

LESSONS AT THE LAKE

by Joe Walewski, Director of Naturalist Training

Creative Writing, Aquatic Chemistry, Winter Mammals, Soil Ecology, Canoeing, Plant Photosynthesis, Animal Signs, Nature's Water Cycle, Predator-Prey Relationships, and Basketry were a few of the lessons offered during the early years of the Environmental Learning Center. By the mid-1980's we expanded the scope and depth of possibilities with lessons such as Acid Rain, Adventure Ropes, Ojibwe Heritage, Beaver Ecology, Snow Study, and Animal Senses. When we moved from Isabella to Finland, we experienced more than just a name change - to Wolf Ridge Environmental Learning Center. Boreal Forest Hike changed to Superior View Hike. Bog Study became Wetlands Ecology. Over the past decade we have enjoyed additions such as Food and Farming, Energy in Your Home, Our Changing World, Earthworks, and Frogs and Toads.

As new lessons arise, others are retired or absorbed. Aquatic Chemistry, Aquatic

Animal Behavior, and Stream Flow and Velocity are three early lessons all now part of Stream Study. Basketry remains in a much more complex Ojibwe Heritage class. Snow Study appears and dis-



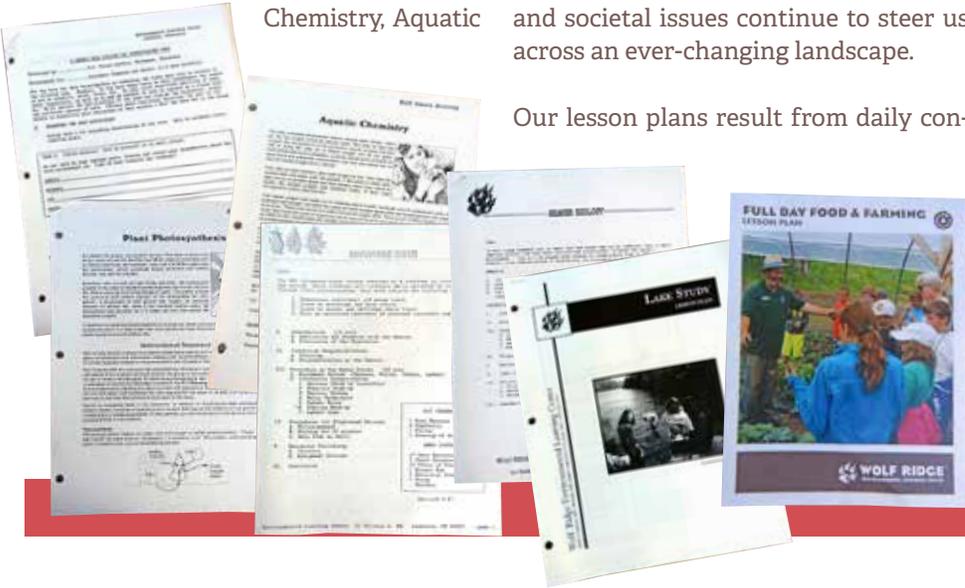
appears in Weather Forecasting depending upon daily weather conditions. And Soil Ecology serves the foundation on which Food and Farming rests. Early lesson plans continue to inform what we do and how we do it. Personal passions, funding opportunities, school requests, and societal issues continue to steer us across an ever-changing landscape.

Our lesson plans result from daily con-

versations starting with, "Hey, I have an idea!" Those ideas come from everywhere and everyone. Our Mission Statement guides our decisions about what we want to teach, but we rely on each other, our participants, and other great organizations to fuel creativity and drive innovation in our teaching.

Every few years, we assess our curriculum. How are classes holding up to changing demands? Do our lessons align with school learning standards? How can we link learning across our entire list of courses? What needs to be added to our written lessons in order to make them more usable for our changing teachers - the more than 30 naturalists who are tasked each year to teach over 40 different 3-hour lesson plans in every season and under all weather conditions.

With all this wonderful history, we now embrace a new opportunity. Based on educational research, scholarly work in environmental education, and decades of trial and error, Wolf Ridge is developing the Lake Superior curriculum. We don't take this lightly and you shouldn't either. Lake Superior is a fragile giant. We have the opportunity and obligation to educate about it and protect it. As we prepare to do so, we begin with topics ideas that inform followed by lessons supporting it. While curriculum addresses the WHAT of learning, lessons plans address the HOW.



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VIEW FROM THE RIDGE

by Pete Smerud, Executive Director



What will motivate us as a society? When will we take action? What will be the ethics with which we embrace our lives? I believe Aldo Leopold's words should be considered,

"We can be ethical only in relation to something we see, feel, understand, love, or otherwise have faith in."

Wolf Ridge was founded in 1971 with focus upon a love for the natural world, yet in the first years looked at the environment as a science based endeavor. By the mid 70's and distinctly in the 80's, our class offerings increased again and again to include subject matter on people, how we interact, and what values we hold in relation to the natural world.

I often hear discussions on climate change where phrases are heard that suggest we need to save the planet. It's not about the planet; rather the question is how the people of the planet will fare. The language used by contemporary educators is beginning to shift in how we talk about climate change. What was previously more focused on scientific understanding is becoming more about the ethical choices of an individual. Our ethics are affected by love – love of people, love of life, love of place. Hence, climate change education is starting to include a focus on love of life – the biosphere as a whole, or a love of place that is important to my loved ones and me. If that place is changing it affects my loved ones, therefore it affects me. Youth around the country are organizing and beginning to lead us, with protests and efforts to

draw attention because they care about THEIR future.

In the past few years, we've now begun to see impacts on a worldwide icon of freshwater, Lake Superior. When the coldest lake around is starting to have algae blooms, people sit up and take notice, wondering, "whoa, what's going on?" Wolf Ridge is now underway with development of our learning site on the Lake Superior shoreline. Our cover story highlights the curriculum that is being developed that will highlight love of place, how we interact with our environment, and the science behind it all. All children and adults need a little bit of Lake Superior in their heart, for if a little love is built, sound action will follow.

In this issue you'll see a list of names of people who I know have put their love into a commitment that will endure beyond their time on the planet. They've made a statement of support with a planned estate gift to Wolf Ridge. Wow! What an an-



Students focus on an amazing creature found in Stream Study class - the water scorpion.

chored way to ensure the people and place you love continues in a manner you hold dear by providing for that outcome even after you die. I was really moved by a short conversation I had with Vern Gersh, one of whom you'll see on that list. He said,

"It's not what we leave to people upon this earth, but the earth we leave to those we love."

Vern perfectly captured what Wolf Ridge is striving for in The Leaders of the Pack planned giving efforts. Vern is modeling hope by his decision to support for what he loves, well beyond his life, and provide a better place for those he loves. Please join those who annually donate to Wolf Ridge to help create the ethics we want to see in future generations. Join those who have signed on to leave a legacy upon their death.

Help Wolf Ridge programs reach more



Vern Gersh engaged in nature.

people so that we can inspire to build an ethical relationship experiences and love of the natural world. Is your business or corporation looking for a destination for their employees, a retreat or meeting that can be combined with helping your team leave a legacy of environmental understanding? Contact us. Know of a school that doesn't

attend Wolf Ridge and should, e.g. your child's school? We have room for more schools, contact us. Know of a family that wants to do a weekend reunion or gathering with outdoor learning and adventure? Contact us. Do you value assuring that children grow up with an outdoor ethic? Please consider a financial donation to help us reach those goals.

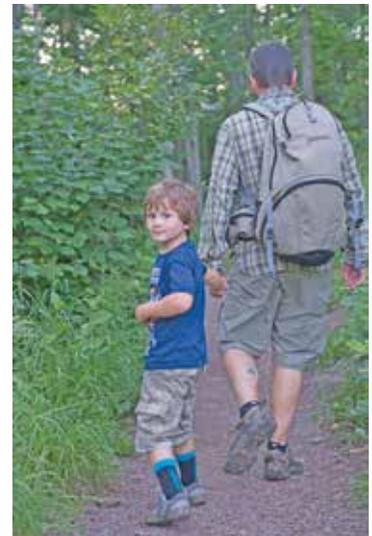
I visited with a school teacher today, Marlen, who had just spent 8 hours on a school bus with kids. He began his Monday morning with arrival to the school at 2:30am! The students and parents arrived not long after, all to get to Wolf Ridge in time for Monday afternoon classes. When I exclaimed, "wow," and asked him why "because I absolutely love what happens to my students at Wolf Ridge. It changes them in such good ways, and that's what I really care about." It seems Aldo Leopold, Vern, and Marlen all know quite well what will cause change and motivate us to act. ♦

THE LEADERS OF THE PACK

Reflect for a moment on your values. What legacy do you and your family want to see in perpetuity? Thoreau said, "To have made even one person's life a little better, that is to succeed." By making a planned gift, you are ensuring the Wolf Ridge experience is enhancing lives for generations to come. Join these *Leaders of the Pack* who have named Wolf Ridge in their estate plans.

With tremendous gratitude Wolf Ridge ELC gratefully acknowledges:

Sandy Ahlstrom
Tom Berg
Russ & Becky Bierbaum
Sue Blumentals
Donna Hill
Terry McLaughlin & Vern Gersh
Robert O'Hara
Nancy Schultz & John Eckfeldt
+ 4 others who choose not to list their names



Become a member of *The Leaders Of The Pack*. More detailed information is available on our website. Visit <https://wolf-ridge.org/donate/planned-giving-3/>. If you have already named Wolf Ridge as a beneficiary of your estate or are considering such, please contact Pete Smerud at 800-523-2733. ♦

HIDDEN HOMES

by Sam Guida, Wolf Ridge Naturalist

Today as I was walking back from the ropes course, I spotted one. Tucked away on a low bow of Balsam Fir were a few weird looking needles. They seemed to have a large bubble in them. The needles reminded me of lump in a snake as it digests its food. As I knelt down to look at them, I noticed more and more needles had these strange swellings! I had found a gall I had never seen before.



A gall is an abnormal plant growth caused by a number of different organisms including insects, mites, nematodes, fungi, bacteria and viruses. The mites and nematodes cause galls by chewing on the host plant, and then live in the galls they create. Insects, usually midges, wasps, aphids and adelgids lay their eggs inside the plant and as the larva develop, they eat the plant around them, causing a gall to form. Fungus, viruses and bacteria can infect young host plant cells. This damage to developing plant cells causes the plant to start producing various growth hormones, which create a flurry of new cell growth and increases cell size, leading to a large mass of growth on the plant. This summer I have been on an amazing treasure hunt finding and identifying galls.

My fascination with galls began when I was little. I grew up on a small fami-

ly farm in the center of Minnesota and spent a lot of time roaming through the woods and fields. One day, while on a walk with my dad, I noticed this ping pong sized ball in the middle of a plant stem. He told me that it was a gall and inside there was a bug. He cut it open and a huge grub was hidden inside! From then on, galls just kept popping up everywhere. Getting the cows in from the far field with my grandpa, we found these odd red balls scattered on the ground underneath the oaks. Cool sticks full of large bumps underneath the Jack Pines made sweet wizard staffs for my Halloween costume. When I came to Wolf Ridge I noticed them when I began looking. The first was in the form of a weird pinecone shaped gall perched on the end of a willow branch and then so many more.



The pinecone shaped gall that I found on a willow turned out to be a Willow Pinecone Gall Midge (*Rabdophaga strobiloide*).

The diversity of galls is staggering. With the number of different families of organisms which can create gall, just thinking about trying to identify them can seem overwhelming. Gall organisms are amazing examples of evolution. Each separate gall causing organism is not only host specific to the kind of host plant that it inhabits but is also specific to the location on that plant it creates a gall on. These locations include; leaves, stems/twigs,

buds, and flowers. This makes it surprisingly easy to research what kind of organism is causing a gall. Galling organism names are generally a string of 3-4 adjectives describing it. They often include the name of the plant, location on the plant or something it may look like, gall, and finally the type of organism which causes the gall.

After picking my strange new gall, I headed back to the Lakeview Staff House to identify it. The galls were on the needles of a Balsam Fir so I began looking for a Balsam Fir needle gall with *Google*. The first results that popped up were about Balsam Gall Midges (*Paradiplosis tumifex*) and soon I was able to confirm that that's what they indeed were. I sliced one of the galls open to find a small chamber containing a period sized grub.

Soon I will be heading out to the woods for class again. I know that if I just look at the plants around me a little closer, I will be able to find many other cool galls. Take a look at the plants near you next time you go out - I guarantee that you'll find some of these hidden gems. From there you can begin using the name formula to find out who lives in that hidden home. Happy hunting!♦



The huge round galls from my childhood which sparked my fascination with galls were found on Goldenrod and I have now learned are caused by Goldenrod Gall Flies (*Eurosta solidaginis*).



Pine-Pine Gall Rust (*Endocronartium harknessii*) creates large burls on Jack Pines making a great wizard staff for my Halloween costume.



The red orbs that my grandpa and I used to find under the oaks were created by Acorn Plum Gall Wasps (*Amphibolips quercusjuglans*).



Identify the plant and gall shape. Using this information try to figure out the name of the organism in the hidden home. Answer on page 11.

LESSONS AT THE LAKE continued from page 1

In these early stages, we are cautious not to leap directly into the fun details of lessons. Developing a foundation first provides stability and coherence across our curriculum for many years to come. Lesson plans are held together by a string of learning activities. Those will change over time - maybe even daily due to weather, group requests, student age, and more. Five sets of questions guide our current vision:

1. What can we learn about Lake Superior? How shall we learn it?
2. What environmental issues are connected to Lake Superior? How might we respond?
3. What are the natural communities of Lake Superior? How shall we explore them?
4. What are scientists doing to monitor Lake Superior? How is science practiced?
5. What can we do to serve natural communities at Lake Superior? How can we be of service?

All these questions and the lessons that follow fit nicely in our Spiral Learning Model. We begin with sensory-rich ways of knowing; reflect on individual human-nature connections; explore details of ecological stories on the shoreline; then

contribute through citizen science and/or service learning. The Spiral Learning Model helps educators plan and visualize connections in learning at various scales from learning activities to lessons (composed of several learning activities) to curriculum (represented by multiple lessons).

As we fine-tune the questions and narrow in on the most exciting and practical answers, we have no doubt much will change over the coming months. We also expect lesson plans in this Lake Superior curriculum will change over the decades ahead. All that being said, here is the current framework for our Lake Superior Curriculum. ♦

LAKE SUPERIOR CURRICULUM

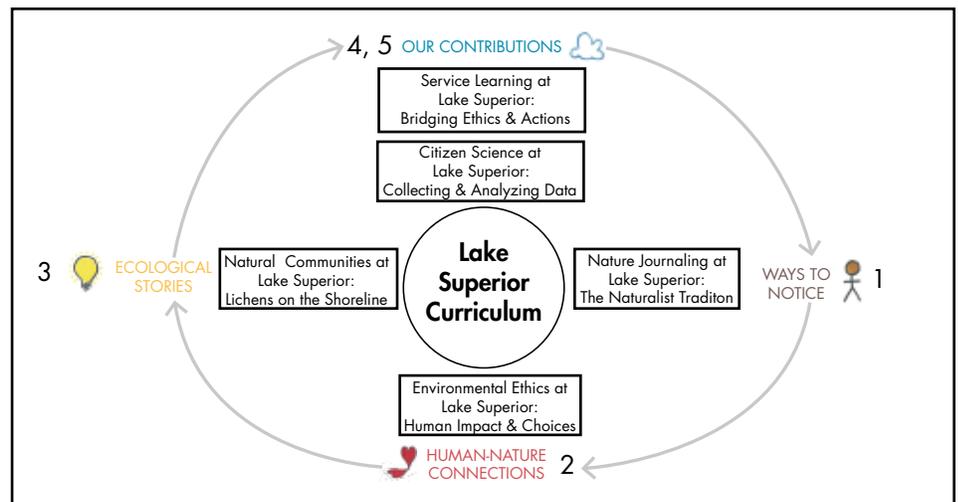
**Nature Journaling at Lake Superior
- Observation and Awareness**

**Environmental Ethics at Lake Superior
- Human Impact and Choices**

**Natural Communities at Lake Superior
- Biodiversity on the Shoreline**

**Citizen Science at Lake Superior
- Collecting and Analyzing Data**

**Service Learning at Lake Superior
- Bridging Ethics and Actions**



2019-20 SEASONAL NATURALISTS

Celia Carr

Hometown: Brooklyn, WI
BA Religion
Earlham College

Emma Davis

Hometown: Nashville, TN
BS Environmental Science
Troy University

Fernando Dominguez

Hometown: Las Vegas, NV
BA Religion
Carleton College

Sydney Fuerst

Hometown: Forest Lake, MN
BA Integrated Elementary & Special Ed
U of MN - Duluth

Sally Hertz

Hometown: Nevada, IA
BA Anthropology/Sociology
Truman State University

Katelyn Lavrenz

Hometown: Monticello, MN
BAS Teaching Life Science
U of MN - Duluth

Shannon Lusk

Hometown: Greenville, SC
BS Marine Biology
College of Charleston

Mary Junko

Hometown: Stillwater, MN
BS Biology
U of MN - Twin Cities



Becca Maxwell

Hometown: Westby, WI
BS Environmental Science
U of WI - Stout

Emma McHone

Hometown: Greensboro, NC
BA Global Studies
Colby College

Angus Mossman

Hometown: Leland, WI
BS Ecology & Evolutionary Biology
Yale University

Claire Poppendeck

Hometown: Plymouth, MN
BA Integrated Elementary & Special Ed
U of MN - Duluth

Federica Ranelli

Hometown: Duluth, MN
BS Food Science
U of WI - Madison

Kenzie Romportl

Hometown: Chanhassan, MN
BA Environmental Studies & Spanish
U of WI - Madison

Cora Walsh

Hometown: St. Paul, MN
BA Environmental Studies
Gustavus Adolphus College

Sofie Wicklund

Hometown: Marine on St. Croix, MN
BA Environmental Studies
Gustavus Adolphus College



Pete Langr (89) began a new job teaching at Hiawatha Collegiate H.S. in Mpls, MN. **Rebecca (Houston) Segal (97)** has recently started working at the Basalt Mountain Hemp Company as ranch manager/grower. **Margaret (Woodward) Rousche (04)** had a baby girl. **Heather Telschow (07)** is working as a RN in the medical/surgical unit with Essentia Health in Virginia, MN. **Emily Carraux (08)** got married. **David Butcher (10) and Katie Fritz (09)** had a baby girl, Ada June. **Angie Ziobro (11)** is now working at UM - Duluth as a communications associate. **MJ Bach (13)** got married. **David (12) and Katie (Kristenson) Stieler (12)** had another boy, Henrik. **Emily Ritchey (16)** is running Round River Farm's CSA. **Rory Anderson (17)** is the communications assistant for the Legislative-Citizens Commission on MN Resources (LCCMR). **Hannah Edstrom (17)** was a credit academy naturalist(nat) at WR & is an EE at Mount Rainier Insitute, WA. **Allison Hren (18)** was a credit academy nat at WR this summer & is now the Student Affairs Assistant at the School for Field Studies in Australia. **Maggie Noun (18)** also was a credit camp Nat at WR & can be found working at Nature Bridge in Olympic, WA. **Charles Paulisich (18)** led WR trips & landed a job teaching math at Two Harbors, MN H.S. **Rachel Sarette (18)** directed family programming at WR & joins Hannah at Mount Rainier. **Class of 2019: AnnMarie Backstrom** was a trip leader at WR & now is a naturalist at Deep Portage, MN. **Kaylyn Borucki** was the WR summer programs director & is currently studying for her masters of EE at Antioch. **Emily Delfosse** was employeed at County Line Tavern over summer & is teaching HS science in McGregor, MN. **Michelle Dinesen** was WR summer nat on the shore & joins AnnMarie at Deep Portage. **Hattie Geist** was a WR credit academy Nat & can be found working as a Nat at Tanglewood. **Isabel Gerber Brydolf** labored at Round River Farm for the summer & returns to WR as a mentor nat along with **Sam Guida**. He was summer nat here. Jay Halverson is employed as a seasonal gypsy moth surveyor for the MN DNR. **Paige Hietpas** started as a Campus Coordinator for Amerigo Education. **Robby Holmes** led WR trips & is staying for a second year as a mentor Nat. **Alex Kelley** spent the summer travelling Europe & is now a Nat at NEED Academy in Truro, MA. **Katie McCreary** was a credit academy Nat and continues on as a mentor naturalist with **Caroline Urban** who was the on-site coordinator at WR this summer. **Anna Weeks** taught summer school in Edina, MN & is now the 3rd & 4th grade special ed teacher at Lake County Intermediate School, CO. ♦

WOLF RIDGE NEWS BRIEFS

• This May, Hilltop Elementary School and WR celebrated the 40th year of Hilltop participating in our program. Former teachers came from around the country to mark the milestone and share stories of adventures over the past years with this year's attending 4th grade students. Wolf Ridge gives a special shout out to the teachers, parents, chaperones, and entire Westonka community for effort in making these experiences possible. The kids even did a bit of math to figure out how many 4th graders have attended in all those years, some as both kid and now parent!



• The Minnesota Pollution Control Agency (MPCA) recently recognized WR for 25 years involvement with the Citizen Lake Monitoring Program.

• Eco Artists for 4th-5th graders, another new camp program was launched. This talented crew created many pieces of art using a wide range of natural materials. An exhibit of their works capped the week.



• Wolf Ridge is sad to announce that Thistle, our beloved porcupine, passed away in June of a cancer illness. He charmed thousands of students and served as the WR animal ambassador at many events. He was 12.



• A section of Sawmill Creek Valley is looking a little greener. After discovery of invasive reed canary grass by Lake County Soil and Water Conservation District aquatic invasive species coordinator, Sonja Smerud (WR alumni), over 600 trees were planted and fenced to shade out the grass and create more shade to preserve ideal habitat for trout. Several teams of Conservation Corp Minnesota labored diligently over the summer hauling the trees, fencing, and tools to the riparian corridor and then with the planting.



• The U.S.A. National Committee on China-U.S. relations placed Chen Yang at WR for 4 weeks as part of a Professional Fellow's program. Chen Yang is deputy director of public education at the Shenzhen Mangrove Wetlands Conservation Foundation, where she is responsible for managing na-



ture centers in Shenzhen, conducting research on nature education development in Guangdong province, and facilitating the Wetland Education Center Program. WR was the 30th center Chen Yang has visited and following her visit has chosen WR as the model she chooses for the nature centers of China to replicate. In January of 2020, the USA National Committee is sending Peter Smerud to China to help in development of the country's nature centers.

• Family camp participants greatly enjoyed the first farm to table dinners at the WR farm. Nothing tastes as yummy as fresh food cooked and served in a beautiful setting.

• This year marked the 20th anniversary of WR's 1998-99 class of student naturalists. It was exciting to see folks from across the U.S. and as far as the Netherlands attend. We all took a trip down memory lane and shared the development of the farm, Lakeview House, and MAC Lodge with them.

• Minnesota Public Radio asked Peter Smerud to tour and help MPR host Angela Davis learn more about Tettegouche State Park and the North Shore. Recordings from their day together was paired with a live broadcast from Tettegouche as MPR kicked off Water Month in July. Peter was joined in the live broadcast by Becky Meyer, U of MN Extension Educator (WR alumni). The conversation centered on the importance of getting outside, our MN state parks, and water.

• Things were hopping in the WR wilderness trip department this summer. Four 5-day BWCAW canoe trips hit the water along with numerous other canoe, kayaking, backpacking trips. Thirty-seven moose sightings were recorded on the Isle Royale backpack adventure!

• Our first ever Ornithology Field Camp for 10-12th graders drew students from all over the U.S. They had the opportunity to engage first hand in songbird banding, watch banding of peregrine chicks, and hone their visual and auditory banding skills. ♦

NEW POSITION & NEW FACE

Wolf Ridge is excited to share that the newly created position of Facility Operations Director has been filled by long time employee, Betsey Mead. This position was developed to help serve the growing and changing needs of Wolf Ridge. As executive director, Pete Smerud turns his focus more outward towards the building of external partnerships to support Wolf Ridge and its programs, Betsey steps in to head the hospitality services provided at Wolf Ridge by the maintenance, custodial, office, and food service departments. She also is the link between the program and hospitality teams. With Shannon as the associate director in charge of the program and Ken Smith handling finances and human resources. Mike Krussow was hired to fill the program coordinator that Betsey vacated. Learn more about these two dedicated individuals in their profiles. ♦

PROFILE: BETSEY MEAD

What is your connection to Wolf Ridge ELC and what have you done in the intervening years? The connection is strong! Wolf Ridge has been part of my story since I was 6 years old. I grew up in Isabella, was an Intern in 1991 and joined the program staff in 1996. I attended college at U of MN - Duluth and received BA in Elementary Education. For 3 years I taught school 6th grade in Eden Prairie which was followed by working as an outdoor educator at Quarry Hill and then it was on to Wolf Ridge. I have held various positions with Program Coordinator being the most recent and the longest. In June I moved into a new position, Facility Operations Director.

Tell our readers about something that you have learned as the result of your time or association with Wolf Ridge ELC. Take the long view. It will work out in the end.

Tell us about yourself - hobbies, family/pet status. My husband Kurt, a MN DNR Naturalist at Tettegouche State Park, and I have two happy and healthy grown daughters living in Duluth pursuing their interests and dreams. New empty nesters, Kurt and I play a lot of cribbage, while Loki, the yellow lab watches and hopes for a walk.

What book and/or movie would you recommend others read. I adored the epic fantasy novel, *The Name of the Wind*, by Patrick Rothfuss.

Please share a travel tip? Travel with your kids. Our family lived for a year overseas when our girls were young. Both agree that it was instrumental in who they are today.

What is your favorite place at Wolf Ridge and why? Up on the Oak hills of the Competitive Orienteering Course, overlooking Lake Superior.

If you could visit with any conservationist/naturalist/environmentalist, living or dead, who would it be and what would you say. I would love to talk with Alexandria Ocasio-Cortez, the U.S. Representative for New York's 14th congressional district. She is standing strong against the inertia of Washington, fighting for what she believes in. Now she is dealing with the failure of the New Green Deal and what's next.

Anything else you would like to share with our readers? If you know a teacher who brings a group to Wolf Ridge, thank them (or better yet, offer to help!) Often, they are putting hours of their own time into creating this opportunity for their students. They are the heroes. ♦



PROFILE: MIKE KRUSSOW

What is your connection to Wolf Ridge ELC? What year(s)? What have you been doing in the intervening years? I spent two memorable years as a naturalist at Wolf Ridge between 2013 and 2015. My first year at Wolf Ridge was split between being a naturalist and student teaching in Silver Bay and my second year there was as a mentor naturalist. After my second year at Wolf Ridge, I continued along the path of EE as an educator at Deep Portage Learning Center and as a Forest Service Interpreter. In the more recent past I found my way into the classroom ,teaching in a couple different settings. I spent one year teaching 4th grade in Silver Bay and was thrilled to be back along the North Shore again! I have spent the last two years working at Great Expectation School in Grand Marais as a science and math teacher for multiple grades. It was difficult to say goodbye to the students that I have spent the last two years with, but many of them have already promised a visit Wolf Ridge in the coming years!



Tell our readers about something that you have learned as the result of your time or association with Wolf Ridge ELC. Fun is underrated. Take the time to find things that you take delight in and do them. I have felt this and seen it in so many of the students at Wolf Ridge. The more enjoyable something is, the more likely you are to return to it and engage with it.

Tell us about yourself - hobbies, family/pet status. Aside from a 9-month stint, I have been living alongside Lake Superior for the last 10 years... quite the milestone for me! I am currently living in Lutsen with my finance, Sarah, who I met at Wolf Ridge. She works at North House Folk School in Grand Marais as the program manager for the Intern and Developing Artists programs. In my free time I love playing games and sports of all sorts. A weekend filled with boot hockey, cross-country skiing, and a board game to wind down sounds like a dream to me. I also enjoy bird watching, baking desserts, playing piano, and making homemade pasta.

What book and/or movie would you recommend others read. I enjoy reading most fantasy/ science fiction novels. I am a bit late to the party, but I am currently in the middle of my first read through of the Harry Potter series.

Please share a travel tip? My first tip would be to travel as much as possible, something I need to work on myself. My most recent travels brought me to the northern redwoods of California. If you have not had the pleasure of visiting these living giants you should clear some space in your schedule. We drove up the California coast from San Francisco and as the sun was setting we started to get into some serious redwood forests. The road was twisted back and forth on itself and with the ever darkening night it was a thrill to see the behemoth trees in flashes from the headlights. It wasn't until the next morning that I woke up and realized the sheer magnitude of the surrounding trees. Absolutely amazing!



What is your favorite place at Wolf Ridge and why? My favorite spot at Wolf Ridge depends on the season. In the winter it would be the southernmost point of Wolf Lake. There is a small grove of spindly cedars that grows along the edge of the lake. Everytime I go there in the winter it feels like I am stepping into a fairy tale. In spring and summer it would be any spot that I can catch a glimpse of migrating warblers...probably the hillside that flanks the north stairs and leads to Sawmill Creek. In fall I would say the top of Mystical Mountain for the pockets of color and beautiful view of Wolf Lake.

If you could visit with any conservationist/naturalist/environmentalist, living or dead, who would it be and what would you say. I would most want to have a conversation with Leonardo Da Vinci. Although he is usually thought of as an artist and inventor, much of his curiosity stemmed from observations he made of the natural world. I would love to pick his brain for a day!◆

Open House: (all ages) June 20, 9-4:00

Family Wknds: (all ages) Jan 17-20, Feb 21-23, Aug 14-17 **NEW**

Family Camp: (all ages) June 28-July 3, July 26-Aug 1, Aug 2-8

Grandparent/Grandchild Summer Adventure: (ages 6-11 & adults) July 19-23

Leave No Trace: (adults) May 16-20

Bird Banding IBP Beginning: (adults) June 21-28

Bird Banding IBP Advanced: (adults) June 30-July 4

Adult Wknds: (adults) Aug 14-17, Sept 25-27 **NEW**

Summer Sampler: (2nd-5th gr) June 24-27, Aug 12-15

Discoverers: (4th-5thgr) June 21-27, July 5-11, July 12-18, July 19-25, July 26-Aug 1, Aug 2-8, Aug 9-15

Voyageurs: (6th-7thgr) June 21-27, July 5-11, July 12-18, July 19-25, July 26-Aug 1, Aug 2-8, Aug 9-15

Adventurers: (8th-9thgr) July 12-18, July 19-25, July 26-Aug 1, Aug 2-8

Day Camp: (K-5thgr) June 29-July 3

Eco-Artists: (4th-5thgr) July 19-25

Green Energy Camp: (4st-5thgr) Aug 9-15

Voyageur Farm Camp: (6th-7th gr) June 21-27

Voyageurs 2-wk Ultimate Survival: (6th-7thgr) July 12-25

Wildlife Camp: (6th-7thgr) Aug 2-8

Angling to Archery: (6th-7thgr) July 5-11, Aug 9-15

Girls Rock the Ridge Leadership: (6th-7th) June 21-27, Aug 9-15

Boys Rock the Ridge Leadership: (6th-7th) July 26-Aug 1

Adventurers Farm Camp: (8th-9th gr) Jul 26-Aug 1

Camp Rock Climbing: (8th-9thgr) Aug 2-8

Advanced Youth Bird Banding: (10th-12thgr) July 5-11

Beginning Youth Bird Banding: (10th-12thgr) July 12-18 **NEW**

Youth Bird Canoe Trip: (10th-12thgr) July 12-18

Counselor-in-Training: (10th-12thgr) Aug 2-15

Credit Camp - Freshwater Ecology: (10th-12thgr) July 5-25

Credit Camp - Wilderness Ethics: (10th-12thgr) July 26-Aug 8

Superior Service Learning: (10th-12thgr) Aug 2-8

Superior Hiking Trail 5-day Backpack: (7th-8th) July 5-11

BWCAW Canoe 5-day: (7th-8thgr) July 26-Aug 1, Aug 9-15

Adventurers 2-wk BWCAW Canoe: (8th-9thgr) July 5-18

Adventurers 2-wk Isle Royale Backpack: (8th-9thgr) July 12-25

Adventurers Northwoods Kayak: (8th-9thgr) June 21-27

Jr Naturalists 2-wk Quetico Canoe: (10th-12thgr) July 19-Aug 1

Jr Naturalists 2-wk Apostle Island: (10th-12thgr) July 26-Aug 8

BWCAW Traverse Canoe Expedition: (10th-12th) June 28-July 18

Apostle Islands Kayak Expedition: (10th-12th) June 28-July 11



Gall ID Answer: Maple Spindle Gall Mite (*Vasates aceriscrumena*)



PHOTO © CHRISTIAN DALBEC

CHRISTIAN DALBEC

2020

The 2020 Wolf Ridge calendar features the work of Christian Dalbec. He was born in Two Harbors, MN and began taking photos in 2012. Known for being 'in and around the lake,' Dalbec specializes in wave and water photography as well as drone work. In 2015, Dalbec started swimming in the frigid waters of Lake Superior year round to capture his favorite locations from the water's view. Waves became a favorite subject to photograph. "Each one is a unique work of art." Dalbec's extraordinary photographs have been published in multiple magazines including *Lighthouse Digest* and *Lake Superior Magazine*. Calendars are available for \$18.95 including shipping. They are also available at special prices, in lots of 25, for school fundraising and retail resale. Proceeds of all calendar sales directly support children attending Wolf Ridge school programs. Email mail@wolf-ridge.org or call Wolf Ridge at (218) 353-7414 for more information and to order. ♦

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Complimentary Issue

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Wolf Ridge thanks these \$1,000+ donors

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Wolf Ridge is an accredited residential environmental school for persons of all ages. We offer immersion programs which involve direct observation and participation in outdoor experiences. Wolf Ridge programs focus on environmental sciences, human culture and history, personal growth, team building, and outdoor recreation.

Our mission is to develop a citizenry that has the knowledge, skills, motivation, and commitment to act together for a quality environment.

We meet our mission by:

- Fostering awareness, curiosity, and sensitivity to the natural world.
- Providing lifelong learning experiences in nature.
- Developing social understanding, respect, and cooperation.
- Modeling values, behaviors, and technologies which lead to a sustainable lifestyle.
- Promoting the concepts of conservation and stewardship.