of Botany, but in 1996 it became part of the part of the Bell Museum, which itself came into existence as the result of legislation enacted by the State of Minnesota on February 20, 1872. The law that passed on that date mandated the University to initiate the Minnesota Geological and Natural History Survey and to preserve the resulting specimens (plants, animals, rocks, soils, fossils) for "public inspection, free of cost, in the University of Minnesota, in rooms convenient of access and properly warmed, lighted, ventilated and furnished, and in charge of a proper scientific curator."

To carry out the provisions of this act, the legislature appropriated an annual sum

Figure 11. Example of a range map for black spruce that can be generated from the Bell Museum Biodiversity Atlas. Image courtesy of Tim Whitfeld.

of $1,000. Despite not always being "properly warmed" the Herbarium has grown in leaps and bounds from the initial tranche of state survey specimens. Our leather-bound ledger records the first major acquisition in 1888 (aside from the State Survey specimens) of six thousand specimens from the Rocky Mountain states collected by John Sandberg, many from areas that later became National Parks. For this collection, the University paid $500, a significant investment for the time. It was Conway MacMillan who made this purchase after he was hired by the University to instruct botany, collect specimens for the Survey, and be the mandated "proper scientific curator" to oversee the Herbarium.

By 1914, the collection had expanded to around four hundred thousand specimens and become global in extent. Since then, faculty, staff, students, external researchers, and state and federal agencies have continued to add new collections from Minnesota, North America, and across the world. Collections from Minnesota alone now stand at around 270,000 specimens. We have specimens of algae (~5,000) bryophytes (7,818), fungi (16,274), lichens (38,351), and vascular plants (206,132) from all 87 of Minnesota's counties, dating from the early 1800s to the pre-sent day. Since 1987, many of these local collections were made by botanists working for the Minnesota Biological Survey, a unit within the Minnesota Department of Natural Resources.

Where the first Geological and Natural History Survey was motivated by inventory, primarily for the purpose of resource extraction, this second round of biological surveys, over 100 years later, was driven by a need for the conservation of dwindling biodiversity. From the perspective of the Herbarium, the

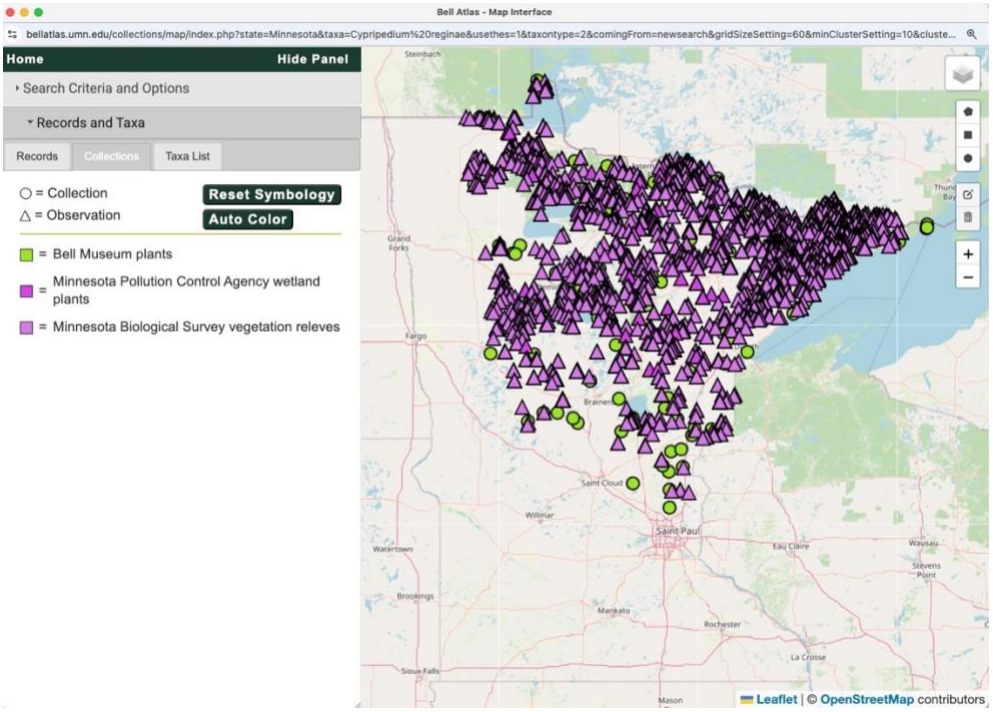

Figure 12. Example of a range map for black spruce. Each point indicates an expert observation (purple triangles) or herbarium specimen (green circles). Image courtesy Tim Whitfeld.

Minnesota Biological Survey has increased local collecting efforts such that we can boast a strong collection of late 20th and early 21st century specimens to complement our 19th and early 20th century specimens. This is not always the case in other herbaria. Natural history collecting began to peter out following the molecular biology revolution in the 1950s and 60's so more recent decades are often poorly represented. Thanks to the Minnesota Biological Survey and hundreds of other collectors over the past two centuries, the Bell Museum's Herbarium has a decade-by-decade documentation of our state's botanical diversity for tracking species' distributions, documenting introduced plants, investigating changes to plant's life cycles, and recording environmental pollution through time. Scientific collections provide an opportunity for time travel by allowing us to access data from the past as a point of comparison for the present. Furthermore, the collections are important for taxonomy and classification, they pro-vide data for studies of evolution, and are a reference for identification.

An exciting development across the world of scientific collections is the ongoing effort to digitize specimens and make them available online. This opens up access to a much wider audience and allows people who may not be able to visit the collections in person to see and study specimens online. Over the past two decades, natural history collections across the world have been involved in this effort and millions of specimen records are available on data aggregator sites such as idigbio.org and gbif.org. Interestingly, a former curator of lichens at the Bell Museum (Clifford Wetmore) was a pioneer in this regard. In the 1970s, Dr. Wetmore began digitizing the University of Minnesota lichen collections on punch cards. These data have been carried forward

through various technological innovations and are still in use today in the Minnesota Biodiversity Atlas (https://bellatlas.umn.edu/).

The Biodiversity Atlas began in 2016 with support from Minnesota's Environment and Natural Resources Trust Fund (ENRTF). Initially, the Atlas included only specimens from the Bell Museum's collections (plants and animals) but additional support from the ENRTF has allowed us to expand and include collections from other Minnesota academic institutions, museums, and state agencies. There are now have over two million records in the *Atlas* with more added every day.

Our goal is to make the Atlas a one-stop-shop for anyone interested in Minnesota's biodiversity. Specimen data and images are available on the site and can be searched by date, locality, species name, or collector. It's possible to compile checklists for a particular county if you'd like to know what plants or animals have been documented in your area and maps can be generated with points showing records of a particular species across the entire state. There are many ways to query and slice the data for use in the classroom, the lab, or for conservation and management. It's also available for general users who would simply like to know more about the natural world in Minnesota. Most importantly, we are continuing to fulfill our legislative mandate to make specimen date available for "public inspection, free of cost" and we plan to continue this effort long into the future!

Figure 13. Sample specimen of dotted blazing star in the Bell Museum Herbarium at the University of Minnesota. Image courtesy Tim Whitfeld.

Bell Museum Herbarium at the University of Minnesota
https://www.bellmuseum.umn.edu/plants/