

## Botanical Bigotry

DR. STEPHEN SAUPE

My buddy Peter is gaga about cars. He loves everything about them – from tires to motors, Fords to Ferraris. Peter is my go-to guy if I ever have a car problem or need car advice. In other words, he knows his stuff.

With apologies to my ancestors, I am an automotive Neanderthal. As evidence, if Peter and I were walking down the street and we saw a cool car drive past, he might say something like, “Hey, check out that sweet 1969 Dodge Charger, 330-hp 383 with a 4-barrel.” My response would be, “My goodness, that’s a pretty yellow car.”

In contrast, the situation would probably be reversed if we were considering a plant. With all due respect to Peter, he likely wouldn’t know that a roadside weed with flat-topped clusters of yellow flowers and lacy foliage is Wild parsnip (*Pastinaca sativa*) and that it is listed as a noxious weed by the Minnesota Department of Agriculture. He might also try to handle the plant not realizing that the sap contains chemicals called furanocoumarins that, when they interact with sunlight, cause a sunburn-like rash and blistering.

Birders and botanists are similar. I’ve been on Audubon excursions when an interesting avian

“Studies of school-age children consistently show that they prefer to study animals. Students also learn and retain zoological concepts more readily than botanical ones.”

lands nearby and the leader might say, “Isn’t this exciting! A clay-colored sparrow just landed in that bush over there,” while I’m thinking, “Do you mean that drab dicky-bird perching in *Rhus glabra* (smooth sumac)?”

Perhaps the take-home message is that each of us has our own unique intellectual interests, preferences, and talents. I love plants and learning as much about them as I can. It comes easy to me. For others, cars or birds are their passion. Sadly, I don’t think I’ll ever be able to learn the names of sparrows or hot rods. For whatever reasons, my brain seems to be biased or prejudiced against them.

If you too like plants, you are definitely in the minority. For example, studies of school-age children consistently show that they prefer to study animals. Students also learn and retain zoological concepts more readily than botanical ones. Though both girls and boys prefer animals, girls, bless their hearts, show a preference for studying plants when compared to boys. Kids and adults are, to use a fancy word, zoocentric.

Most people simply don’t notice plants in their environment and fail to recognize the importance of plants. In 1999 James Wandersee dubbed this condition, “plant blindness.” This term is now often applied to any situation in which individuals show a preference for animals and a concomitant lack of interest in and knowledge about plants. If you don’t notice or care about the difference between Wild parsnip and say, Common tansy (*Tanacetum vulgare*), then you may exhibit plant blindness.



As a botanist, Dr. Stephen Saupe regularly leads plant hikes in the Abbey Arboretum, one way to counteract our zoological preferences and the brain’s apparent bias against plants. OUTDOOR U ARCHIVES.

By analogy, I guess that makes me the poster child for “automotive blindness.”

Why is plant blindness so prevalent? There are many possible causes. Perhaps there is an innate human preference, zoothauvinism, for creatures that look like us.

Botanical illiteracy is surely a factor. Botany is often neglected in the curriculum. Many biology textbooks have significantly less coverage of plants than animals. Uninspiring, uninteresting, and hypertechnical botany lessons, combined with teachers who use precious few botanical examples, likely all contribute to plant blindness.

A lack of botanical mentors is certainly another cause. I can directly trace my love of plants to one of my undergraduate professors, Dr. Gwynn Ramsey, who took me on field trips to the Smoky Mountains and recruited me to work in the herbarium. Dr. Ramsey, coupled with my discovery of books by Euell Gibbons, a popular author who wrote about edible and medicinal wild plants, were the key mentors who watered and fertilized the seed of my botanical future.

A more controversial explanation for plant blindness



This child could be studying the differences in red maple and sugar maple buds in the early spring. But it is much more likely she's aiming to find a critter moving around in the forest canopy. OUTDOOR U ARCHIVES.

is that there may be a physiological cause. Wandersee hypothesized that our brain and visual system are not designed to see plants because plants don't move, are more or less uniformly colored, and blend into their background.

Though you might be tempted to think that I do not exhibit plant blindness, you'd be wrong. For some plants like the sedges, I'm as blind as the proverbial bat. Welby Smith, Minnesota State Botanist with the MN DNR, recently published a book about Minnesota sedges. Guess how many species there are. Right, 217! It is one of the largest groups of Minnesota plants. Now, guess how many sedges I can confidently identify. If I round up, less than a dozen.

Why am I sedge blind? Perhaps it's because many of the sedges look superficially alike and are distinguished by relative minor differences. Or I simply haven't made the necessary effort to appreciate these differences. Or I haven't had a mentor, like Welby, teaching me how to identify sedges.

As a botanist and teacher, my mission has always been to open my students' eyes to the fascination of plants. From hosting an informal campus botany club – Plant Science Alliance – to creating botanical displays in the hallways, to decorating the Bailey Herbarium like an herbal Disneyland, I've tried to provide opportunities for our students to escape plant blindness.

As recent events have sadly shown, our biases and prejudices often extend to other people, as well as toward plants. There are bigots against both people and plants. Perhaps some of the solutions to plant blindness, such as better education and mentors, could be applied to anti-racism and diversity initiatives. In the meantime, I'm certainly glad we have people like Peter who are vehicular geniuses, birders who can recognize a sparrow by an evanescent sighting, and DNR botanists who are sedge gurus. After all, diversity is what makes the world go round. Just imagine how boring life would be if everyone loved plants as much as me.

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*DR. STEPHEN SAUPE is a CSB/SJU professor of biology. If they weren't quite so rare we might have other options for our resident plant expert. But we voted and decided to keep him around for all our botany needs anyway.*

# A History of the Snowshoe

KYLE RAUCH

Snowshoeing in deep powder on a winter trek in the Arb is an exploratory experience. Snowshoes give you the ability to intrepidly climb kames and eskers then glissade down the backside, only to ascend the next and repeat. They're just as fun to set out on a march across the lake.

In places where the winter snow piles up, snowshoeing is a great option for folks looking to enjoy the outdoors during the cold winter months. The activity broadens your ability to interact with the landscape by enticing you with your well adapted footwear to explore the harder to get to places. In fact, snowshoes work much better off trail where the snow is deeper and unbroken. Deep snow also protects overwintering plants, minimizing your impact on the land while traveling off trail.

Evidence of snowshoes is found on rock art and archaeological finds in central Asia, roughly 8,000 years ago (pre-dating the wheel), however, the technology was likely used earlier in the Late Pleistocene as humans dispersed across Siberia through Beringia and into the Americas.

Snowshoeing was long used as a means of winter transportation for Indigenous groups, then later trappers, explorers, and woodsmen. In places where people lived in deep snow for part of their yearly cycle, the key to survival was finding ways to move efficiently through the landscape.

The purpose of the snowshoe is to allow its user to "float" on the snow. The tool allows your weight to be distributed over a larger surface area which increases flotation. The result is not sinking into the snowpack with each step. The snowshoe also allows easy recovery from step to step as the snow does not sink in around each "post-holing" step, which happens when not using snowshoes.

The look and feel of the snowshoe has varied historically, but the basic design and principle has gone mostly unchanged. Was the idea inspired by observing other animal adaptations such as snowshoe hare or lynx,



Snowshoes have been around for thousands of years, and while there have been many different designs, the basic parts support the key function: to help humans "float" atop deep snow. KYLE RAUCH.

both of whom have perfected the floating technique in the snow?

In North America, the snowshoe evolved into the frame and lacing design (racquettes, the early French explorers called them) by the many Indigenous groups living across the boreal regions of the continent. Snowshoe frames were made of ash due to its pliability and strength, while the lacing was made of rawhide or sinew usually harvested from cervids, the family of animals that includes deer, elk, and reindeer. Indian Nations including the Algonquin and Athabaskan used these materials to create their own snowshoe designs that were adapted for specific use in their local landscape. Some of these designs include the Bearpaw, Ojibwe, Yukon, and Beavertail.

Recreational snowshoeing became popular in Canada during the 19th century. But in the first half of the 20th century, as skiing became more common in North America, long established snowshoe clubs and snowshoeing as a leisure activity fell out of style. Modern recreational snowshoes, developed in the 1970-

80s, helped revitalize the outdoor activity.

In recent decades a smaller, light-weight product has dominated recreational use. Modern designs use a tubular aluminum frame, synthetic leather decking, hard plastic bindings, and nylon straps to make a smaller, oval-shaped, and easy to use snowshoe. They also expanded the playground for snowshoeing by adding metal spikes or crampons to the bottom of the bindings allowing hikers to ascend mountainous terrain.

The new durable design, easy use, and low cost of snowshoes make it one of the most accessible outdoor recreation activities for the winter months. It's also an activity that requires little technical skill, little space for storage/transport, relatively little investment, and is permitted on most public lands. Snowshoeing is fun, healthy, and can easily be done with groups.

Outdoor U has led multiple snowshoe treks for

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# Belonging in the Outdoors

CRYSTAL DIAZ '22

“...there was no way I, a Latina woman from Southside Chicago, could call myself outdoorsy.”

As an out-of-state Saint Ben's student – I was born and raised in the inner city of Chicago – I never had the direct exposure to what I understood “the outdoors” to mean. All that started to change immediately upon entering my first year of college.

I was drawn to the opportunities Outdoor U brings to students to connect with the outdoors: Collegebound, the Peer Resource Program, and the Outdoor Leadership Center all facilitate programs, challenge courses, and wilderness trips that are open to the whole student body. My first year, I even signed up for a spring break climbing trip in Utah while having no climbing experience whatsoever. I now have a great passion for climbing and enjoy using the campus climbing wall with my friends. I have had the incredible opportunity to learn about and appreciate our natural spaces, and through these experiences I have created some of the best memories and friendships, as well as a huge appreciation for exploring our beautiful world.

Even as I was discovering my passion for the outdoors, I couldn't help but notice that I didn't seem to fit the mold of what it means to be “outdoorsy” and started to second-guess if I could be. I especially remember seeing all the films in the annual BANFF Film Festival and being at once overwhelmed and inspired by the amazing snow

sport films, but also lonely in the realization that BIPOC (black, indigenous, people of color), queer, disabled, and plus-sized athletes were not represented within the norm of how society defines an outdoor athlete. With that one, mostly white, perspective of people's relationship with “the outdoors,” I started to think that there was no way I, a Latina woman from Southside Chicago, could call myself outdoorsy.

Barriers to connecting with the outdoors are very real for people with disabilities, BIPOC, LGBTQIA+, and other marginalized communities, including access to outdoor spaces, feeling unwelcome, discrimination, lack of financial resources for “proper” outdoor equipment, and many others.

I've worked hard to regain my footing to consider myself outdoorsy and personally connected with the natural world. I try not to allow my passions to be discredited by comparison to the stereotypical outdoor experiences. This personal journey inspired my collaboration with Outdoor U student naturalist, Sara Holmes, and the Saint Ben's and Saint John's student senates to create a platform where students and the wider CSB/SJU community can share their unique stories and experiences with the natural world.

*Nature's Narratives: where we work, live, and play*

seeks to both change and add to the narrative of “the outdoors.” We welcome images and experiences of “traditional” outdoor experiences of big mountains, forest, lakes. But we especially invite sharing those “non-traditional” outdoor experiences from our community members hailing from all over the world, many of whom did not grow up within reach of those traditional outdoor spaces.

Connections to nature look different for each of us. As a city girl, my connection to nature includes running



From running in city parks to dangling from a rock outcrop in Utah, Crystal Diaz has been on a journey of discovery in the outdoors that gives her growing confidence that there is a place for her in the natural world. CRYSTAL DIAZ.

CRYSTAL, CONTINUED ON PAGE 7

# Belonging in the Outdoors

ISABELLA BOVEE '24

“...having access to opportunities made learning to love the outdoors so effortless.”

The transition from high school to college is a right of passage for many. It's a transition towards independence, personal growth, and at CSB/SJU “empowering you to ask and answer wicked questions.” My transition began in 2020, amid a global pandemic and a national reckoning with racial justice, causing me to reflect on both the challenges and opportunities of this time.

As a college student, I understand the struggle of balancing school with work and a new social life. College is a planned “upending” of normal life. And COVID-19 is the unplanned wrinkle challenging my college plans. At such a pivotal time in my life, things have been nothing short of hectic.

Growing up, it was normal for me to go on Sunday bike rides around Lake Nokomis with my family. Getting to explore the many trails around the lakes of Minneapolis, just a few blocks from my childhood home, are among my most cherished memories. Being in such proximity to the trails and having access to bikes and hammocks and other opportunities made learning to love the outdoors so effortless. I've always appreciated the ability to use the natural world as a place of joy, recreation, healing, and community but it's only recently I've come to realize my privilege in having that resource at my disposal.

Living at CSB/SJU I continue to have ready access to trails and natural spaces. There are still days where I realize I hardly went outside the whole day (hello Zoom meetings!), but the days I do find the time to get outside, that fresh air has proven incredibly beneficial to my mood, my focus, and my overall health. This is true under normal conditions, but even more so now that interactions with others is so limited. And having access to safe outdoor spaces not only relieves stress but is one of the most pandemic-friendly ways to get some of those much-needed human interactions.

My experiences outdoors have also given me a chance to reflect on some of those big “wicked questions” I'm meant to embrace. How do we make the outdoors accessible to all? Does access to nature make healthier communities? What barriers – economic, education, accessibility, race – do people different from me face in getting outside? Can we learn from our COVID-19 adaptations to improve accessibility to the outdoors for more communities?

I have always been accustomed to having access to outdoor experiences with very few obstacles to overcome.

ISABELLA, CONTINUED ON PAGE 7



Traveling to beautiful outdoor spaces from a young age (top, with her family as a child), having ready access to trails, lakes, and beaches near her home (bottom left), and hammocking with friends in the Abbey Arboretum, are all ways being in the outdoors has been a natural and comfortable part of Isabella Bovee's days. ISABELLA BOVEE.

## What are wicked questions?

They're the world's biggest questions. The ones that few ask because they feel impossible to answer. They require a blending of ideas from a broad range of fields, a variety of experiences, and creative-thinking to meet the challenges of the day.

[csbsju.edu/integrations-curriculum](https://csbsju.edu/integrations-curriculum)

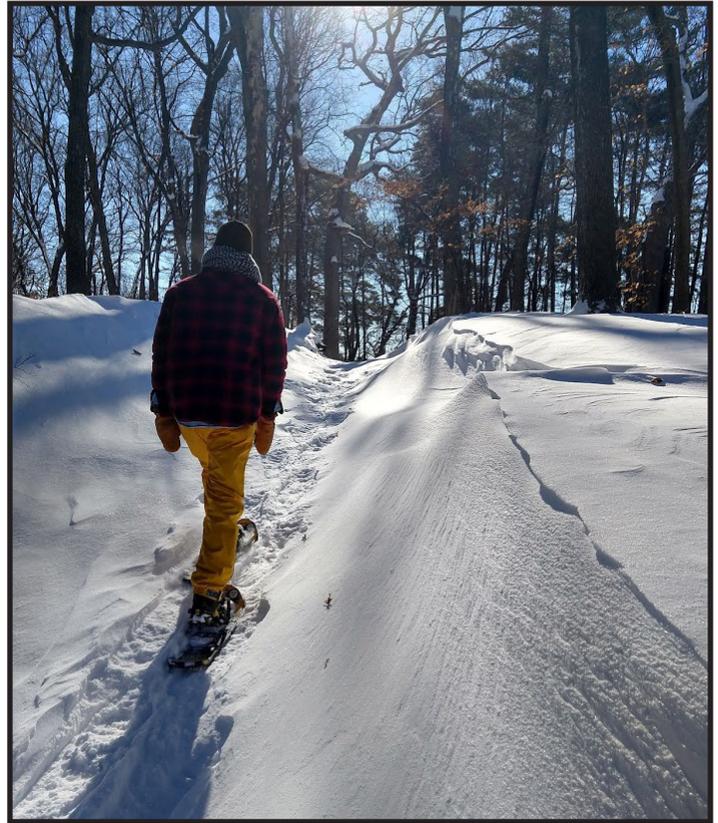
college students this winter with mostly beginners trying the activity for the first time. As COVID-19 has forced many people to flock to the outdoors for leisure this year, snowshoe sales have skyrocketed just as bikes and Nordic skis have. It will be interesting to see how many of these beginner recreationalists will stick with these activities after making the initial investment and effort.

The history, designs, uses, and trends of snowshoeing make for an interesting story, expanding our appreciation for this ancient technology and the Indigenous ingenuity that created it. Let's enjoy the northern winter.

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**KYLE RAUCH** is an environmental education coordinator for Outdoor U and director of adventure programs. From ice-age megafauna to the history of snowshoes, Kyle's natural history knowledge and passion runs as deep as the snow we wish to trek with our snowshoes. Interested in learning more?

1. Snowshoe History. GV Snowshoes. [www.gvsnowshoes.com](http://www.gvsnowshoes.com)
2. Wickman, Thomas M. (2018). *Snowshoe Country: an environmental and cultural history of winter in the early American Northeast*. Cambridge University Press.
3. Joque, J. (2019). Snowshoeing Education: Crossing Paths on My Ojibwa Snowshoes. *Snowshoe Magazine*.



Snowshoeing is one of the more accessible winter activities and can be a peaceful and grounding recreational experience. OUTDOOR U ARCHIVES.

This winter, a group of CSB/SJU students were selected by lottery to attend a snowshoe making class hosted by Outdoor U. Students were able to make a pair of Ojibwe-style snowshoes. Using black ash harvested from the Abbey Arboretum, the students bent the steamed quarter-sawn strips into the customary teardrop shape tapering at both ends with upturned toes using a bending form. Two opposing halves of the ash frame were connected via a copper rivet to form the tapered tip and tail of the snowshoe.

Students then used tubular nylon lacing to weave the toe, mid, and heel sections as was traditionally done with sinew. The Ojibwe or Cree style snowshoe found in the north was well suited to speedy travel in and out of forested areas and through deep snow. It was also an easier to make snowshoe as it uses two pieces of bent ash to form instead of a more difficult tight 180-degree bend if you are using only one piece of ash to form the shoe. Historically rawhide straps or thongs bound the foot to the snowshoe. Today, we are attaching pre-made bindings of nylon straps and plastic buckles. The group will finish weaving their shoes this spring before we come back together to apply a protective varnish to finish them. PHOTOS BY JOHN GEISSLER.



# Get Involved

SAINT JOHN'S OUTDOOR UNIVERSITY

## ABBEY CONSERVATION CORPS WORKDAYS

[csbsju.edu/outdooru/events/volunteer](https://csbsju.edu/outdooru/events/volunteer)

Help with land stewardship efforts in the 2,944-acre Abbey Arboretum this season. Meet in Science Lot 1 and be prepared to drive individually to work sites. Participants must follow current COVID-19 regulations, including social-distancing and masking. No experience necessary.

Wednesdays weekly

10:00 a.m. - 12:00 p.m.

## ABBEY CONSERVATION CORPS LEAVE A LEGACY TREE PLANTING

[csbsju.edu/outdooru/events/volunteer](https://csbsju.edu/outdooru/events/volunteer)

Kick off the growing season with a day of service! Plant, protect and water up to 800 oak seedlings in the Abbey Arboretum. Sign up on our website to receive more details about the day.

Saturday, May 15

9:00 a.m.—Noon and/or 12:30—3:30 p.m.

## iNATURALIST SPECIES ID - ON YOUR OWN

[inaturalist.org](https://inaturalist.org)

Explore and share your observations in the Abbey Arboretum! Using iNaturalist to share photos of plants and animals you see, when and where you see them, creating a great phenology database for naturalists of all ages and abilities to explore. Search "Collegetown, MN" on inaturalist.org to start learning and sharing.

CRYSTAL, CONTINUED FROM PAGE 4

in neighborhood parks, walking the dog, and gardening with my mom and grandma.

Outdoor U staff have committed to increased efforts to reduce barriers to outdoor experiences for marginalized communities. CSB/SJU is founded on the Benedictine Values, including Respect for Persons, Justice, Stewardship, and Community Living. As Bennies, Johnnies, and members of the extended CSB/SJU community, we are privileged to be surrounded by beautiful and accessible outdoor spaces.

We are excited to highlight the unique and diverse experiences with the natural world within our community through the *Nature's Narratives* project. The Benedictine Values can serve as a guide to how we can be more mindful of our diverse identities and sharing this land so that someone like me no longer has to question whether my values, passions, and experiences belong in the outdoors.

*CRYSTAL DIAZ is a junior political science major and Hispanic studies minor at the College of Saint Benedict, and is a Peer Resource Program facilitator. She is beyond grateful for the sacrifices of her parents and grandparents that have made it possible for her to be a first-generation college student and a proud Bennie.*

ISABELLA, CONTINUED FROM PAGE 5

I have also grown to recognize how socio-economic and racial privilege have played a role in the opportunities I've had. This is not something I regret. On the contrary, it inspires me to make the effort to dismantle barriers and create bridges and pathways that give others exposure to all the beauty and glory of the natural world as readily as I have had.

With the chaos that comes with life as a college student (or as a human, really), the ability to spend as much time outdoors as possible is invaluable. Choosing to acknowledge my own privilege – and revel in the opportunities it has given me – while actively building a road to equality is well worth it for the betterment of people everywhere. I can't pretend to have any wicked answers to the big questions we face but getting outside is probably a good place to start looking.

*ISABELLA BOVEE is a first-year student at the College of Saint Benedict majoring in global business leadership and is an Outdoor U office and marketing assistant. She's looking forward to experiencing more "normal" levels of unpredictability in post-COVID college life but in the meantime, you can find her out on the trails.*

## Saint John's Outdoor University Staff:

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Saint John's Outdoor U Director  
Abbey Arboretum Land Manager  
SARAH GAINEY  
Assistant Director  
Envr. Education Coordinator  
KYLE RAUCH  
Assistant Director  
Envr. Education Coordinator  
JENNY KUTTER  
Department Coordinator  
Editor, Sagatagan Seasons  
HENRY BECKER  
Abbey Arboretum Forest Technician

## Student Staff:

2 OFFICE ASSISTANTS  
11 NATURALISTS  
2 LAND MANAGERS  
3 ADVENTURE ASSISTANTS  
36 PRP FACILITATORS  
16 OLC ASSOCIATES

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# SAGATAGAN SEASONS

Spring 2021

Saint John's  
**OUTDOOR**  
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## THE PROGRAM

Saint John's Outdoor University provides environmental and outdoor education through classes, events and initiatives with the Abbey Arboretum, Saint John's University and the College of Saint Benedict.

## THE PLACE

Saint John's Abbey Arboretum is more than 2,500 acres of lakes, prairie, oak savanna and forest owned by Saint John's Abbey and surrounding Saint John's University.

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# NATURE'S NARRATIVES

WHERE WE WORK, LIVE, AND PLAY



Visit [csbsju.edu/outdooru](http://csbsju.edu/outdooru) to learn more.