



The Nature Center Stream



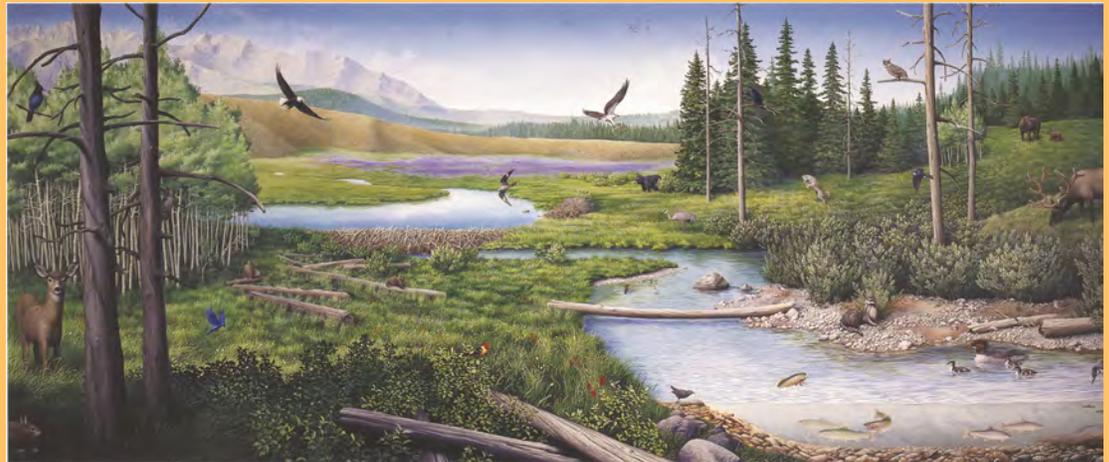
FALL The Seasonal Newsletter of the Idaho Department of Fish and Game MK Nature Center

2016



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AmeriCorps Member Joins MKNC

We are pleased to welcome Brian Lawless as our AmeriCorps Member at MK Nature Center. Thanks to the financial support from Friends of MK Nature Center and Palouse Clearwater Environmental Institute, Brian will be working with us for 11 months. If he looks familiar, that's because he's been an environmental educator at several places in the area including the Jim Hall Foothills Learning Center, Boise Watershed, and the McCall Outdoor Science School (MOSS). Brian's education includes degrees in biology and geosciences from Boise State and a very soon to be completed Master of Science in Natural Resources from the University of Idaho. He loves being outside and loves teaching, and is looking forward to being part of the MKNC education program. Welcome Brian!



**Palouse-Clearwater
Environmental Institute**



MK Nature Center - Your Face-to-Fish Connection

Welcome Vicky Runnoe

Greetings! While I have been associated with the MK Nature Center for the past ten years, I am excited to be taking a more hands-on role as the center's new supervisor. This is a vibrant, exciting place! I am excited to be here on a daily basis working with the dynamic staff and you, our visitors.

I got my start in conservation education because of birds. As an avid birder, I loved to help others enjoy birds. This led to volunteer work and an internship at Mosquito Hill Nature Center in New London, Wisconsin. During college I worked at several non-profit nature centers before landing my first job as Park Naturalist at Quartz Mountain State Park in southwest Oklahoma. A move to Idaho gave me the chance to work for the National Park Service as an Interpretive Ranger at the Big Hole National Battlefield and at Fish and Game's Salmon Regional Office as the Regional Conservation Educator. In my current position as Conservation Education Supervisor I work with the MK Nature Center, Project WILD, Aquatic Education, *Wildlife Express* and Hunter Education. These programs provide me with endless variety and the chance to work with a lot of great folks.

I am the proud parent of two wonderful kids who learned at an early age that being outside was fun and that chickadees sing "cheeseburger, cheeseburger." Now in high school and college, they still take time from their busy lives to enjoy the outdoors. My border collies are also a big part of my life. I enjoy training and showing them in obedience trials. They are also great hiking partners, happily herding their flock of humans up the trail, but undoubtedly wishing I would quit stopping to watch the birds.

Please stop by to say hello the next time you visit the nature center!

Welcome Adare Evans

Hello! Some of you may already be familiar with my name or face. In January, I will have worked for Fish and Game for 25 years as a Wildlife Educator. A large portion of that time has been spent in schools presenting education programs. I also am the Co-coordinator for Trout in the Classroom for southwest Idaho and the lead writer for *Wildlife Express*, Idaho Fish and Game's educational newspaper for school age –students.

While currently not based in the Nature Center building, you may see me from time to time poking around the building or out on the grounds. I will be conducting Hunter Education Classes at the Nature Center, taking over the Rod Loaner Program from Sara and helping out with the occasional special event.

So if you see people parading around the shelter belt with bright orange firearms – don't panic! It is a hunter education class learning how to be safe, responsible hunters and future stewards for Idaho wildlife.

View Lamprey at the Nature Center

Sara Focht, Wildlife Educator, MKNC

The Pacific Lamprey have arrived. The MK Nature Center is hosting three Pacific Lamprey for the winter! These three “eels” arrived on July 11th in a Nez Perce Fisheries Truck and had traveled all they way from Nez Perce Tribal Hatchery near Lenore, ID .



Actually they traveled a lot further than that, as their amazing life cycle carries them half way across the world.

Pacific Lamprey are anadromous, like salmon, beginning their life in freshwater then traveling to the ocean to feed before returning to freshwater to spawn and die. Lamprey have interesting childhoods! After they are born, they spend up to 7 years filter feeding in sandy, gravel bars in cold Idaho streams. They position their back ends down in the sand and hide from predators by retreating into the stream substrate. This time period is the larval stage of their life cycle and they are called ammocoetes.



MKNC's Susan Ziebarth and Lamprey enthusiasts puts lamprey into MKNC display tank. Susan has worked tirelessly on getting the lamprey comfortable and viewable

When it is time, they swim to the ocean as salmon do, facing the same dangers of warm water, predators, obstructions, and pollution. On the way to the ocean, their bodies change and they get ready for ocean eating, which in their case, means sucking blood! They metamorphose into their adult form, transforming from eyeless earthworm-looking juveniles into silvery “macrophthalmia,” developing eyes and oral disks to attach to their hosts.

They spend a few years as parasites, sucking blood of salmon, whales, sharks, or whatever fish they can steal a drink from (their preferred hosts are groundfish such as cod, pollock, and hake). After about 2-3 years in the ocean, their instincts guide them back upstream and inland, but unlike salmon, lamprey do not necessarily return to their birth waters. They are signaled to turn inland, into freshwater when they detect a pheromone released by ammocoetes upstream. It could be that they return to where they were born, but it more likely they end up in other streams where other “eels” were born.

Pacific lamprey populations are less than 5 percent of their historic population levels. Because of this, the Nez Perce Tribe in Idaho and other Columbia River tribes have stepped in to help the lamprey.

Between June 15 and August 31st, the Nez Perce fisheries program employees travel weekly to the three lowest Columbia River dams to collect the lamprey that are leaving the ocean. They drive them back to Lenore, Idaho and overwinter them in dark, cold water containers until spring. When the weather warms, the tribe takes them to historic spawning habitat areas and the “eels” spawn and die, completing their lifecycle.



MK Nature Center - Your Face-to-Fish Connection

PAGE 4 **Flesh-eating Plants are Here** *Lauren Studley*

Did you know Idaho has carnivorous plants? Like the famous Venus Flytraps, these plants use insects and small organisms to supplement their nutrient-poor environment. Let's take a look at the Idaho natives.

The Sundews (*Drosera*)

The *Drosera* family are known for their sticky spine-covered leaves. These bright red spines emit a glue used to snag any insect that lands. *Drosera's* leaves will then retaliate against struggle by wrapping the leaves around the insect, forcing it to become further trapped. The **sessile** cells, which are glands that emit digestive enzymes, then go to work. Well studied by Charles Darwin himself, this forb grows in high altitude bogs and fens. It ranges from 10 -35 mm in leaf length, with a single inflorescence bearing white, five-petaled blossoms.

Idaho has three species of Sundews. *Drosera rotundifolia*, Common Sundew – Has ping-pong paddle shaped leaves. Like other temperate *Droseraceae*, in the winter the plant forms a **hibernaculum**, a bud of tightly curled leaves that helps it survive the long cold Idaho winters.

Drosera anglica, English Sundew (pictured right)- This beautiful sundew is found throughout central and northern Idaho, including as far south as Warm Lake, Cascade, Idaho. Popular as a house plant, this sundew must remain protected from poaching by unknowing plant enthusiasts.

Drosera intermedia, Spoon-leaf Sundew - Idaho's unique gem! Usually found east of the Mississippi, a lone population of *D. intermedia* is alive and well-protected deep in the Sawtooth Natural Research Area outside of Stanley, Idaho. I explored the area last summer and was excited to find this flesh-eating forb surrounded by untouched lodgepole pines, sedges, rushes, and rare Ute's ladies tresses and explorer's gentians.



English Sundew, IDFG.

The Bladderworts (*Utricularia*)

Besides sundews, Idaho is also home to 4 species of *Utricularia*, the fascinating bladderwort! These unique water-based plants use their spiny **stolons**, branching stems with a series of hundreds of leaves, to float in lakes and slow-moving water bodies. They often band together to form large floating fen islands, where other terrestrial species can grow.

Utricularia macrorhiza, the Common Bladderwort, is by far Idaho's largest and flashiest of water-based carnivorous plants. Recently titled as the World's Fastest Predatory Action, the bladders of this plant use a suction reaction to suck in prey passing by. Found throughout Idaho's waterways, this species is easily spotted by its bright yellow snapdragon-like flowers.

Utricularia minor, Lesser Bladderwort – As noted in its name, this plant is minuscule and pales compared to the *U. macrorhiza*. Its diminutive flowers can still be found where its larger cousin grows and feeds on tiny protozoa and single-celled organisms.

Utricularia gibba, Humped Bladderwort – The Humped bladderwort has a fantastic flower associated with it, with the typical pea-flower having an emphasized petal. Lauren is working on verifying this species, hopefully this summer. During the cold winter, this and all other temperate bladderworts curl up into tight balls, known as **turions**, then sink to warmer waters to survive.

Utricularia intermedia, Flatleaf Bladderwort – these are only found in Boundary, Bonner, and Bear Lake counties.

The take-away? Wetlands hold a variety of incredible species, from orchids to carnivores. They need protection, and education is conservation's best friend. Teach others about our delicate peatlands and bogs and enjoy all that nature has to offer for years to come.



Lauren Studley is an avid fan of botany and had her interest in carnivorous plants piqued when she had a conversation with a Master Naturalist and learned Idaho had native sundews and bladderworts. Shocked that this isn't common knowledge, she has since begun a campaign to document populations for conservation, improve education by creating brochures and coloring books, and give talks to science and nature groups.

Orb Weaver Spiders



Pictured above: a tiny orb web woven in the concave feature of an aspen leaf. Upper left: one of many orb webs decorating the gate near the aviary at MKNC. Photos by Sara Focht.

Spiders in the family Araneidae are called orb-weaver spiders for their spectacular round and intricate disc-shaped webs. During late summer and early fall, these webs are large and noticeable in gardens, near streams, and making real life Halloween decorations in porch corners. Most people know that orb-weavers use their net-like webs to catch flying insects, but there are some interesting details about these creatures that might surprise you.

Orb-weavers are non-aggressive spiders that rarely harm humans. If provoked (picked up), they may bite to protect themselves, but produce no more than a ‘bee sting’ type reaction. Orb weavers eat their web almost daily and restring it in the same location each night (or make repairs nightly). This “build and rebuild” approach keeps their webs clean.

With the ability to make several kinds of silk, the orb-weaver can build the web using both sticky and non-sticky silk varieties, wrap up prey in yet another type of silk, and use silk in mating rituals that is different from all the other silks mentioned.

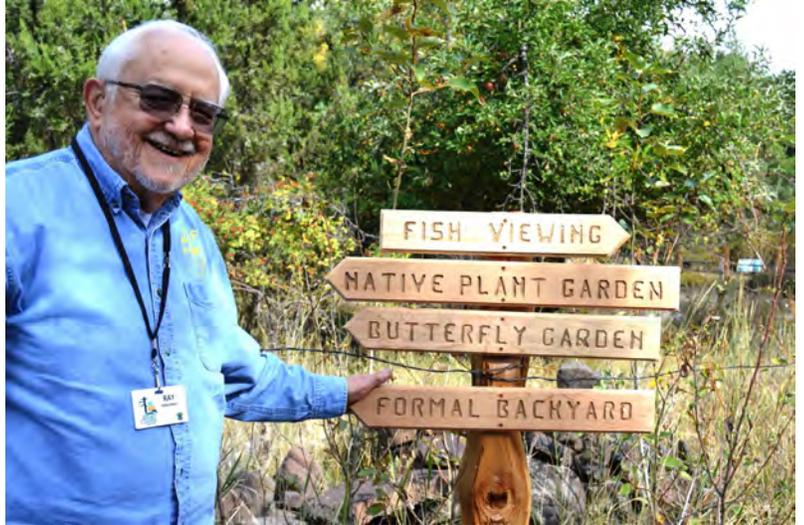
Interestingly, there are spiders from other families that also produce orb webs.

Which Way Should I Go?

Sara Focht, Wildlife Educator, MKNC

Those of us who work at the Nature Center know that the paths create a simple “figure eight” pattern if looking down at the nature center from above. One loop includes the fish viewing windows and the other loop features gardens. However, the folks that designed the Nature Center nearly 26 years ago, built in curves and turns to make the path more interesting and created viewpoints that were hidden from one another. This design makes the nature walk more intimate, helping visitors enjoy their location without being able to look ahead and get distracted. With that, comes a certain level of confusion for those first visiting the nature center. Kids on my tours often ask me if I am lost! I hope I am not acting lost, but I reassure them I know exactly where we are on the Nature Center grounds and I know how to get back to the building!

To ease this confusion, our long-time volunteer and Idaho Master Naturalist Ray Heady, created some directional signs. These signs are now mounted with the help of Idaho Master Naturalist Jerry Pugh. Visitors who come in through the greenbelt entrance or Municipal Park can now find the visitor center and all the other features of the nature center. Thanks to Ray (pictured right) for his hard work cutting and routing the signs. Thanks to Jerry for installing!



More New Faces

Hi! My name is Tara Jennings. I just moved here from Corvallis, OR. I received my Master’s degree in Forest Science at Oregon State University. I’ve spent the last 15 years working in genetics. I’ve worked on everything from bacteria and fungi to wolverines and martens and most recently, trees like Douglas-Fir and Whitebark pine.

When not at the nature center, I have two cats and a dog that keep me pretty busy. In the summer months, I love to hike and camp. In the winter months, I enjoy reading, playing video games and learning to snowboard.

I’m so excited to become a part of the MK Nature Center Team. I’ll be doing a little bit of everything. If you see me on the grounds or in the gift shop, stop and say hi!



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Thank you IFWF!

Vicky Runnoe, Conservation Education Supervisor, MKNC

A big thanks goes out to the Idaho Fish and Wildlife Foundation for providing financial assistance when the nature center was inundated with water-related repairs. Early this summer a leak was discovered in our main water supply line. Our water woes continued as the nature center wells began to make ominous sounds. In a torrent of repairs, the supply line was fixed and the wells given a new life through a complete cleaning, new casing and new pumps and motors. IFWF provided grants of almost \$15,000 to help pay for these repairs.



Idaho Fish & Wildlife
FOUNDATION

Water is truly the lifeblood of the nature center. Through a labyrinth of pipes, weirs and a degasser, water moves from the wells to the stream, alpine lake and pond. Without it, we simply would not have water to supply these features. Without the water, the nature center would not be the attractive oasis it is for wildlife and visitors. Keeping our water system flowing smoothly is an important job. We appreciate IFWF's willingness to help out and keep our water moving.

Aspiring Entomologist Volunteers

Sara Focht, Wildlife Educator, IDFG MK Nature Center

As a child, I never knew how to answer the question, "what do you want to be when you grow up?" I had a lot of interests and abilities, but never had a strong pull toward one profession or another until I was in college. This summer, I had the pleasure of meeting a young woman who knows exactly what she wants to do when she grows up. Meet Amanda Richael. Amanda emailed me before school was out to see if there were any volunteer opportunities for a 12 year old at the nature center. After talking with her over email for a while, it was clear that Amanda could come do an educational booth about insects.....her passion. Amanda is a budding entomologist. "Budding" might be an understatement at this point. Amanda has a beautiful insect collection that she has created herself. When she comes to the Nature Center, she brings her collection, net, vials, insect books, and microscope. She shows visitors some local insects they might see at the Nature Center. In addition knowing a lot about insects, Amanda is friendly and pleasant, and interested in sharing her love for insects with others. She was a great volunteer this summer and we will be asking her back to help us teach others about insects and the important ecological roles they play in Idaho's habitats.

When not studying insects, Amanda plays basketball for Boise Slam. She loves to garden and runs a neighborhood vegetable stand. In the very little free time she has left, she reads and writes (she aspires to write a book on the history of Iceland), and plays piano.



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Community Partners to the Rescue

Susan Ziebarth, Wildlife Educator, MKNC



Micron Spring-Clean Work Day

May 14, 2016

For the past few years, Aubrey Smith has put together a determined team of fellow employees and die-hard gardeners to have a Spring Garden Cleanup and Hot-Dog feed at the Nature Center. Again this year they rescued the much neglected "Vacant Lot Native Plant Garden" from the rapidly expanding weed population. Thank you Aubrey, George, Fred, Jeanette, Max, Wally and family, Justin, Gabriel, Joe, Lacey, Kelly, Dana, Amy and Tye.



Healthwise Community Support Work Day

May 20, 2016

Soaked, cold and muddy, this tenacious Healthwise legal team stuck it out weeding in the H.I.P. garden until Tammy called Uncle! Last year they braved 100 degree heat, this year freezing rain. The photos don't come close to showing how muddy, wet and cold we all were.

Thanks, Tammy, Caralea and Mellisa!



Boise Cascade Community Service Day

September 28, 2016

Although we love "Snags" (dead trees) at the Nature Center, our hillside behind the main waterfall and near the path was so full of them they were becoming a hazard for employees working in that area as well as visitors walking by. With saws "a-blazing" the team from Boise Cascade made short work of removing several dead trees, dead limbs and a few exotic trees too. Some were cut into firewood and the rest went to the local recycling center to be made in to mulch. They left some select snags that are not a hazard in place for the wildlife to enjoy.

Many thanks to Stephanie, Jo, Doug, Mari, Kelly, Kathy, Ren, Suzanne and McRay (not listed in order of the photo).

Fence Replaced

Susan Ziebarth, Wildlife Educator, MKNC
Kyle Johnson, Eagle Scout

After leading a group of peers, his parents and some other Troop 61 adults, Kyle Johnson completed this very successful project by writing the following summary:



Before

My Eagle Project involved replacing a 26 year old fence near the entrance of the MK Nature Center. Members of Troop 61, along with Susan Ziebarth, some friends, the occasional encouraging comment from park visitors, and a doe with her fawns, all contributed in one way or another to the project. With all that help, the work was completed in one warm August weekend!



After

Left to right photo: John LeClaire, Garrett Carcas, Eric Johnson, Kyle Johnson (Eagle Scout Candidate), and Ethan Carcas.

Thank you to Kyle and all the participants from Troop 61 who participated in this much needed fence replacement project!



Annual Bird Seed Sale

On December 2-3 come to MK Nature Center to stock up on birdseed, buy holiday gifts, see and learn about live raptors, and participate in children's crafts and activities. This is our annual winter fund raiser, so come on down and support the nature center. A fun, festive event for the whole family! Hope to see you there!



Thank You For Supporting MKNC

The following people donated to the MK Nature Center between July 1st and September 30th 2016. Donations come in the form of money, goods, services, or other in-kind donations.

Larry Amen, Glenn & Leslie Hadden, Barbara Mecham, Hilda Packard (pictured below), Judy Ouderkirk

The following people volunteered their time to the MK Nature Center between July 1 and August 31, 2016. MK Nature Center receives an average of nearly 500 volunteer hours monthly. Thank you!!

Sean Aucutt
Patrice Davies
Seth Davis
Nancy DeWitt
Margit Donhowe
Rebecca Fritz
Grace Gould
Marylee Hale
Rilee Harrold

Raymond Heady
Katie Hebdon
Dan Herrig
Bill Horton
Amanda Laib
Kyle Larsen
Victoria Larson
Rikka McCarthy
Ali McClintic

Cheryl Minckler
Bronwyn Myers
Mary Reid
Amanda Richael
Emily Rigg
Abigail Sasso
Arleen Schaeffer
Jake Stone
Brandi Wheeler

Long-time supporter and friend Hilda Packard (pictured middle) celebrated her birthday last summer. MKNC staff Sue Dudley, Susan Ziebarth, and Dave Cannamela joined her to celebrate.



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