

A Time of Change

reetings Friends! I hope this newsletter finds you in good spirits as we move from fall into winter. Over the past few weeks staff and visitors have seen a number of trumpeter and mute swans using the lake. There have also been the usual sightings of loons, eagles, ospreys, ducks and coots around the lake. Many of these birds will stay around the park until the ice comes in during the next few weeks or so.

The contractors have also been making steady progress on the new toilet shower buildings in Quartzite and Northern Lights campgrounds. The footings and frost walls have been poured and they will be starting on the masonry walls. Their hope is to get the exterior walls and roof up so they can heat the interior and then finish that off. They will continue to work on these projects throughout the winter so we can get them open for campers this spring. Contractors are also supposed to be starting on the sewer line repair/replacement project on the North and South Shores here at the park. We are hoping the winter will not be too harsh this year so they can get everything done.

We also will be seeing some staff changes here at the park. Richard Drea, a long-time maintenance employee will be retiring this month. We would like to thank him for his hard work and service to the park over the years. As of right now, our only maintenance employee is Randy George. I am hoping that we will get the approval to move ahead with the filling of our vacancies so we continue to provide our visitors with a high quality experience they have come to expect. We just had our busiest October ever and I'm guessing we will finish the year with over two million visitors. We will continue to do our best with the limited staff and resources that we have.

I would also like to take this opportunity to congratulate Joan Wheeler who was our Limited Term Employee (LTE) of the year. Joan has worked in the Visitor Center for a few years and she is never one to be idle for long. She provides our visitors with excellent customer service in one of the fastest paced visitor centers in the state. She frequently moves between selling park stickers and registering campers to answering the phones (5 lines no less) and keeping the Visitor Center clean and orderly. Please congratulate her the next time you see her.

This is the time of year we frequently use to get caught up with paperwork and interior jobs and chores. Although I have no shortage of these tasks to do, it is still great to get out in the park and enjoy all that is has to offer. Each season and transition between seasons provides for something new or familiar for us all to experience out in the park. I'll see you at the park.

> Steve Schmelzer Park Superintendent Devil's Lake State Park (608) 356-8301 ext. 111 Steven.Schmelzer@Wisconsin.gov



First snow at the Roznos Meadow trail head.



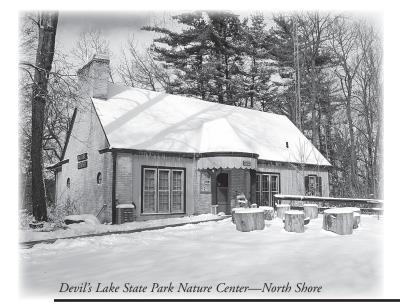
Solution Is Your Annual Membership Card! No, it is not very glamorous, but clip it out and keep it handy anyway! When you visit Devil's Lake State Park, show this card at either the North Shore, South Shore, or Ice Age Campground Concessions and receive a 10% discount on food and boat rentals. You may also be asked to present this card at special, members-only events and activities.

Let it Snow, Let it Snow...

he temperatures have dropped, the snow is falling, and the lake is starting to freeze. You may think that because winter has come to Devil's Lake you'll need to wait until it warms up again to enjoy the park. Think again! There are lots of ways you can enjoy Devil's Lake State Park during the winter season.

There is beauty in nature any time of the year, but there is something captivating about the frozen stillness that winter brings. One of my favorite ways to enjoy winter at Devil's Lake is on snowshoes. I especially love the days when the sun is out, there aren't any clouds, the sky is a rich blue color, and there is fresh snow on the ground that sparkles and glistens like small diamonds. It's fun to hear the different sounds the snow makes underfoot as the temperature changes and the snow ages.

Even though winter can seem never ending with all of the cold and shoveling, the moments when I can get out on snowshoes and just enjoy makes winter one of my favorite seasons at Devil's Lake State Park. If you want to try your hand (or foot as the case maybe) at snowshoeing,



stop by the Nature Center—we have several pairs that visitors can borrow! There are a variety of sizes for kids all the way up to adults.

Snowshoes aren't the only way to enjoy winter at Devil's Lake—many people enjoy experiencing the park on cross-country skis! There are several miles of groomed trails in the park. The Steinke Basin trail provides a fairly easy ski through some beautiful wooded areas in the park, or, for a bit more of a challenge, try the Johnson Moraine loop. Both trails start at the parking lot on County DL.

The park doesn't loan out skis, but a local bike and adventure shop rents them for a pretty reasonable fee.

No matter how you plan on enjoying the park in winter, make sure you dress for being outside in chilly temperatures. It helps for both snowshoeing and skiing to dress in layers. It can be chilly starting out, but once you get going you'll want to shed a layer or two. Clothes that wick moisture (i.e. sweat) are the best. Cotton T-shirts and blue jeans tend to stay wet and can keep you from staying warm, especially on really cold, windy days. Warm, waterproof boots are a must too—you'd be surprised how many people you'll find out on the trails in tennis shoes!

Hopefully you'll get a chance to get out this winter to enjoy Devil's Lake State Park. There are lots of programs and events happening throughout the winter. Check them out on the opposite page, or visit the Friends of Devil's Lake State Park web page at www.devilslakefriends.org.

If you are interested in borrowing snowshoes or just visiting the Devil's Lake State Park Nature Center, it's open Thursday and Friday afternoons between 12:00 and 3:30p.m. and on Saturdays from 9:30 a.m. until 3:30 p.m.

See you on the Trails!

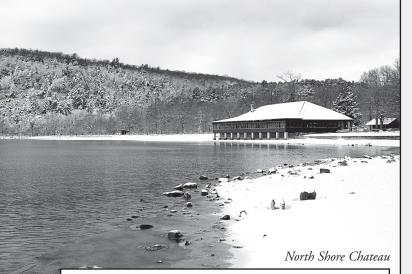
Sue Johansen, Park Naturalist (608) 356-8301 ext. 140 SusanA.Johansen@wisconsin.gov

Greetings from the President

When the park is a pleasant time of hearty meals and warm evening fires after a day well spent in the outdoors. Don't forget to include some time each week out at the park. There are still great things to see during this quiet period in the bluffs. If you enjoy late season birds as I do, then keep your eyes on the lake for ducks, geese and swans that linger before it freezes over. Drop by the Nature Center to check out many winter residents that frequent the bird feeders. At dusk and dawn you may be treated to the call of an owl!

This is also a time to start planning for the warm months, especially if you would like to join our group and get more involved with helping park staff get things done through the course of a year. We are hosting more events for families to attend in all seasons. Look for our Friends of Devil's Lake banner during these outings, then come visit with us to find out what you can do as a member. We're open to new ideas and fresh energy!

Here's to a fun winter filled with enjoyable trips to you favorite state park.



Year-End Giving

A 2014 comes to a close, please consider a yearend gift to the Friends of Devil's Lake State Park. Tax-deductible donations are welcome year-round and can be designated for special projects like Nature Center programs, trail or bench maintenance or given towards general operations.

The Bottomless Lake

Sometime back in the mid-1980s I was lucky enough to see a live concert in Madison featuring Bonnie Raitt and John Prine (one of Raitt's earliest hits was her rendition of Prine's "Angels from Montgomery"). A regular feature Prine's set in those days was a song called "The Bottomless Lake." As anyone who is familiar with his music will know, John Prine is quite a storyteller, and he often prefaces each song with a rambling anecdote about its origins.

John Prine grew up in Maywood, Illinois, a northwest suburb of Chicago, and on that particular night he told the audience that "The Bottomless Lake" was inspired by annual family trips to Devil's Lake State Park when he was a child. Prine told us that every time the Baraboo Hills came into view on their drive north along Highway 12 his father would take great glee in telling an elaborate tale about the time, many years ago, that a freight train jumped the tracks that runs along the base of the east bluff, plunged into the waters of Devil's Lake and disappeared. Then, several miles later as they entered the park and began descending the steep, serpentine curves of South Shore Road, the elder Prine would stamp the floorboards to simulate pumping the brakes and loudly exclaim "oh no, we don't have any brakes ... we're gonna end up at the bottom of the bottomless lake!" which would draw squeals of delight from the kids in the back of the station wagon as they repeated the nonsensical phrase.

Now, being a master storyteller, Prine was prone to adapting and embellishing his anecdotes in order to connect with a specific audience, and an internet search of various Prine chat groups, fan sites and Youtube concert videos reveals that he also claims lakes in Kentucky, Pennsylvania and New York as his inspiration for the song (the lyric makes specific reference to the Erie Canal).

Regardless of the true origins of the song, over the years I have heard many Chicago-area friends as well as tourists remark that they, too, had heard that Devil's Lake is bottomless. Certainly the sharp drop-offs along the Tumbled Rocks Trail and especially below the Wisconsin and Southern railroad tracks on the bend near the South Shore suggest that Devil's Lake is remarkably deep.

However, despite the legends, the deepest point in Devil's Lake (directly south of the North Shore's Rock Elm Shelter and on a line between Balanced Rock and the mouth of Messenger Creek) is only 47 feet—just a little more than the height of your average city utility pole.

-Mark Tully, info@ballindalloch-press.com

Devil's Lake State Park Events & Activities

JANUARY 2015 First Day Hike

Thursday, January 1, 3:30-5:00 p.m. Wisconsin State Parks is once again hosting First Day Hikes on New Year's Day. These hikes offer visitors an opportunity to begin the New Year rejuvenated and connected with nature. This year at Devil's Lake, we are going to take a twilight hike/snowshoe through Roznos Meadow. Dress warm and bring a flashlight and your snowshoes. We'll have snowshoes to loan as well. Meet at the parking lot on Hwy 113.

Go Snowshoeing!

Saturday, January 3, 1:00 - 3:00 p.m. Winter is here and it's a great time to get out snowshoeing! If you missed out on the First Day hike, then join us for this snowshoe adventure. We'll snowshoe though Roznoz Meadows, a relatively flat area of the park that is great if you are a beginning snowshoer. Dress warm and bring your snowshoes if you have a pair, otherwise we'll have snowshoes to loan as well. Meet at the Ice Age Trail/ Roznos Meadow Parking Lot on HWY 113 near the south entrance of the park.

Snapshot Wisconsin A citizen-based trail camera project to monitor wildlife

Sat., Jan. 10, 11:00 a.m.-12:00 p.m Let's discover our wildlife together! Snapshot Wisconsin is a new, yeararound, statewide effort to monitor Wisconsin's wildlife with a network of trail cameras. The goals of the project are to improve the spatial and temporal resolution of wildlife monitoring to help inform management decisions, and to include citizens, including educators and their students, in that process. We expect to recruit thousands of volunteers to place and monitor > 3,000 trail cameras across Wisconsin, and these volunteers will be indispensable to project success. Snapshot Wisconsin is just beginning, and we will recruit the first volunteers in 2015. In addition to background on the project, we will talk about the results of our pilot study, how trail camera

pictures are used currently, and our hope Winter Phenology Hike for how they will be used in the future. We will discuss wildlife management related to bobcats, bear, deer, wolves, beaver, otter, and other Wisconsin critters.

"Wild" Winter Afternoon Saturday January 17, 1:00-5:00 p.m. Its winter, but that doesn't mean you have to stay inside! Cure your winter cabin fever and join us for this wild winter adventure! Go on a self-guided snowshoe (depending on snow) or hike through the park. Warm up by the campfire and make a s'more. There will be fun nature activities to participate in too. Bring your snowshoes or borrow ours- we have lots of sizes to fit everyone in your family. Make sure you dress appropriately; the event will happen rain, snow, or shine. Meet outside the Rock Elm shelter on the park's north shore. Sponsored by the Friends of Devil's Lake State Park.

Learn to Ice Fish

Saturday January 17, 1:00 - 4:00 p.m. Bundle up to learn the basics of how to ice fish. Devil's Lake volunteers and staff will help you go out on the ice and try to catch a fish! All equipment and bait is provided. All children must be accompanied by an adult and adults are welcome! Dress warm as there will be no shanties, but there will be a fire to warm up by on shore. This is a "Free Fishing Weekend" so no fishing license is required. Meet outside the Rock Elm Shelter on the park's north shore.

Winter Wildlife on Snowshoes

Saturday January 24, 1:00-3:00 p.m. Get moving! Get connected! Winter is a great time to get out and explore your environment, and snowshoes are a great way to do it. Join the Park's Naturalist as you trek the trails in the silent world of winter on snowshoes. The program will emphasize wildlife tracks and signs, and recreational snowshoeing as you connect (See details above) to your winter surroundings. Meet at the Meet at the Nature Center. Nature Center.

Saturday January 31, 1:00-3:00 p.m. Phenology refers to the seasonal changes in plants and animals from year to year - such as migration of birds, flowers blooming, insects emerging, etc. Start the new year learning to track natural events. We'll spend the afternoon hiking around the park to record what animals and animal signs we see. The information we collect will be recorded in the National Phenology Network's program Nature's Notebook. Meet at the Nature Center.

FEBRUARY 2015

Nature Tales - Winter Tracks Saturday, Feb. 7, 10:00-11:00 a.m. Join us for an hour of stories - naturally! Fun awaits your 3 to 8 year old as we check out the footprints tell stories about what animals have been doing. Dress to spend some time outside. Meet at the Nature Center.

Winter Wildlife on Snowshoes Saturday February 14, 1:00-3:00 p.m. (See details at left) Meet at the Nature Center.

Candlelight Snowshoe

Saturday Feb. 21, 6:00-9:00 p.m. Its winter, but that doesn't mean you have to stay inside! Cure your winter cabin fever and join us for this wild winter adventure! Go on a self-guided snowshoe (depending on snow) or hike through the park. Warm up by the campfire and make a s'more. Bring your snowshoes or borrow one of our pairs - we have lots of sizes to fit everyone in your family. Make sure you dress appropriately; the event will happen rain, snow, or shine. Meet outside the Rock Elm shelter on the park's north shore. Sponsored by the Friends of Devil's Lake State Park.

Winter Phenology Hike Saturday February 28, 1:00-3:00 p.m.

For a complete listing of events, visit: www.devilslakefriends.org/events or call the Nature Center at (608)356-8301 ext. 140

The Great Unconformity

The geologic history of the Baraboo area can be divided into three parts. The first part, the *Precambrian* history, includes formation of igneous granitic intrusive rocks and volcanic rhyolites that formed about 1.75 billion years ago. Overlying these rocks is a thick (approx. 4,000 ft) sequence of sandstone (later metamorphosed to quartzite) and 1,500 ft of less-resistant shale (now slate) that were folded sometime between 1.65 and 1.45 billion years ago. This folding event also resulted in the metamorphism of the thick sandstone deposits to form the famous Baraboo Quartzite.

The second part includes *Late Cambrian* layers composed of non-marine and marine sandstones and conglomerates that were deposited, for the most part, in a warm tropical sea surrounding the elliptical ring of hills composed of resistant Baraboo Quartzite. During the Cambrian period, Wisconsin was located in the southern tropics at approximately 10° south latitude, where tropical storms would be expected, and the Baraboo area lay close to the continental margin of North America.

The final chapter of the Baraboo area's geology includes a climatic cooling and *glacial event* that left behind rock debris transported from Canada many times during the last 1.8 million years, with the maximum extent of glaciation occurring approx. 18,000 years ago.

Along the East Bluff Trail, near Elephant Cave and Elephant Rock, an amazing piece of North America's ancient history can be seen...*The Great Unconformity!* An unconformity represents gaps in the geologic record that formed wherever layers were not deposited for a period of time or else layers were deposited and were later removed by erosion. At this location in Devil's Lake State Park, you can see the Cambrian conglomerate of the Parfrey's Glen Formation (age approx. 0.5 billion years old) sitting *unconformably* on eroded Precambrian Baraboo Quartzite (age approx. 1.65 billion years old). This erosional unconformity represents over 1 billion years of missing rock! It is clear from looking at the rocks that the source of the boulders in the conglomerate was the underlying quartzite that was broken and tumbled by fierce tropical storms.

The Great Unconformity is part of a continentwide unconformity that extends across Laurentia, the ancient core of North America. It marks the progressive covering of Laurentia by a shallow sea and it's burial by shallow marine sediments of the Cambrian. This submergence ended an extended period of time where widespread continental denudation occurred, which unearthed Precambrian rocks and exposed them to surface erosion. This unconformity can be seen in a variety of places across the country, including near the bottom of the Grand Canyon.

Melissa Hage Assistant Professor of Geology University of Wisconsin – Baraboo/Sauk County



This example of The Great Uncomformity can be seen above the north shore near the beginning of the east bluff trail. In this view, Elephant Rock (comprised of late Cambrian sandstone) is just to the right and Elephant Cave is to the left.

"I am in love with pines."-Aldo Leopold

S you look out over the bluffs of Devil's Lake State Park one thing you will notice, especially at this time of year, are the daubs of deep green foliage poking up from among the gray trunks and bare branches. These might be any of our native evergreens: spruce, juniper, hemlock or cedar, but chances are they are pines.

There are three pine species that are native to Wisconsin and Devil's Lake: jack, red and white pine.

Jack pine (*Pinus banksiana*) is the smallest of the three. They are identified by their scruffy appearance and short paired needles. Their cones require relatively high temperatures to open and jack pine are one of the first trees to grow back after forest fires. Jack pine are also known as scrub pine, Banksian pine (after English botanist Sir Joseph Banks, 1743-1820), or Hudson Bay pine.

Red pine (*Pinus resinosa*) is also common within Devil's Lake State Park. Red pines are an ancient species and were one of the first trees to move into the area after the retreat of the last glaciers some 12,000 years ago. Red pine are easily identified by their irregular plates of reddish-gray bark and their long needles which grow in fascicles of two. The needles are very brittle so that they snap cleanly when bent in half. Also known as Norway or hard pine, these tall, straight trees can tower up to 140 feet and can achieve 500 years of age. The wood of the red pine tends to be knotty and splits easily, so it is primarily used in construction or as pulpwood. The reddish bark was formerly used in tanning leather.

Eastern white pine (*Pinus strobus*) are the tallest trees in the Baraboo Hills and are the most common pine in Devil's Lake State Park—the majority of the trees seen growing among the talus fields are white pines.

Eastern white pine are also known simply as white pine or soft pine. They are identified by their dark gray bark and long, soft needles that grow in fascicles of five. White pines can grow up to 150 feet tall and five to six feet in diameter. They are a long-lived tree and can reach over 400 years old. Central Wisconsin is the southernmost extent of white pine's natural range, although you will find occasional stands as far south as central Illinois.

During the 17th and 18th centuries white pine was a major commodity in the triangle trade and many New England towns prospered supplying lumber to Britain. England also had the biggest navy in the world at that time and light, flexible, old-growth white pines were highly prized by the Royal Navy for use as ship masts, spars and yards. The tallest, straightest white pines were declared property of the King and marked with the royal broad arrow. Hefty fines were imposed on anyone who dared to fell one of these big white pines. This lead to the Pine Tree Riot of 1772 which played a significant role in the events leading up to the American Revolution.

After the United States won its Independence in 1783, demand for building materials skyrocketed. The eastern white pine was once again highly prized as an entire house could be built from just one tree! Many colonial homes used white pine for framing, paneling, windows and doors, floors and furniture and billions of board feet were harvested. By the 1850s the young nation's insatiable appetite for lumber had gobbled up most of the pine forests of New England, New York and Pennsylvania.



The Pine Tree Shilling (shown actual size) was colonial America's earliest silver coin. The white pine tree featured on the obverse pays tribute one of the most valued American exports at that time.

Eyes soon turned to the forests of the upper Midwest. Eastern white pine quickly became a major cash crop of the Wisconsin north woods as it fueled the timber rush of the late nineteenth century. From 1890 until about 1910 forest products were Wisconsin's top export and logging provided jobs for thousands of people. In northern Wisconsin several waterways were dammed to create chains of lakes that could be used to float the huge white pine logs into the Wisconsin River.

Pine pitch was also an important commodity. Native Americans used pine pitch as a waterproofing agent and Europeans adopted it to treat ropes, rigging and caulking on their ships. Pine pitch also has excellent bonding qualities and was used to seal seams on the voyageurs' bark canoes. Later it was used as a bonding compound in glues.

Pine tar also has natural antimicrobial properties. Some Wisconsin Indian tribes mixed it with beeswax to create a salve for treating infections and gangrenous wounds. Oils and infusions made from pine resin were used as a folk remedy for bladder and kidney infections, and to relieve respiratory diseases like bronchitis and tuberculosis. Pine oil was also used externally to relieve rheumatic pain, sciatica, nephritis and in aroma therapy.

As you hike or ski or snowshoe or ice fish Devil's Lake State Park this winter, take a moment to look up at these majestic trees and reflect upon their long history. Perhaps you too will fall in love with the pines!

Mark Tully, Editor and Publisher info@ballindalloch-press.com

How Old is That Tree?

OST people know that trees create a growth ring each year and that by counting the rings on a tree you can tell its age. You don't need to cut down a tree to count these rings—foresters and scientists often use an increment borer to take a small section sample from a living tree.

You can also make a fairly good estimate of a tree's age by using the following these three simple steps from the International Society of Arboriculture:

- 1. First, use a flexible tape measure to measure tree circumference in inches. Take your measurement at 54 inches (four and a half feet) above ground level.
- 2. Convert your circumference measurement to the diameter of your tree—diameter equals the circumference divided by 3.14 (pi).
- 3. Using the table below, multiply the diameter in inches by the appropriate growth factor to determine the estimated age of your tree.

So, for example, let's say we have a white pine. If we measure a circumference of 69 inches (at 54" up from the ground), dividing by 3.14 gives us a diameter of 22 inches. Multiply that by white pine's growth factor of 5 and we get an estimated age of 110 years! This technique is an easy way of estimating the tree's age without having to kill it, but note that growing conditions over the life span of a tree vary greatly, so the actual age of a tree measured this way might be older or younger by as much as a decade.

Also note that although you can also use this method to determine the age of trees in your yard at home, the growth factors listed below are more accurate for forest-grown trees, which tend to grow taller and thinner than urban trees. Also note that trees growing in stressful urban situations—inadequate soil nutrients, lack of water or excessive pruning—often grow more slowly than healthy trees.

Measuring trees and calculating their age offers a perfect excuse to wander the woods around Devil's Lake (like anyone needs and excuse?). Consider dragging a young person along with you—measuring trees is a great way to give kids a deeper appreciation for nature, the Baraboo Hills, and Devil's Lake State Park, PLUS it is a great exercise for practicing math skills! You might even want to take along a small history guide to look up the significant historical events that transpired during a particular tree's lifetime—A *Pocket History of the United States* by Allan Nevins or *A Short History of Wisconsin* by Erika Janek are two good choices.

Tree species common to south central Wisconsin and their growth factors

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TREE SPECIES	GROWTH FACTOR	TREE SPECIES	GROWTH FACTOR
American beech	6	Red maple	4.5
American elm	4	Red oak	4
American sycamore	4	Red pine	5.5
Black cherry	5	River birch	
Black walnut	4.5	Scarlet oak	4
Common horsechestnut	8	Scotch pine	
Colorado blue spruce	4.5	Shagbark hickory	7.5
Cottonwood	2	Shingle oak	6
Douglas fir	5	Silver maple	3
Green ash	4	Sugar maple	
Linden (Basswood)		Tulip tree	
Norway maple	4.5	White ash	5
Norway spruce	5	White fir	7.5
Pin oak		White oak	5
Redbud	7	White pine	5

Circumference \div pi (3.14) = diameter in inches x growth factor = tree age.

NOTE: table will only provide a rough estimate of a tree's age—actual age may be older or younger by as much as a decade depending upon habitat, soil composition and growing conditions. Several species listed are non-native but are common in residential plantings.



State Park

P.O Box 209 Baraboo WI 53913



Return Service Requested

Contact Us

If you would like to contribute a story, photograph, poem or artwork relating to Devil's Lake State Park, please contact the editor, Mark Tully at 608.356.1836 or info@ballindalloch-press.com Membership paid through year shown on label

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Friends of Devil's Lake State Park Membership Categories & Benefits

One Year Membership - \$20

• Subscription to *Friends of Devil's Lake State Park Advocate* newsletter

Three Year Membership - \$55

- Subscription to *Friends of Devil's Lake State Park Advocate* newsletter
- Friends of Devil's Lake State Park decal

One-year Explorer Membership - \$100

- Subscription to *Friends of Devil's Lake State Park Advocate* newsletter
- Friends of Devil's Lake State Park decal
- Annual Wisconsin State Parks admission sticker

NEW: All memberships also receive a 10% discount on food and boat rentals at Devil's Lake State Park concessions (some exclusions apply).

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□ I am renewing my current membership.	This is a new membership with Friends of Devil's Lake State Park.			
One Year Membership (\$20)	One-year Explorer (\$100)			
Three Year Membership (\$55)	Additional gift to support DLSP projects \$			
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