



Agassiz Environmental Learning Center

~ Spring 2020 Newsletter ~

Mission: "To foster a greater understanding of the interrelationships between humans and nature"

In this Issue:

First of all, you'll notice many activities that the Agassiz ELC would normally be doing are being affected by coronavirus concerns. The Fertile Nature Center building and bathrooms will be closed until further notice. However, trails throughout the Fertile Sand Hills are open for much needed physical and mental well being. Kayak rentals will also be on hold until further notice.

The good news is the Great Outdoors has not been cancelled. Spring is here anyway with much enjoyment to be found in nature. You'll find lots of tips in this newsletter to enhance your experience. Get out and ENJOY ~ responsibly!

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Comments or story suggestions welcome, please contact:

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Spring in the Sand Hills

Changes are quick and numerous in our northern latitudes as spring arrives. The natural world changes as snow melts and rivers rise and fall, migratory birds pass through or prepare to nest, and pasque flowers pop up and bloom before giving way to prairie smoke and penstemon.

Regarding recreation, early April snow provided one last ski outing but quickly yielded to hiking explorations of the Fertile Sand Hills, often along well worn deer trails winding through the other-worldly terrain of grown-over sand dunes formed by winds over 4,000 years ago along these shores of Glacial Lake Agassiz—the largest glacial inland lake in the world.

While the retreat of the last ice age set the stage for formation of the Fertile Sand Hills, a warming climate today is creating adverse effects to local and world-wide environments. Climate change is the theme of this year's Earth Day, explore climate history and facts at the links below.

Skeptical Science.com lists 197 common myths about climate change alongside what the science actually says. It's all backed by abundant research.

Climate.nasa.gov has a multitude of visuals, and using language that you don't need to be a rocket scientist to understand, NASA dissects the evidence, causes and effects of climate change.

Climatecentral.org has research and charts of changes in not only temperature, but mosquito and tick issues, poison ivy potency, hardiness zones and more.

Scistarter is a great place to find, join, and contribute to science through more than 1600 formal and informal research projects, events and tools.

Earth Day Every Day tip: Don't get overwhelmed...just do something... take a plastic bag with you on walks and pick up trash...turn off lights...play/explore with kids outdoors. Be Kind!

Meet Agassiz ELC's New Education Program Director

Hello! My name is Brent Silvis and I'm the new Environmental Education Director at the Agassiz Environmental Learning Center. As a kid growing up in Pennsylvania, my favorite parts of the summer were trips to state parks and the environmental education programs offered there. Years later, as I was considering a career change, my experiences at those parks contributed a lot to my decision to return to college to pursue an environmental science degree.

Since graduating from University of North Dakota several years ago, I have taught classes at several area tribal and community colleges. Moving to Fertile, my wife and I

were quickly drawn to the beautiful Sand Hills and the recreation they provide. Now, I find myself fortunate to be the educator at the Agassiz Environmental



Learning Center and conducting my own environmental education programs! I look forward to assisting members of our community in discovering the education and recreation opportunities available at AELC and the Fertile Sand Hills Recreation Area.

Agassiz ELC March Board Mtg

Agassiz ELC regular board meeting was held March 12th at the Fertile Community Center. The main order of business was approval of hiring Brent Silvis as the new Education Program Director.

Tyler Janke, MnDNR presented a detailed burn plan for DNR land and a portion of the City's Sand Hills adjoining property. The Board approved of the proposed spring burn. Janke will coordinate with the local Fire Department.

AELC Board of Directors

Wayne Goeken, Erskine *Chair
Craig Engelstad, Fertile *Vice-Chair
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Agassiz ELC shall not discriminate on the basis of race, color, religion, creed, gender, gender expression, age, national origin, disability, marital status, sexual orientation, or military status, in any of its activities or operations.

I step into my new position at a very strange time. The coronavirus has had a tragic impact on many lives. All of us have found our daily lives radically changed. This would typically be one of the busiest times at AELC, with spring weather approaching and area schools bringing groups of students for outdoor education and recreation. Instead, this year the center is closed until further notice, with all spring programming postponed.

I hope, as we wait for this situation to pass, you will find opportunities to hit the trails in the Sand Hills for some exercise, fresh air and nature – remembering, of course, to maintain social distancing on the trails. I, personally, am taking this time to familiarize myself with the Nature Center, network with community members and work on our programming.

If you have questions about the Nature Center or its programming, are interested in becoming involved as a volunteer or member, are considering visiting or bringing a group to the learning center or the Sand Hills, or have ideas for how we could better engage the community in our education and recreation opportunities, please contact me at agassizelcfertile@gmail.com. I look forward to hearing from you and seeing you in the Sand Hills!

By Brent Silvis, AELC Education Program Director

The last fling of winter is over...The earth, the soil itself, has a dreaming quality about it. It is warm now to the touch; it has come alive; it hides secrets that in a moment, in a little while, it will tell.

Donald Culross Peattie, American naturalist and writer

Happy 50th Anniversary to Earth Day

Wednesday, April 22, 2020 will be Earth Day—the 50th Anniversary since its inaugural celebration on April 22, 1970. This year’s theme is climate action. The event was first proposed to the United Nations by John McConnell, a native of Iowa. Credit for establishing Earth Day in the United States is given to Senator Gaylord Nelson, of Wisconsin. Nelson is still a pretty big deal at the University of Wisconsin, where a college is named after him. Earth Day events are coordinated worldwide by the Earth Day Network.

The establishment of Earth Day coincided with the larger environmental movement of the late 60s and early 70s. This movement was catalyzed by a series of issues, such as the Cuyahoga River fires in Ohio, the extinction or near extinction of several species, including the bison and bald eagle, and the escalating nuclear arms race, as well as the publishing of several profound works such as “Sand County Almanac” and “Silent Spring”.

“Sand County Almanac” was written by another Iowan, Aldo Leopold, who eventually found his way to the University of Wisconsin. “Sand County Almanac” explains the need for a “land ethic”, or the need for humans to care for the land and the

environment. “Silent Spring”, which made the connection between the use of pesticides and the decline of bird populations, was written by Rachel Carson, who spent her early life in Pittsburgh.

It is no coincidence that Earth Day falls in the middle of National Environmental Education Week, which is April 20 – April 24. This annual event was established in 1990 and is coordinated by the National Environmental Education Foundation. On a typical year, this would be a perfect week to host visitors at the Agassiz ELC to celebrate the Earth and learn about environmental stewardship. However, our current situation doesn’t permit this.

I encourage everybody to make some time to get outside this week. The Sand Hills Recreation Area is a perfect place to do this. Get some fresh air and exercise, find a place to sit quietly for a while and just observe the nature around you, and search for signs of spring. Get involved by visiting earthday.org. Visit the AELC Facebook page, where I’ll be posting environmental education and Earth Day information, activities and links to virtual events throughout the week. Have a good week, find time for nature, and stay healthy.

Brent Silvis – AELC Education Program Director



Earth Week Hiking Tip—Check out Pasque Flowers in Fertile Sand Hills!

Usually, by the April 22nd timing of Earth Day, spring is well on its way at the Fertile Sand Hills. Winter’s snow has mostly melted and the spring flush of the Sand Hill River is subsiding. AND pasque flowers are blooming! Though a slow year so far, there should be dozens in bloom by Earth Day with hundreds more to follow--a spectacular display well worth the hike.

The lavender pasque flowers, sometimes referred to as prairie crocus, are the first flowers of spring in the Fertile Sand Hills. The best place to find them is at the southeast end of Death Valley 1. Pasque refers to Easter Passover and is the Old French spelling for “Easter,” which is often the time of it blooming. Pasque flower is the Manitoba provincial flower and the state flower of South Dakota. Happy Hiking! WG



Sand Hill River Trail

As local rivers and lakes shed their ice, paddlers are excited to get out and enjoy the open water. The Sand Hill River has become a very popular paddling option. Extreme caution is advised for any spring paddling due to the near freezing water that can quickly lead to hypothermia. Planning, preparation and common sense can help avoid mishaps and provide for a very fun paddling season ahead.

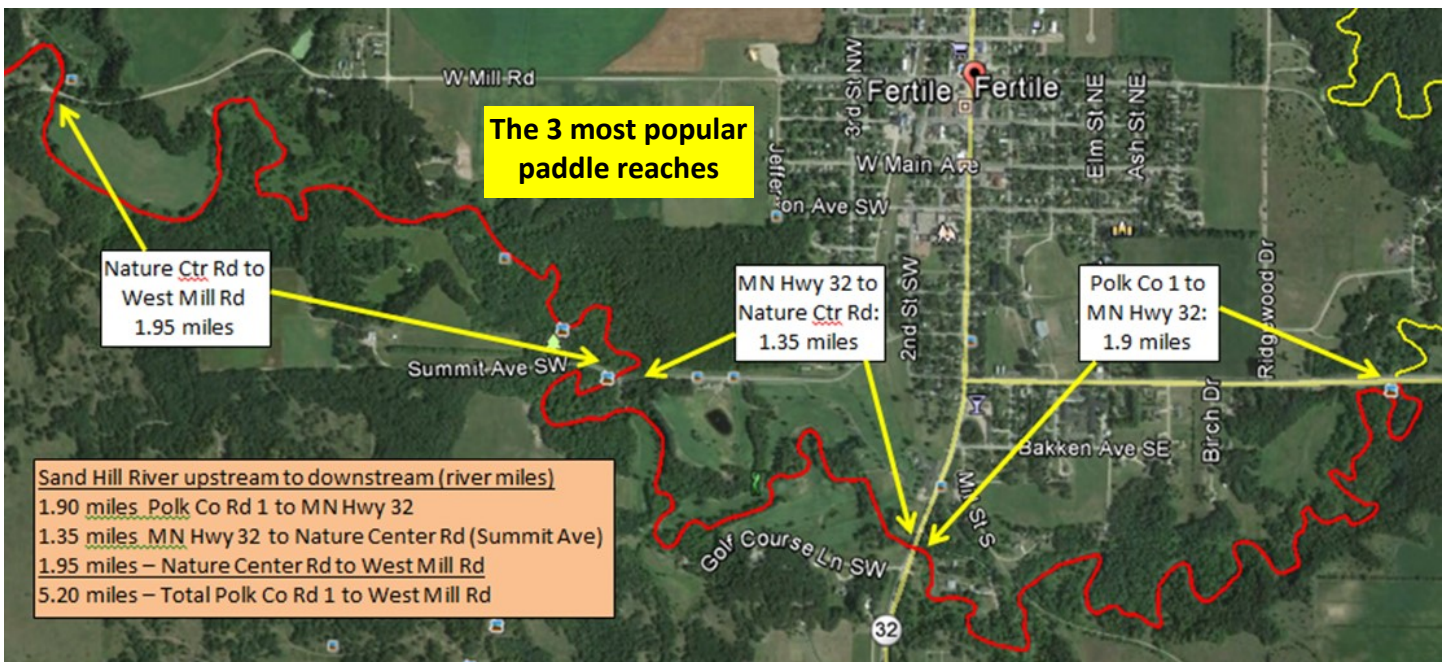


There are four segments of the Sand Hill River that can be paddled in the Fertile area covering eight river miles. Maps are available to show where to get on and off for these reaches as well as distance and time estimates for paddling each reach. Tree snagging of another six river miles in two reaches is being worked on downstream. Calmer reaches upstream between Winger and Rindal also provide fun early season paddling with lots of waterfowl and songbirds.

Paddlers in the Fertile area are fortunate to have a great asset for planning paddle trips—a river [gaging station](#) just downstream of Fertile that provides near real-time information online for river flow and stage or height. When flow drops to around 30-40 cubic feet per second (cfs), paddlers will be hitting rocks and may need to get out and drag through in spots. Flows above 250 cfs can be dangerous for inexperienced paddlers due to potential tree snags.

When our virus isolation status allows, the AELC looks forward to providing on-water sessions to introduce paddlers to basic kayaking and a tour of segments of the Sand Hill River. In the meantime, be extra cautious so as not to create any rescue situation where first responders would need to be involved—don't put any extra strain on our health care professionals at this time. The American Canoe Association has issued sensible COVID-19 guidance [here](#).

Watch for updates on the AELC and Sand Hill River Kayaking Facebook pages regarding updates on programs and availability of kayak rentals. Please share your kayak trip scouting reports on these Facebook pages to let others know if there are any trees down, water level reports, or other observations. WG



Geocaching

Do you geocache? There are a lot of reasons to love geocaching. It's free, provided you have access to a smartphone or GPS device. It requires that you get outside and exercise. You'll see some nature and explore some cool places you've never been before. And there is a sense of adventure in searching for hidden treasure that kids (and most adults) really love.

What is geocaching? Geocaching is basically a treasure hunt. A typical geocache is a weatherproof container hidden somewhere, which contains a logbook. Often, it will also contain little trinkets, or "swag", too. The geographic coordinates of the cache are provided and used with a GPS unit, or viewed through a smartphone app.

The objective is to use the GPS coordinates or information provided by the app to locate the cache. Once you find the cache, you record your find in the logbook. You can also bring a trinket or small item along to exchange for one of the trinkets in the cache. It's a good idea to also record your find in the app or on the geocaching.com website. If there is a problem with the cache or you couldn't find it, you can record that information, too. There is a worldwide community of geocachers and it is a lot of fun!

How do you get started? Normally, you could borrow a GPS unit from the nature center but, until we are able to reopen, you will have to use a smartphone. Download the app called "Geocaching". Once you've downloaded, installed and set up the app, you can use the map within the app to view nearby caches. Use the map to locate the cache. Click on the cache icon in the map for more information about the cache.

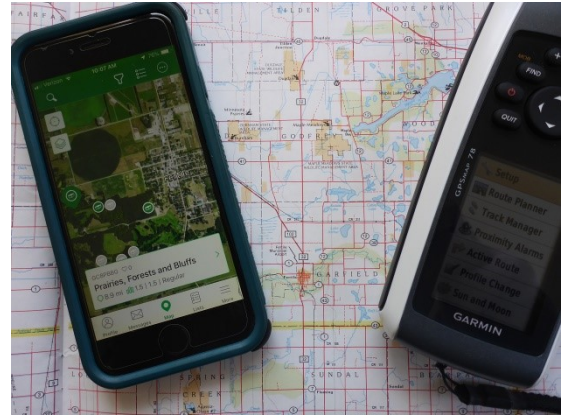
The app is free, but of course there's a catch. Detailed information about some of the more difficult caches can only be viewed if you pay for the premium version of the app. However, there is a website that corresponds with the app, geocaching.com. This is a great resource for learning about geocaching and it seems to provide more information about the premium caches than what is available through the free app.

There are currently about eleven caches in or very near to the Sand Hills Recreation Area. Two of them I've just placed and most of them I've visited recently to verify they are still intact. I've found that all the caches I've visited have been fairly easy to find. So, the Sand Hills would be a great place for an introduction to this great hobby. In fact, I've even been able to locate some of the premium caches there using only the little bit of information available in the free app.

That's my introductory lesson on geocaching. For more information, check out the geocaching.com website or search online for introductory videos. Send me an email at agassizelcfertile@gmail.com if you have questions. There's actually quite a bit more to know about geocaching and maybe in a future article I'll discuss things like travel bugs and earthcaches.

Finally, as long as coronavirus is a concern, use the same precautions while geocaching as you would in other situations. Maintain social distancing on the trail. Realize that somebody may have recently handled a cache. You may decide to search for caches but not handle them or, if you do handle them, immediately and thoroughly sanitize your hands afterwards.

Brent Silvis – AELC Education Program Director



Quick Links ~ Resources for Exploring

As spring awakens, the natural world is rapidly changing with birds arriving, plants emerging, and rivers flowing. With warmer temperatures, it is a great time to be outdoors and it is encouraged for physical and mental wellbeing amid the covid-19 restrictions. Simply getting out and hiking is calming in and of itself. In addition, there are many online resources and mobile apps to enhance your explorations. And full disclosure, we're just learning how to use some of these ourselves, so let us know how they work for you, or other resources you find useful. Let's GO!

Phenology, "the study of cyclic and seasonal natural phenomena, especially in relation to climate and plant and animal life," is a common way that people relate to their environment, whether they consciously know it or not. Things like ice-out dates on lakes, the first sighting of bluebirds, or the first blooms of pasque flowers are all phenology observations. Keeping track of these events from year to year provides an interesting perspective on local conditions as relates to climate change.

[Journey North](#) is a great site to follow phenology and progression of birds, butterflies, and blooms as maps are populated with sightings as seasons change—and you can report your sightings as well to help others track changes. Another perhaps more comprehensive site is at [USA National Phenology Network](#), which is also home of Nature's Notebook where citizen scientists also share observations and contribute to an understanding of changing patterns of nature.



[iNaturalist](#) is a great app and online tool to help identify plants and animals and share your observations with naturalists and contribute to biodiversity science, from the rarest butterfly to the most common backyard weed. Another app, [Plantsnap.com](#) allows you to take a picture of a plant with your phone and use the app to identify it.

Birding enthusiasts have many resources to help identify and track birds. [Merlin](#) is a free app through the Cornell Lab of Ornithology that is considered to be the most advanced bird identification app available. It will help identify birds by photos or a Wizard ID. Merlin's identification is based on information provided through a companion free Cornell program, [eBird](#) which is an app for storing bird observations from around the world. Bird lists can be created for individual observers or places—there is a [list of birds for the Agassiz ELC!](#)



Speaking of birds, you can participate in the upcoming [World Migratory Bird Day](#) on May 9th. The 2020 WMBD conservation theme, Birds Connect Our World, focuses on the tracking technologies used to explore the routes of migratory birds across the globe, and how this knowledge is used to inform conservation. Bird observations on May 9th can be from your backyard or local area—all submitted via eBird noted above.

You can also "watch" birds via lots of live cams of birds through [Cornell's live bird cameras](#). The [MnDNR Eagle cam](#) is live monitoring the rapid growth of two eaglets. All sorts of critters and then some are viewable through this site's [wildlife cameras](#).

If you're interested in building nest boxes for wildlife, check out this [Nestbuilder](#) site. Speaking of which, the Agassiz ELC has put out 10 new bluebird nest boxes this spring along the edges of restored prairie areas west and south of the Fertile Nature Center. Plans for birdfeeders near the Nature Center are next. WG



Tiny Terrors – Ticks and Mosquitoes

If you haven't yet, you will soon find the first tick of the season clinging to your pant leg. There are many types of ticks in Minnesota and their numbers are on the rise, due in part to warmer winters. Ticks can spread dangerous diseases, such as Lyme disease. Of the ticks found here, the blacklegged tick, or deer tick, is the one that poses the most health concerns.

Of the many tickborne diseases, Lyme disease and anaplasmosis are two that Minnesotans should be aware of. Both are carried by blacklegged ticks. Lyme disease can be fatal or can cause long-term or permanent health issues. With symptoms similar to cold and flu, the most distinctive symptom of Lyme disease is a rash, often shaped like a "bull's eye", around the bite. Over time, the rash will get larger, expanding outward from the bite. Less common than Lyme disease, anaplasmosis causes fever, chills, aches and headaches.

With the growing tick populations there are growing numbers of cases of tickborne illnesses. For example, in 2000 there were 465 known cases of Lyme disease in Minnesota; in 2017 there were 1408. June and July are the months one would be most likely to contract a tickborne illness.



These ticks are lined up next to the thumb to see their relative sizes. From left to right are the blacklegged tick (deer tick) larva, nymph, adult male, and adult female followed by the American dog tick (wood tick) adult female and adult male.

The mosquito is another disease vector. Mosquitoes need water to reproduce and Minnesota being the land of 10,000 lakes, we have a healthy mosquito population. The mosquito is often considered to be the world's deadliest animal. Most illnesses which have earned it that distinction are common to warmer climates, such as malaria and zika. One mosquito-borne disease of concern to Minnesotans is West Nile virus, with 63 cases in 2018. Symptoms of West Nile virus infection are flu-like, with severe cases potentially fatal. Mid-summer through early fall is when mosquito-borne illnesses are most likely.

Brent Silvis – AELC Education Program Director

Tips for avoiding tickborne and mosquito-borne illnesses

- Avoid areas with a lot of brush. Ticks are there, waiting for you.
- Wear tight-fitting, light-colored clothing. Check yourself and your clothing frequently for ticks. Wear long pants and a long-sleeved shirt. Tuck your pant legs into your socks. Consider a hat and mosquito net.
- Use repellent. Treating clothing with permethrin is effective but read the directions carefully. Repellents with 30% DEET are also recommended, but there are some health concerns associated with this product so do your research. Personally, I've had luck with some of the "natural" eucalyptus-based products. Check this resource: <https://www.epa.gov/insect-repellents/find-repellent-right-you>
- Check your entire body for ticks, bites, rashes and other symptoms of disease. Enlist some help for places that are difficult to see. Check your children and pets, too. There are products sold in store to assist in tick removal, though you will soon master the technique of removing them with fingers or tweezers. Removing the tick within 12 hours will prevent most diseases. If the tick is swollen (engorged) it has probably been there for a while and you should see a doctor.
- As with most things, early detection is key. If you have symptoms or health concerns, see a doctor ASAP.

Information sources: [Minnesota Department of Health](#) and [Centers for Disease Control and Prevention](#) websites.

Membership Matters....Sincere appreciation to our new and renewing members shown below. Member support is critically important to help the Agassiz ELC achieve its mission and provide education and recreation opportunities to youth and adult users of the Agassiz ELC and Fertile Sand Hills. Thank You!

One of the benefits of membership is free access to trails, otherwise there is a daily fee for trail use which AELC is now waiving during the COVID-19 isolation period as a means to promote outdoor access for physical and mental wellbeing. Enjoy the calm that nature provides and encourage others to do so as well. And if you are in a position to do so, please consider becoming a member or provide a gift membership for friends or family to be able to enjoy the Fertile Sand Hills even after the current isolation period is over. Thank you.

- Alex & Kelsey Engelstad
- Craig & Cindy Engelstad
- Trey & Corene Everett
- Matt & Marrilee Forgit
- Howard & Jody Gudvangen
- Thomas & Vivian Hall
- Brian Hoiseth & Julie Hallie
- JJ & Kristen Hamre
- Mark & Melanie Lacrosse
- Jon Langved
- Mario & Jean LaPlante
- Natty & Lori Messick
- Mark Stola
- SandHill Snow Cruisers

~ THANK YOU ~



Darren Matetich, Otter Tail Power Company Bemidji Operations Manager (center) presented a donation from Otter Tail Power Company Foundation to Agassiz ELC Treasurer Dan Wilkens (left) and AELC Vice-Chair Craig Engelstad (right). Funds will be used to purchase supplies for youth education programs.

Agassiz ELC Volunteer Opportunities

~ contingent on isolation needs—contact us~

- Help improve AELC’s social media presence by posting photos of your outings in the Fertile Sand Hills to the AELC Facebook page and your social media outlets. Also photos to document site conditions and phenology are useful.
- Office help for processing newsletter and membership mailings, brochure folding, and document scanning.
- Site management assistance in trail maintenance, weeding of pollinator garden, and signage updates among other tasks.
- Nature Center hosts. Great place to spend time in a natural setting and help direct others to explore the wonders of the Fertile Sand Hills!

WISH LIST

- ⇒ Hummingbird feeders
- ⇒ Oriole feeders and grape jelly
- ⇒ Bird seed—preferably black oil
- ⇒ First Aid kit—land and water
- ⇒ Personal Flotation Devices
- ⇒ Throw Bag—water safety
- ⇒ Sponges for kayaks
- ⇒ Rakes and shovels
- ⇒ Hand or garden tools
- ⇒ Mosquito/tick repellent
- ⇒ Scotch tape portable dispensers
- ⇒ Plastic storage totes with lids
- ⇒ Kitchen items in good condition (silverware, utensils, plates, bowls, pots, pans)
- ⇒ Pencil sharpener—hand crank or electric

Contact Brent if you can help: 701-885-1548. Thanks!