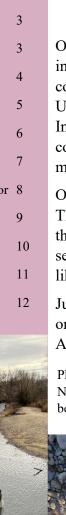






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MK Nature Center

STREAM

The Seasonal Newsletter of the Morrison Knudsen Nature Center

Winter 2025

Welcome Whitefish

On November 16th, MK Nature Center volunteers and staff stocked mountain whitefish into the Alpine Lake viewing window (largest outdoor viewing window). The project was coordinated by Idaho Master Naturalist Howard Sheppa. Howard recruited Trout Unlimited members and a few other volunteers to fish along the beautiful Boise River. Information was obtained from the Fisheries Bureau at IDFG about where the greatest concentration of whitefish were (data from their last whitefish survey). Permits and methods of transport were discussed and planned.

Our staff members helped unload the fish, creating some diversity in the Alpine Lake. The newcomers attracted some attention from the resident rainbows! It appeared that over the course of the first few days the whitefish were like the "new kids at school." The trout seemed to be chasing them around. And not unlike another school behavior, it now seems like the new whitefish "hang out together."

Just a week later, six steelhead were introduced to the same area; prompting the social order to get shuffled once again. We hope you make a trip to see the fish diversity in the Alpine Lake this winter!

Photos from left to right. Volunteers fish along the Boise River. The first mountain whitefish captured. Nature center staff member Bethany Tennant stocking the Alpine Lake. Mountain whitefish swimming below a rainbow for comparison. Photos by Howard Sheppa and MKNC.



Wonderful Whitefish

Article from Wildlife Express (2007), edited by Martin Koenig, IDFG

The mountain whitefish may not have any spots on its body or bright reddish-pink colors, but take a closer look! This fish is a silvery-white beauty. Its subtle shades of brown, silvery-gray and blue can be striking.

The scientific name for the mountain whitefish is *Prosopium williamsoni*. They are very common throughout larger streams and rivers and are the most common game fish in Idaho. A game fish is a fish that you can catch and eat. Mountain whitefish are true natives. There are even genetically distinct populations in the Big Lost and Big Wood watersheds that are so unique, they might be considered a different species. In many of Idaho's streams, they used to be the only fish you could catch and eat. Rainbow trout were eventually put in many of Idaho's streams and lakes for anglers to enjoy.

The mountain whitefish looks a bit like a sucker and a bit like a trout. Its body is round and streamlined like a trout. The small mouth with big lips and no teeth is similar to a sucker's mouth. The small mouth limits the size of food a whitefish can catch, but make them particularly good at eating aquatic insects, fish eggs, and smaller fish off the bottom. Mountain whitefish will sometimes feed on the water's surface when aquatic insects are hatching. This is the time when aquatic insects leave the water for a life on land; it's like setting a buffet table for fish.

Unfortunately, mountain whitefish have a not-so-nice and not-at all-accurate nickname. The "trashfish" reference, carried over from a less informed time, is still heard today. Back when trout were being introduced for sportfishing, it was believed that mountain whitefish competed for food, which is not entirely false. However, their bodies and behavior indicate the two fish fill



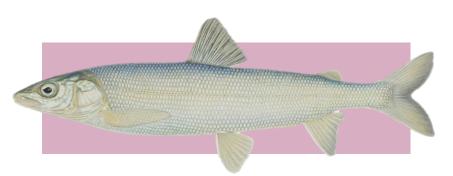
Mountain whitefish photo by Martin Koenig, IDFG.

different ecological niches in a river. Whitefish were overharvested in the 1940s and 50s, but are now indicated as a Species of Greatest Conservation Need in the State Wildlife Action Plan. Today, more knowledgeable anglers understand the beauty, function, and deliciousness of the mountain whitefish.

Mountain whitefish live a long life – at least for a fish. One mountain whitefish in Idaho was found to be 23 years old! A cutthroat trout would be lucky to make it to 10 years of age. An old whitefish doesn't mean a giant, however. Most whitefish are around 10 to 18 inches long.

Late September through November is when mountain whitefish spawn or lay their eggs. They like the water to be very cold! The water temperature usually needs to be around 42°F or colder for spawning to take place. Mountain whitefish often spawn at night. The darkness offers the eggs some protection from hungry predators. Unlike trout and salmon, mountain whitefish do not dig a gravel nest. The female finds a spot of clean gravel and just releases her eggs. She may release as many as 40,000 eggs! The eggs are fertilized by the male, sink and stick to the gravel. The eggs incubate in the cool, calm winter waters and hatch in March. If the young whitefish are able to avoid predators,

including larger whitefish, they will spawn in about three years.



The mountain whitefish might not be the most colorful fish in Idaho, but it is top fin in many rivers and streams in the state and can now be seen in the large viewing window at MK Nature Center.

Mountain whitefish artwork © Joseph Tomellari.

Year-End Giving Drive

Tom Allen, President, Friends of MK Nature Center

As 2024 drew to a close, the Friends of MK Nature Center (FOMKNC) renewed their annual giving campaign to generate continued support to enhance the educational opportunities offered at the MK Nature Center. With the support of our individual donors and area foundations, we have helped families and students enjoy, learn about, and appreciate our natural world over the years.

If you donated during this recent year-end campaign, thank you so much! Please know that the FOMKNC puts all donations to work on specific projects each year to ensure that the MK Nature Center will continue to offer wonderful outdoor educational experiences for our community.

We are excited to announce the start of our next big project for 2025. We have secured funding from generous



donors and permission from Idaho Department of Fish and Game to develop an outdoor classroom area on the northwest section of the property. If you are a long-time supporter of MK Nature Center, you may remember the area that was known as the Formal Backyard (pictured left). This area was used for outdoor teaching, educational events, volunteer appreciation events, ceremonies, retirement parties, and classes.

When the IDFG headquarters was demolished and rebuilt in 2020, part of this space became the IDFG fleet parking area. We plan to work with MK Nature Center staff, IDFG, and a local designer to develop an area just south of the original space to bring back some of that area's important functionality.

Anyone can help the Friends support activities and projects at the MK Nature Center with donations by mail at FOMKNC, P.O. Box 604, Boise, ID 83701 or online at https://www.friendsofmknc.org/donate.

Then and Now

Sara Focht, Conservation Education Supervisor, IDFG, MKNC

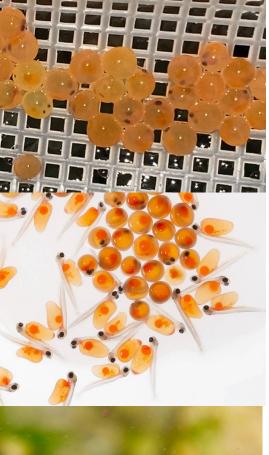


As has been said so many times before, change is the only thing that stays the same. Looking back on old photos of the nature center is remarkable in proving this! The top picture was taken in 1991 and faces northeast looking at the Alpine Lake Viewing Window. That same shot today would not be possible due to the mature vegetation.

Another striking feature in the top photograph is the towering dead tree (a snag that is a component of our logo). If the snag were still standing, it would also be impossible to see from anywhere in the nature center due to the forest that has grown up around it.

But the snag is not standing, since time has taken it's toll. Today, it lays to rest near where it had been placed so many years ago. Dead trees, standing or downed, provide excellent habitat for wildlife! Next time you visit the nature center, see if you can find the remains of the snag in the forest!

Photos by IDFG.



Trout in the Classroom

Lori Wilson, Wildlife Educator, IDFG

Do you enjoy observing trout through the underwater viewing windows at MK Nature Center?

Soon there will be another opportunity to observe the complete life cycle of trout! The MK Nature Center has joined more than a hundred teachers across the state of Idaho who raise rainbow trout in their classroom! Our trout will hatch and grown inside a tank in the visitor center.

Trout in the Classroom gives all of us the opportunity to learn more about the stages in the life cycle of rainbow trout. The nature center will receive eggs in January. By mid-February, we should have young fry swimming around our tank. In May, we will release the trout. Stop in periodically to see this growth and transformation!



Photos from top to bottom:

Rainbow trout eggs will be cradled in a basket for easy viewing in the tank. Photo by IDFG.

Rainbow trout eggs and freshly hatched sac fry. Photo by Sam Stukel, USFWS.

Young rainbow trout don't look like their parents. Photo by Ryan Hagerty, USFWS.

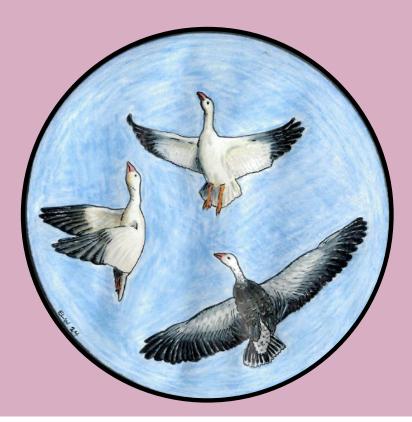
Trout will be released in the spring. Photo by IDFG.

Trout will change and grow to adulthood. Photo by Ryan Hagerty, USFWS.

Trout in the Classroom tanks are chilled by coils to keep the water cold for the fish. Photo by IDFG.







Art and Nature

Artwork and information by Erica Wilson, volunteer, MKNC, IDFG

Common Name: Snow Goose or Blue Goose Scientific Name: Anser caerulescens

In Idaho: Native to Idaho. Seen in the spring and fall. Not present year-round.

Reproduction:

Snow geese return to the Arctic tundra in the summer to mate and reproduce in massive nesting colonies. White geese interbreed with those of the blue morph, tending to choose a breeding partner that resembles their parents' coloring. Monogamous pairs usually form long-term bonds. Shallow depressions in the ground serve as nests and are lined with dry vegetation and down from the mother's body. Females lay three to five eggs, which are incubated for 23 to 25 days. Females forage up to 18 hours a day once they arrive at breeding grounds but eat little once they begin incubating the eggs. Young fledge within 45 days and reach maturity in two years. The lifespan of the snow goose is unknown but is believed to be more than 15 years in the wild.

Diet:

Snow geese are vegetarians with voracious appetites for grasses, sedges, rushes, forbs, horsetails, shrubs, and willows. They will consume nearly any part of a plant, including seeds, stems, leaves, tubers, and roots. They eat either by grazing, shearing plants off at ground level or ripping entire stems from the ground. In winter and during migration they also eat grains and young stems of farm crops, along with a variety of berries. Goslings may eat fruits, flowers, horsetail shoots, and fly larvae.

Interesting Facts:

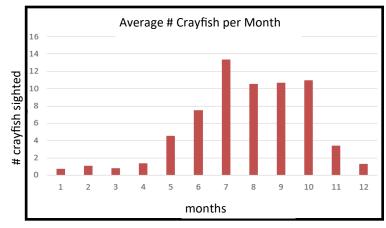
The dark color of the blue morph snow goose is controlled by a single gene, with dark being partially dominant over white. If a pure dark goose mates with a white goose, the offspring will all be dark (possibly with white bellies). If two white geese mate, they have only white offspring. If two dark geese mate, they will have mostly dark offspring but might have a few white ones, too.

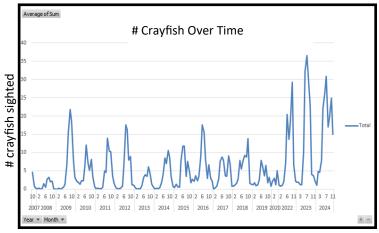
In wintering and migrating flocks that are feeding, some geese act as lookouts, keeping an eye out for eagles and other predators. Upon sighting a threat, they call out to the rest of the flock, which may take flight. Snow geese make epic journeys by air, but they are impressive on foot, too. Within the first three weeks of hatching, goslings may walk up to 50 miles with their parents from the nest to a more suitable brood-rearing area.

The oldest snow goose on record, a blue morph, was shot in Idaho in 2020. It was 30 years, 8 months old and was originally banded in Arizona in 1990.

Counting Crayfish

Sara Focht, Conservation Education Supervisor, MKNC





over many years with

years!

years

Many scientists like data and graphs, and Chris Harrington is no different. Chris is a Software Engineer III at Idaho Fish and Game Headquarters. You might see Chris at the nature center because up to 10 times a month, Chris takes a short break from work and walks the loop with the underwater fish viewing windows. It might appear he is just stretching his legs from programming at his desk, but you might not notice that he is collecting data. Since 2007, Chris has been counting the number of crayfish he sees in the windows and logging his results!

Chris's interest in crayfish did not start at the nature center. In fact, as an undergraduate student, Chris attempted several research projects on crayfish, only to find out they are masters of escape from tanks and move so far in the wild after being disturbed that his research methods were foiled.

Chris provided me with an impressive and intimidating spreadsheet of all his crayfish counting data over the years and luckily, he also included these informative graphs. Notice crayfish are out and about foraging in masses during July (top graph). The bottom graph will show you the annual activity cycle of crayfish at MKNC

quite a spike in activity the last

Chris told me the all time highest number of crayfish seen in one day was on October 14, 2022 with a whopping 71 crayfish out and about (that happened to be a Friday...the same day MKNC staff feeds the

fish in all the viewing windows). On a non-fish feeding day last October, Chris counted 58 crayfish.

This type of counting was not intended to estimate our crayfish population numbers, but Chris has shown some interesting trends about when crayfish are active and when they

Crayfish photographs by MKNC. Chris Harrington photo by Sue Dudley, MKNC.





Wildlife Plates Support Wildlife

Connor Liesse, Public Information Specialist, IDFG

Whether you buzz around town in a Tesla or an '89 F-150, the chance to upgrade your vehicle's license plate artwork is finally here. By now, you've probably seen these beautiful plates around town! They look good and they benefit a pretty great cause!

The <u>Idaho Fish and Wildlife Foundation</u>—a partner of the Idaho Department of Fish and Game—provides Idaho residents with three colorful license plate options: elk, cutthroat trout, and mountain bluebird. All three feature new, original artwork by Idaho artists.

Proceeds from each license plate purchase goes to three distinct causes—all of which are designed to support Fish and Game's wildlife diversity program. It doesn't matter if you're a backcountry archery hunter or a backyard birdwatcher, by purchasing an Idaho wildlife license plate, you're supporting Idaho's plant and animal life.



The new Idaho bluebird plates run \$35 brand new, \$25 of which goes to IFWF's wildlife diversity program. If renewing your plate, the cost is \$25, with \$15 being set aside for wildlife. The new bluebird artwork was illustrated by Coeur d'Alene resident Stephen Clark.

The cutthroat trout plates cost \$35 (new) and \$15 (renewed). Depending on which option you're going with—either \$25 or \$15 as a contribution—a small portion of that goes towards the construction and maintenance of non-motorized boating access facilities for anglers. The cutthroat trout artwork was also illustrated by Stephen Clark.





The elk plates cost \$35 (new) and \$15 (renewed). The contribution portions are the same as above—either \$25 or \$15—with a small percentage of that going towards Idaho Fish and Game's wildlife disease lab *and* the livestock disease control fund. The new elk design was illustrated by Filer resident Courtney Cunningham.

Head on over to **www.itd.idaho.gov** if you're interested in renewing or purchasing one of these new Idaho wildlife plates.

Thank You, Tony Sandor

Tom Allen, President, Friends of MK Nature Center

Since 2015, Friends of the MK Nature Center has raised funds as a 501(c) (3) non-profit organization to support and enhance the educational programming and facilities at the MK Nature Center. The one constant in nearly a decade has been the leadership and guidance of Tony Sandor as President of the Friends' Board of Directors (pictured right). His support of the MK Nature Center and his commitment to continue the legacy of the Morrison Knudsen name in our community have been unwavering and remarkable.

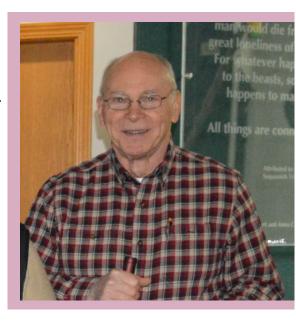
In the Fall of 2024, Tony opted to step down from his position as President of the Friends' Board, but will thankfully remain involved as an Emeritus Member. Taking over for Tony is a tall order, but the Board members and I intend to take full advantage of his advice and connections going forward.

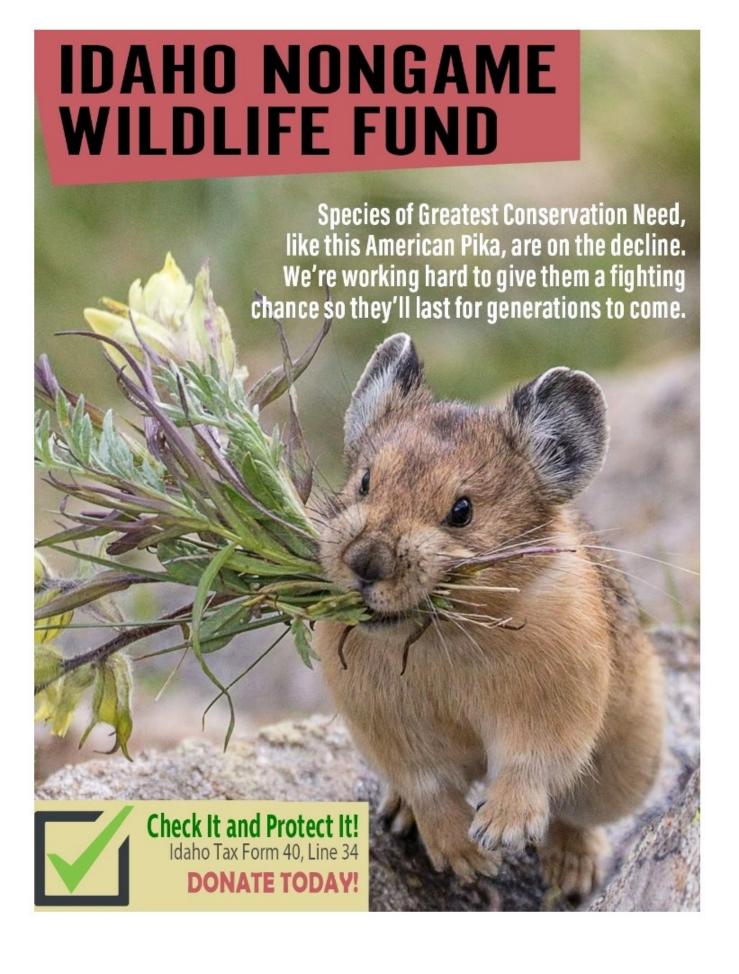
The Friends of MK Nature Center has provided many enhancements over the years, far too many to list here. But a few that merit noting are:

- Building the educational kiosk (pictured below)
- Funding an AmeriCorps member every year (pictured below)
- Hiring artists and designers to beautify all the underwater fish viewing windows (pictured below)
- Creating a new pollinator garden
- Funding the design, production and installation of new interpretive signs
- Benches for the front area and along the path (pictured below).

All of these projects were completed due to the hard work of the board members and donors throughout the years, under the leadership of Tony. To those of you who know Tony or simply cross his path occasionally at the MK Nature Center, please convey your congratulations and gratitude for his long-time dedication and support for the MK Nature Center, its staff, and its visitors. Tony truly created a legacy that will be carried on!







Idaho's Tallest Avian Angler

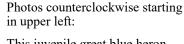
Amina Catovic. Biological Aide, IDFG, MKNC



Standing at almost 5 feet tall with an impressive wingspan that can stretch up to 6.5 feet, the great blue heron is an absolute marvel to witness. Known as the largest heron in North America, these majestic birds are built for adventure, thriving in almost any water habitat, from tropical swamps in Florida to freezing coastlines in Alaska.

At the MK Nature Center, great blue heron are common, so much so, that it is a prominent component of our logo!

Heron have found that our sturgeon pond and alpine waterfall are great spots to rest and snack on fresh fish. If you visit the center, you might find yourself squinting at the water trying to figure out if the bird is real or a statue! I had a visitor ask me recently if we placed taxidermies outside! We don't! These stealthy hunters are masters of stillness. For what may feel like ages, these birds stand motionless in the water, waiting for the perfect moment to strike a fish with their powerful beak, a perfect example of their honed adaptations as anglers.



This juvenile great blue heron, still perfecting the art of patience as it watches the water, hoping for a tasty meal to swim by (photo by Amina Catovic).

Even the wildlife use the bridges (photo by MKNC).

A heron checking out what's on the lunch menu through the glass (photo by Sara Focht).

Heron are seen at MKNC all year round (photo by Austin Reich.)

Heron legs as seen through the underwater fish viewing window at MKNC (photo by IDFG).











2024 Bird Seed Sale

Sue Dudley, Gift Shop Manager, Volunteer Coordinator, MKNC



Vicky Runnoe and Wilson



Jan Egge, Susan Riley, Benita Putzier, Susie Carlson, Dave Cannamela



Steven Berg



Susie Carlson



Carolyn King and Elizabeth Grosse



Benita Putzier, Susan Riley, Jan Egge, Steven Berg



Debbie Wiggins

We had an amazing group of volunteers helping with the fundraiser this year. We are so thankful for all of you who spent your precious time, helping with this event.

BIRD SEED STILL AVAILABLE FOR PURCHASE WHILE SUPPLIES LAST!



Wishing you a very Happy New Year!

DONORS



Bob and Ann Hay Sharon and Russ Kiefer Caroline Morris Plein Air Painters of Idaho

Donors listed above do not include Friends of MK Nature Center members and donations.

VOLUNTEERS

October

November

December

Patrice Davies
Chet Andes
Kenny Andes
Glenn Anders
Steven Berg
Pam Bly
Andy Brunnelle
Ruiji Cai
Susie Carlson
Cindy Clark
Patrice Davies
Hrishikesh Deshmukh
Kevin Drews
Jan Egge
Jack Fieselman

Todd Finato

Bob Foss

Mike Frith Kenneth Fugate Richard Goodman Tom Governale Morgan Grohs Elizabeth Grosse Erin Hadi Marylee Hale Helen Harrington John Hofland Luke Hofland **Zachary Hunt** Ray Johnston Richard Jones Carolyn King Auriane Koster Randy Langseth

Lianna Lin Cindy Marlow Jon Mathews Terri Muse Bronwyn Myers Hannah Myers Kelly Odell Josh Olson Lyla Olson Neva Olson Christine Pangos Matt Park Diana Parker Benita Putzier Susan Riley Vicky Runnoe Russ Ruschert

Kathy Sandstrom Arleen Schaeffer Blake Schnebly Katie Sewell Howard Sheppa Bobbie Smith Jim Swier Beth Todd Bonnie Urresti Claire Veseth Matt Wezlewski Debbie Wiggins Julia Zarbnisky Julia Zhao







Left: Patrice Davies guides a group of students for their outdoor tour during a Wild Turkey program in November. Photo by Sara Focht. Middle: Howard Sheppa lines out the whitefish stocking project with Trout Unlimited Members. Photo provided by TU. Right: Debbie Wiggins, Jan Egge, and Cindy Clark help at the 2024 Bird Seed Sale.

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