An Icon of the High Country, the Wolverine

by Bill Bosworth*
Regional Wildlife Biologist, Idaho Department of Fish & Game-Southwest Region

The wolverine, emblematic of solitude and thin air, is among the most sparsely distributed animals in Idaho. Although North American distribution is centered in the boreal forest ecosystem of Alaska and Canada, populations extend south in high-elevation subalpine and alpine habitats. Individuals in the Rocky Mountains of Idaho, Montana, and Wyoming comprise the southern-most extant population in North America. In Idaho, wolverines occupy high-elevation ranges, including the Centennial, Pioneer, and Sawtooth mountains, as well as the higher-elevation mountains around McCall.

A dedicated wildlife enthusiast wishing to see a wolverine needs only one thing: extraordinary luck. Like any viewing experience, being at the right place at the right time is the key, but even the best habitat contains few individuals. Some understanding of this animal’s unique ecology may improve the likelihood of a chance encounter.

The wolverine is a medium-sized carnivore belonging to the weasel family. Despite the larger-than-life reputation, adults typically weigh only 20 to 30 pounds. Prey includes birds and small mammals, such as snowshoe hares, ground squirrels, marmots, and grouse. Carrion, however, is a key food resource, particularly during the winter months when prey is scarce in the high country. Sources may include deer and elk that have succumbed to starvation and mountain goats killed by avalanches.

Winter is a particularly important period for female wolverines, which give birth to 1 or 2 kits in late February through March. Den sites are often in rock fields or under deadfall timber. These sites are at elevations above 8000 feet, and a blanket of snow over these shelters protects the young from the winter weather extremes. During the late spring and early summer, kits become more active and the female may move the kits to new den sites into the summer months. Family groups are occasionally encountered in the backcountry during the later summer and early fall.

Perhaps the wolverine’s most striking ecological trait is its large space requirements. Female wolverines use areas (in ecological jargon referred to as “home ranges”) that are on the order of 125 to 150 square miles. Several adult females occurring in the same region occupy home ranges that do not overlap. Male home ranges typically overlap several female’s ranges but do not overlap ranges of adjacent males. Male home range size is on the order of 500 to 600 square miles.

The wolverine was first documented in Idaho during a biological survey in the late 1800s, though trappers doubtless knew of their occurrence well before then. By the mid-20th century, the wolverine was regarded as an exceptionally rare species in the state. Since then, populations have undergone an apparent recovery. However, new concerns are arising in the context of climate variability. The prospect of climate warming and associated loss of montane habitat characteristics important to wolverine survival and reproduction has heightened concerns for the viability of populations in Montana, Wyoming, and Idaho. The US Fish and Wildlife Service has proposed listing the wolverine populations in the USA south of Canada under the US Endangered Species Act as Threatened.

In response to potential threats to wolverine habitat and a changing regulatory context, the Idaho Department of Fish and Game has undertaken development of a management plan. This plan will highlight resource management priorities, create opportunities for resource management partners to contribute to addressing wolverine habitat needs, and identify education and outreach needs. These proactive measures are intended to facilitate voluntary participation in programs that ensure the long-term sustainability of Idaho’s wolverine population. The hope is that our children and grandchildren will continue to have the chance to stumble upon this icon of the high country.
Fishing for a Living, the Belted Kingfisher

by Terry Thomas*
Regional Habitat Manager, Idaho Department of Fish and Game- Idaho Falls Region

We spotted the belted kingfisher perched on a limb in a Snake River side channel. Images of a kingfisher would be a welcome addition to my portfolio, so I hoped we’d get lucky and this wary bird would allow us within camera range. We stopped paddling the canoe and drifted lazily toward it. There was no talking and no movement at all, but he would have none of it. Before we closed to within 50 yards, he was off, scolding us with a series of rattling mechanical calls.

You can find belted kingfishers along waterways throughout North America. They are easy to identify because, with the exception of the ringed and green kingfishers whose range barely extends into Texas, they are also our only kingfishers.

A belted kingfisher is about 12 inches long, with a blue-gray back and a blue-gray band across its white chest and belly. It sort of looks like it is wearing a tuxedo.

Kingfishers are built like wrestlers: top heavy with short necks and a haircut only a mother could love. A disproportionately long and stout black bill is their tool. While the female is similar to the male, there is one difference. Unlike most birds, she is even more colorful, adding a chestnut-colored belly band.

Belted kingfishers are handsome birds, but among the 92 species of the kingfisher family, they are relatively nondescript, or at least sedately attired. Most kingfisher species are wildly colorful.

As the name implies, members of the kingfisher family eat fish, but also many other prey species. However, the belted kingfisher relies heavily on fish and its hunting technique shows it. From preferred perches, it spots prey under the water and then dives headfirst to grasp the fish with its bill. The kingfisher actually closes its eyes when it dives, so it must attack with pinpoint accuracy. It returns to a perch where it proceeds to bash its prey against the perch before swallowing it headfirst.

Belted kingfishers don’t construct nests of sticks or grass, nor do they utilize cavities in trees. Their nests are hollowed out in the sides of dirt banks. A mating pair takes turns excavating a tunnel from one to eight feet deep into the bank where they hollow out a chamber for five to eight eggs. This species has actually benefitted from human activities, such as road cuts and gravel pits, which increase the number of potential nest locations.

Nestling belted kingfishers have a very acidic stomach and can mostly digest fish bones and scales. However, as the birds approach adulthood, digestion changes and much like owls, they begin to regurgitate pellets of indigestible material. Pellets accumulate below a favorite perch, and just like with owl pellets, these can be used to identify what the kingfisher has been eating.

Seeing a kingfisher is much different than photographing one. Getting close will require carefully studying its habits and concealing a blind near a favored perch. Clearly, with this bird, I can’t count on luck.

Belted kingfisher; photo (BY-NC-SA) Nick Chill Photography on Flickr: EOL Images.
Fall Wildlife Events

Boise Watershed
11818 West Joplin Rd., Boise; (208) 489-1284 www.cityofboise.org/Bee/WaterShed/Home/index.aspx

The Boise WaterShed is open every 3rd Saturday of each month from 10 am - 2 pm as part of the Watershed Weekend series. Join us for an outdoor walking tour of the Wastewater Treatment Plant at 1 pm. FREE admission! No pre-registration required unless indicated.

Oct. 19 - Fall Celebration
Get up close and personal with live animals from Zoo Boise in the theater! Create Fall-themed arts and crafts and Halloween costume accessories. Wear your Halloween costume or accessory and get your photo taken in our photo booth! At 10:30, enjoy homemade caramel popcorn while listening to John Thomsen perform Idaho folk songs. Take a fun hay ride tour on the outskirts of the wastewater treatment plant at 11:30 and 12:30 (weather permitting). Tours limited to the first 20 people. Close-toe shoes are required.

Nov. 16 - Map Mania
WaterShed for a day of mapping! Join us between 10:00 a.m. and 1:00 P.M. and discover fun, new ways to create maps! Brought to you by the Southwest Idaho GIS Users Group. In the exhibit hall, we create treasure maps of your neighborhood, play map games for cool prizes, and make and eat your own cookie map (yum!) Young children will enjoy the “Young Geographer” station. Local government and utility agencies will also be on hand to showcase mapping tools available to the community.

Dec. 21- Santa’s Workshop
Become one of Santa’s elves and spend some time with the Jolly Old Elf himself! Join us between 10:00 a.m. and 1:00 p.m. and discover eco-friendly ways to celebrate the season! Mrs. Claus will also be on hand to make sure that you have a merry good time. With a little effort and imagination, you can help reduce the environmental impact of the holiday season. Learn how to recycle old holiday cards into new cards or gift tags, sew a gift bag from fabric remnants, and make beautiful ornaments and decorations from everyday household items. We will also have tasty treats for all and a choir to entertain you with holiday carols! No wastewater treatment plant tour today.

Bruneau Dunes State Park
27608 Sand Dunes Rd., Mountain Home; (208) 366-7919 http://parksandrecreation.idaho.gov/parks/bruneau-dunes

See the night sky as you’ve never seen it before. Visitors will watch a short audio visual orientation program in the Steele-Reese Education Center, and then have the chance to survey the heavens through the “Obsession”, the observatory’s 25-inch Newtonian Reflector telescope. Visitors might see a planet, nebula, the moon, or a galaxy!

Most nights, following the orientation program, visitors will also have an opportunity to join a guided night walk and use UV lights to hunt for the glow-in-the-dark scorpions that inhabit the park.

Children must be accompanied by an adult. These events are always weather permitting. The park reserves the right to close the observatory early due to either weather conditions OR lack of public attendance. There is a viewing fee of $3 a person (children 5 and under are free).

Follow link for Astronomer’s forecast http://cleardarksky.com/c/BrnDnsSPObjectkey.html

For more information, please contact the park at 208-366-7919.

Bruneau Dunes Observatory Program
Oct. 4 & 5: 8:15pm-11:30pm
Oct. 11 & 12: 8:15pm-11:30pm

Viewing Fee - $3 per person cash or check only age 5 and under free

Craters of the Moon National Monument
Arco, ID: (208) 527-1300 http://www.nps.gov/crmo/index.htm

Daily - Ranger guided Walks and Talks until October 19th.

Cave Walks 1 pm Daily
Meet at the Caves Area Parking Lot
Follow the trail through seas of ropy lava into the strange underground world of a lava tube. Wear sturdy shoes and bring a flashlight. (1.5 hours, 1 mile)

Patio Talks 3:15 pm Daily
Meet at the Visitor Center Plaza
Join a ranger under the shade of the canopy for an introductory talk about this fascinating landscape. (15 minutes) Look for a detailed schedule at: http://www.nps.gov/crmo/planyourvisit/events.htm

Nov. 9, 10, 11- Fee Free Day
A Trip to the Moon: shows continuously in the Visitor Center theater (25 minutes). Part of the award-winning Outdoor Idaho series, this film provides an excellent introduction to the natural and cultural history of the Monument.

Cave Walks: Daily at 1p.m. & 4 p.m.; also at 9 a.m. Fri.-Sun. (1.5 hours,1 mile). Explore a lava tube cave with a Ranger. A paved trail leads through ropy seas of lava. At the end of the trail descend into the strange underground world of a lava tube. Obtain a cave permit at the visitor center, wear sturdy shoes and bring a flashlight. Meet at the Caves Area trailhead.

Patio Talks: 2:15 & 4:15 p.m., Daily; also at 11a.m. Fri.-Sun. (15 minutes). Join us for a short presentation on the Visitor Center patio. Check at the visitor center for topics.

Broken Top Hike: Mon.-Thurs. at 9 a.m. (2 hours, 1.8 miles). Hike over, under and around a volcano on this fascinating hike. Bring sturdy shoes, water, a flashlight and a cave permit for exploring Buffalo Caves. Meet at the Broken Top Loop/ Tree Molds parking lot.

Evening Stroll: Nightly at 7 p.m. (30 minutes,.25 mile)
Take a short hike to a panoramic view of the North Crater Cinder Cone and the lava landscape that surrounds it. Meet at the campground amphitheater.

[Continued page 4]
Oct. 12- 5th Annual Star Party
Celebrate the spirit of giving with the family who lived here long before there was a Foothills Learning Center. Joel and Carol McCord sold their house and land to the City of Boise which expanded Hulls Gulch Reserve and allowed the Foothills Learning Center to become a reality. Program is from 10am to 2pm. All ages welcome! Free; no registration is required. Please leave pets at home, thanks!

Oct. 17- Sesqui-Speaks Lecture: Science, Democracy, and Boise’s Environmental Future with John Freemuth; 5:30pm-7:30pm.
Boise is a city embedded it its environment. Historically we have used that environment, now we also see it as a place to recreate and protect, its desirability as a place to live may well depend on how its citizenswork out the various relationships they have with the environment and each other.

SAVE THE DATE!

Hagerman Bird Festival: February 14-16, 2014
Did you know that the Hagerman Valley is a hotspot for wintering birds? More than a hundred bald eagles winter in the Hagerman Valley, and a great variety of birds depend on the open water the valley offers in winter, including great blue herons, trumpeter and tundra swans, Canada and snow geese, egrets, and thousands of ducks.

A celebration of wintering birds is planned for Presidents’ Day weekend, February 14, 15th and 16th, 2014. The festival, which begins Friday evening and concludes Sunday morning, will include presentations, workshops, guided birding tours and activities for the whole family.

The Festival is presented by the Prairie Falcon Audubon Society, www.prairiefalconaudubon.org, Southern Idaho Tourism, visitsouthidaho.com, and the Hagerman Valley Chamber of Commerce www.hagermanvalleychamber.com

This celebration of birds will welcome families and birders of all levels to Hagerman and its surrounding natural wonders. Come join us!

More information: hagermanbirdfestival@gmail.com; contact: Southern Idaho Tourism at 1-800-255-8946; or write: Hagerman Valley Birding Festival, P.O. Box 503, Hagerman, ID 83332.

Visit us on Facebook: www.facebook.com/HagermanBirdFestival

Waterfowl can be seen by the thousands at Hagerman Wildlife Management Area during the winter © Wallace Keck
It had already been a long day when I went to my last site near Devil Girl creek in the Selkirk mountain range. My first visit to this site had resulted in nothing and on this second visit; my beer-laced slug traps had nothing on them. I only had 5 more minutes of my 15-minute timed search when I saw it. It was attached to the underside of an alder log. When I tapped on its back, the large speckled mantle rose up slightly and quivered for a moment before returning to rest. After three more taps, its eyes finally emerged and it stretched out to its full length. It was the magnum mantleslug, the unofficial mascot for the Multispecies Baseline Initiative (MBI) and I finally found one. The story of the magnum mantleslug is short and simple. It was first documented in Idaho in 1948 on Lolo Pass and then disappeared in Idaho for over sixty years. Its disappearance, however, was the simple result of no one looking for it. In 2010, a biologist working with the MBI found one during a timed search aimed specifically at looking for snails and slugs. Since then, MBI technicians and volunteers have found this species to be fairly well distributed across the panhandle region of Idaho.

The main goal of MBI is to collect location data and micro-climate requirements for 20 Species of Greatest Conservation Need. Each of these 20 species are listed as ‘lacking essential information’ in the Idaho and Washington State Wildlife Action Plans. In order to accomplish this, a 5x5 km grid was applied to the Panhandle region and points within each grid cell were designated as a location to survey for terrestrial gastropods (i.e. snails and slugs) and beetles. Temperature loggers were also installed at each of the survey locations. Additionally, a wetland was randomly selected in each of the grid cells to survey for amphibians, swab for the invasive fungus, chytrid and a portion of the wetlands received water temperature loggers. Snails, slugs and amphibians (i.e. frogs, toads and salamanders) all respire through their skin, which may make them more sensitive to climate change than other species. Additionally, some of these species are threatened by invasive species, hence their populations are changing without any baseline knowledge. Finally there is very little money available to study non-game and non-endangered species, hence studying these organisms on a species to species level is nearly impossible.

This summer, 12 wildlife technicians and several biologists from partner organizations hiked, drove and bicycled hundreds of miles to complete over 1,000 surveys from the Canadian border south through the St. Joe National Forest. The technicians collected numerous amphibian tissue and disease samples, thousands of gastropod samples and observed hundreds of amphibians. They also surveyed for other species such as pika, white bark pine, terrestrial garter snake, western bumblebee, spotted knapweed and tansy. Overall, the technician’s efforts this and in prior seasons are providing the essential information necessary to inform the states’ Wildlife Action Plans. Additionally, the technicians are able to experience the same awe and excitement; as I did with the magnum mantleslug, which comes when observing species that are new to them.

Clockwise from top left: Columbia spotted frog, Magnum mantleslug, and a technician samples a wetland using a dip-net. © IDFG, Multispecies Baseline Initiative
Osprey populations have increased dramatically in Idaho since the 1980’s and it is pretty common to see them nesting on power poles, stadium lights, cell towers and other man-made structures near lakes, rivers and other water bodies. But if you look closely at the nest, you’re also likely to see a hidden danger, colored twine, woven into the nest. All birds collect string, twine, and fishing line while constructing nests, but Osprey seem to be particularly fond of using twine to adorn and bind their nest. Young bird’s talons can easily become entangled in the twine while sitting in the nest. Their entanglement only becomes known when they take their first flight and are seen dangling from the nest.

Because osprey often nest on power poles or on nesting platforms installed to protect the birds and prevent power outages, Idaho Power often receives customer calls in late July and August alerting us to osprey hanging from the nest. When we receive the call, an Idaho Power troubleman is sent to the pole to free the bird. We work with licensed rehabilitators and/or the Idaho Department of Fish and Game to evaluate the bird and if possible release the bird on site. Ospreys do not do well in captivity, becoming highly stressed, so it is important to release them as soon as possible. Many Ospreys are rescued each year, but many others perish in the heat if they are not noticed quickly and reported. It has been estimated that baling twine alone kills about 10 percent of osprey chicks in some areas.
Our story begins during the summer of 2012. It was then that I first met Alfred Larson and I was hooked. Not only by the bluebirds, but also by this fascinating man. I came back and told Al’s story to my coproducer at Wild Lens, Matthew Podolsky, and we both thought it sounded like a great idea for a film.

After reading the famous 1970s National Geographic article about bluebird declines, Al decided to help the cause by putting up 25 bluebird boxes around his home on Daggett Creek near Boise, Idaho. That was 1978. Fast-forward 35 years to today and Al is still monitoring over 300 bluebird boxes all across southwest Idaho at the crisp young age of 91. Over his 35-year bluebird career, he has banded and raised over 27,000 nestling bluebirds, an astonishing number!

Al has bluebird trails in “five different counties in southwest Idaho.” These vast networks of boxes are located in very different environments than most bluebird trails in North America. While most bluebirders face very real problems from human-associated predators and competitors such as raccoons, House Sparrows, and European Starlings, Al is relatively free from these pests. For instance, he has never had a House Sparrow occupy one of his bluebird boxes. How can this be? The key is that Al chose to place his bluebird trails in remote areas away from human settlement. His two largest trails, totaling over 250 boxes, are located in the Owyhee Mountains of southwest Idaho and near the small community of Prairie along the south fork of the Boise River.

We spent most of the summer filming and accompanying Al on his bluebird trails. We also spent a considerable amount of time just filming the bluebirds in their natural habitat, documenting their nesting cycle. From pair courtship to the fledgling of second broods, we saw it all. At every stage, Al keeps diligent notes and records to be stored in his personal database when he returns home. He also has a Master Banding permit, banding every single bluebird nesting before they fledge from their boxes. He also bands the occasional adult female caught inside the box while incubating eggs. These banding records are turned over to the Bird Banding Laboratory and help us learn about the migratory routes and wintering grounds of these birds. Al once had a Mountain Bluebird band picked up in New Mexico during early spring migration.

Al is genuinely worried about what will happen to his vast bluebird trails when he is no longer able to care for them. After we began production for Bluebird Man in April of 2013, it came to our attention that there are many other bluebird enthusiasts around the country facing similar situations. The older generation that was instrumental in establishing bluebird trails and reversing the population declines of the 1960s and 70s is looking to pass on this large-scale citizen science program to the next generation. Luckily for Al, the Golden Eagle Audubon Society has taken up the call to see that his trails are not left to whither away and decay. This fantastic organization has been working with Al to ensure there is a network of dedicated volunteers ready to monitor his trials when he is no longer able. As peak fall migration season hits, we take stock of what we learned and experienced this past breeding season. Al has been such a great mentor and guide throughout the spring and summer, and his years of experience and devotion continue to amaze us.

I think it is safe to say we will be back on the bluebird trail next year, even after Bluebird Man is finished.

With post-production for Bluebird Man in full swing, we are confident we have everything we need to tell the unique story of Al Larson and his bluebirds. At the same time we want to convey the history of bluebird conservation in North America: it is truly one of the greatest conservation success stories of the last half-century. However, we still have a lot of work ahead to make sure the hard work of those that came before us isn’t laid to waste. We hope our film can play a small role in that cause.
Thank you to those who made direct donations, purchased or renewed a wildlife license plate, or let us know of a tax check-off donation between July 1- Sept. 31, 2013.

Idaho’s nongame wildlife thanks you ALL!

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- Idaho Power
- Idaho Recreation and Tourism Initiative
- U.S. Bureau of Land Management
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