For a Golden Eagle, Death Begins a New Journey

by Beth Waterbury*
Regional Wildlife Biologist, Idaho Department of Fish & Game-Salmon Region

At 20 years old, she lived a long life – a few years shy of the North American longevity record for a wild golden eagle. She was found dead in late winter some 50 miles northwest of Leadore, Idaho, where she was banded as an adult bird in 1994. But this was not the end of her journey. She was recently shipped to the National Eagle Repository near Denver, Colorado, one of 2,300 bald and golden eagles received each year by the facility. Established by the U.S. Fish and Wildlife Service (FWS) in the early 1970s, the repository serves as a central location to salvage, store, and distribute eagles and eagle parts and feathers to Native Americans for use in religious and cultural ceremonies.

Both bald and golden eagles are highly revered in American Indian cultures, symbolizing trust, honor, strength, power, and wisdom. According to traditional beliefs, the Creator chose the Eagle above all birds to be the Master of the Sky and emissary between human beings and the Creator. The golden eagle, also known as the “war eagle,” is associated with courage in battle. Its feathers are used in healing and strengthening ceremonies for warriors, including soldiers returning from Iraq and Afghanistan. An eagle feather is often presented to Native American students at their graduation as an honor of great achievement and important rite of spiritual passage.

Idaho contributes its share of eagles to the repository’s supply chain. Idaho Fish and Game biologists and officers salvage as many as 100 bald and golden eagles each year that perish as a result of electrocutions, power line strikes, vehicle collisions, poisonings, disease, unlawful shootings, or natural causes. Biologists will follow up with power companies, transportation agencies, and other partners to correct these issues and avert future mortalities. Contributing salvaged eagles to the repository takes some of the sting out of these losses.

Each eagle arriving at the repository is assigned a tracking number and inspected for body and feather condition, species, and age. A small staff fills orders for feathers, heads, talons, wings, tails, and whole eagles used for religious ceremonies by many of the 500 federally recognized American Indian tribes. Staff specialists may process up to 150 shipments of loose feathers and 30 whole eagles a week. Despite the efforts of FWS to ship birds as swiftly as possible, about 6,000 orders are waiting to be filled. About 95 percent of orders are for whole eagles and the wait for a whole immature golden eagle, the most coveted bird, may take up to 5 years.

Demand that outstrips the repository’s supply has raised legal issues over American Indian sovereignty, religious freedom, and access to eagles for traditional purposes. In March 2012, the FWS granted a permit to the Northern Arapaho Tribe of Wyoming allowing it to kill or capture two bald eagles for their sacred Sun Dance ceremony. While this precedent isn’t expected to unleash a flood of applications from other tribes, the salvage efforts of the National Eagle Repository and its partners help to offset the pressure to take birds from the wild, thereby protecting eagle populations.

The banded female golden eagle from Lemhi County, Idaho will make one final journey to a Native American household where her feathers will be used in a variety of religious and traditional ceremonies. Where in life she roamed the wild Idaho landscape, she will continue her journey as Master of the Sky where she flies higher and sees further than any other bird.

*For a Golden Eagle, Death Begins a New Journey by Beth Waterbury, Regional Wildlife Biologist, Idaho Department of Fish & Game-Salmon Region.
any of us find the soft cooing of a dove in late evening or early morning soothing. But listen closely, that might not be our familiar mourning dove. Instead it could be a Eurasian collared-dove, a species on a fast track across the continent. Why is this bird here, and is it affecting native species?

Eurasian collared-doves, despite the common name, historically were native to India and nearby countries. Expansion across Europe occurred in the 1900s. A release of birds in the Bahamas and the Caribbean island of Guadeloupe in the 1970s began the influx to North America. From the Bahamas they jumped to Florida in the early 1980s. At least one pair was nesting in that state by 1982. Idaho is a long way from Florida, even as the dove flies, yet this species’ remarkable wave of expansion arrived here by the early to mid-2000s. McCall had at least 1 nesting pair by 2012. Researchers from the Cornell Laboratory of Ornithology describe this species’ advancement as “far faster than any of the estimates for the speed of invasion by house sparrows or starlings in the 1800s.” Others call it “explosive”. To be fair, this dispersal has been aided by subsequent releases of captive birds in several states. Eurasian collared-doves have reached Alaska but, interestingly, the northeastern United States is still uncolonized.

Standardized surveys in place before Eurasian collared-doves arrived give biologists a unique opportunity to take a closer look at how native birds, specifically mourning doves, are faring during this transition. These two species are attracted to similar urban and suburban habitats and seed sources. Idaho Department of Fish and Game conducts Call Count Surveys for mourning doves every May along 22 routes throughout the state. Routes are 20 miles long with listening stations every mile. Mourning doves seen and heard at each stop, plus those seen while driving between stations, are counted. Idaho’s routes are part of a nationwide effort organized by the U.S. Fish and Wildlife Service. The results are used primarily to establish hunting thresholds, but coincidentally have provided a way to track mourning dove numbers in the face of what might be a new competitor. The long-running Breeding Bird Survey is another independent source of information on mourning dove trends.

Both sets of data show a declining trend for mourning doves in Idaho over the last 45 years. However, both surveys show an unchanging or increasing trend in the short term (the last 2 and last 10 years). This short term reflects the time period when Eurasian collared-doves arrived in Idaho. Mourning doves are very abundant and widespread, and Eurasian collared-dove populations are just establishing. Thus, if there is an effect on mourning dove populations, it likely will be a number of years before that trend is evident from surveys. In the meantime, we all have the opportunity to improve our birding skills; there’s another dove in town and it looks like it’s here to stay.

Author’s Note: Information on the historical distribution of the Eurasian collared-dove is from the Birds of North America account by Christina M. Romagosa, 2012.
Boise Watershed
11818 West Joplin Rd., Boise; (208) 489-1284
www.cityofboise.org/Bee/WaterShed/Home/index.aspx

July 3, 10, 17, 24, 31 and Aug. 7, 14
WaterShed Wednesday Series every Wednesday from 10am-12pm. Join us for free all-ages activities, scientific demonstrations, movies and more in the exhibit hall!

From 10:00 a.m. to 12:00 p.m. in the exhibit hall, we will play interactive games and learn fun facts about animals and plants! At 10:30, join us for a hands-on presentation and interactive activity in the Theater. At 11:00, see and smell the process of wastewater treatment during the treatment plant tour. Closed-toe shoes required for tour, no strollers. There’s something for the whole family to enjoy while staying cool this summer. No pre-registration required; groups welcome!

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.

July 20 - Our Water: Stories to Share
Artist Amy Nack will lead you in creating Historic Postcards that will tell the story of our valley. See the story of water history in the Treasure Valley through a series of photographs from the US Bureau of Reclamation. Learn from Public Works professionals about the evolution of sewers and geothermal water. Browse the hands-on exhibits and enjoy old-fashioned ice cream.

August 17 - Where Does your Water Shed?
At 10:30, prepare to get your hands dirty with mud elephant artist Matt Laurance who will lead you in making your own animal sculpture out of mud. Plan to spend 1 to 2 hours if participating in this activity. Around the exhibit hall, create your own watershed and make eco-art from a variety of recyclable materials. Join Ada Soil and Water Conservation District to learn about their youth programs. Be sure to check out the temporary art installation of the Mud Elephant before it’s gone!

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

Solar Viewing and Star Gazing
July 5, 6, 12, 19; 7:30pm until 12:30am
Solar viewing, through a specially adapted telescope, from 7:30 pm until sunset. There is no fee for solar viewing. A multimedia presentation follows inside the Steele Reese Education Center at 9:30 pm. Then, step into the universe and view a variety of celestial objects through our telescopes until 12:30 am. There are park staff and volunteers available to answer questions and give star tours. Come and view the wonders of the universe through Idaho’s largest public telescope. Weather permitting we will be able to view planets, the moon, nebulae, galaxies, and star clusters. This tour of the universe costs only $3.00 per person (age 5 and under are free.)

Bruneau Dunes Observatory Program
July 5 & 6: 9:30pm-7:12:30am
July 12 & 13: 9:30pm-12:30am
July 19 & 20: 9:15pm-12:30am
July 26 & 27: 9:15pm-12:30am
August 2 & 3: 9pm-12:30am
August 9 &10: 9pm-12:30am

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

Attend a presentation in the Steele-Reese Education Center. View a planet, nebula, the moon, or a galaxy through the “Obsession” 25-inch Newtonian Reflector telescope. Sky viewing begins after presentation.

Children must be accompanied by an adult. (Weather Permitting) (The Park reserves the right to close the observatory early due to either weather conditions OR lack of public attendance.)

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

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

Daily - Ranger guided Walks and Talks: Climb a volcano, explore a lava tube or join us for an evening presentation in the campground. Walks and talks and Junior Ranger activities are offered daily throughout the summer. Look for a detailed schedule at: http://www.nps.gov/crmo/planyourvisit/events.htm

July 13 & 14 - Geology Teacher’s Workshop
This workshop will cover a wide range of regional geology, from the volcanic features of Craters of the Moon to past and ongoing geologic processes. Workshop time is split evenly between the classroom and field excursions. College credit is available for teachers seeking continuing education credits. Contact the park Geologist/Education Specialist at 208-527-1331 to register or for more information.

July 13 - Pioneer Mountains Hike: 9 am – 1 pm
See a little-visited side of Craters of the Moon as we follow Little Cottonwood Creek high into the Pioneer Mountains. Experience a shady stream-side habitat with outstanding views of the Great Rift and Snake River Plain. Carry water, sunscreen, and pack a lunch. A walking stick is recommended for some off-trail hiking. Reservations are required and the hike will be limited to 15 people. Call 208-527-1335 to make a reservation. Meet at the Visitor Center.

July 20 - Full Moon Hike: 7 pm – 10 pm
Explore this unearthly landscape under a full moon. Cooler temperatures make this moderate, 4-mile evening hike pleasant. Wear sturdy shoes and bring snacks, water, and a light jacket. Reservations are available by calling 208-527-1335. Meet at the Tree Molds Parking Lot.

July 27-Geology Exploration Hike: 8:30am -1pm
Hike with the park geologist to examine the remarkably well preserved volcanic features of Craters of the Moon. Wear hiking boots and bring a pack, lunch and water. Reservations are required and the walk will be limited to 15 people. Call 208-527-1335 to make a reservation. Meet at the Tree Molds Parking Lot.

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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 April 1- June 30, 2013.

Idaho’s nongame wildlife thanks you ALL!

©mike morrison
Wildflowers at Craters of the Moon: There’s an app for that!

by Ted Stout
Chief of Interpretation and Education, Craters of the Moon National Monument and Preserve

Wildflowers at Craters of the Moon: There’s an app for that!

Like having a Ranger in your pocket, our new wildflower app provides the ability to identify 100 of the most common plants at Craters of the Moon. Download your free copy for both Apple and Android devices by visiting our webpage at: http://www.nps.gov/crmo/photosmultimedia/index.htm

Recent rains should make this another good year for the annual eruption of wildflowers. A variety of flowers are already blooming on sagebrush covered slopes and through cracks in the lava. Peak bloom typically occurs on the cinder slopes in mid-June and continues through early July. Dwarf Monkeyflower, Dwarf Buckwheat and Silver Leaved Phacelia make up the bulk of the display on the cinder cones, but the varied habitats of the park support more than 700 different types of plants.

Although June brings the most impressive show of flowering plants, there are a wide variety of wildflowers that bloom throughout the summer. To find out “What’s Blooming Now” please visit: http://www.nps.gov/crmo/naturescience/wildflowers.htm

Our Facebook page also provides regular reports on wildflowers and other observations in the park: https://www.facebook.com/CratersoftheMoonNationalMonument

Clockwise from top left: Indian paintbrush, blazing star, arrowleaf balsamroot, and dwarf monkeyflower © Craters of the Moon National Monument and Preserve
Top 5 Reasons NOT to use Red Hummingbird Nectar

Reason #1: It serves NO purpose - Most hummingbird feeders on the market have enough color on them (red or otherwise) to attract hummingbirds without the need for red dye in the nectar. If there is no red on your feeder, simply tie a piece of red flagging, rope, or fabric to it.

Reason #2: The dye is petroleum based - The dye in colored nectar is red dye #40. Red dye #40 is now made mostly from petroleum, which is not good for any animal to ingest!

Reason #3: Nectar from flowers is clear - not red - Nectar made with water and simple table sugar at a 4-to-1 ratio most closely approximates the naturally clear nectar found in flowers.

Reason #4: The red dye passes though the hummingbird - The dye stains their excretions red. These indicators mean the red dye is “not metabolized, but passes through the kidneys, where it might cause problems.” (see photo on right)

Reason #5: You can make clear nectar more simply - No more trips to the store to buy nectar. Make it at home. A simple 4-to-1 water to table sugar solution will attract and feed all the hummingbirds you can handle!

Hummingbird Nectar Recipe

1 part sugar to 4 parts water

1. Boil water
2. Stir in sugar to dissolve
3. LET COOL and then fill feeder
4. Store remainder in refrigerator for up to 2 weeks

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<thead>
<tr>
<th>To Make</th>
<th>Water</th>
<th>Sugar</th>
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<tr>
<td>1 cup nectar</td>
<td>1 cup</td>
<td>1/4 cup</td>
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<td>2 cups nectar</td>
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<td>3 cups nectar</td>
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<tr>
<td>4 cups nectar</td>
<td>4 cups</td>
<td>1 cup</td>
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© Idaho Bird Observatory


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How You Can Help

To prevent the spread of WNS, screening is required to visit any cave at Craters of the Moon. Free permits are available at the Visitor Center, Entrance Station, or at any Ranger program.

Be prepared to answer the following questions:

Have you been in a cave or mine since 2005? If so, are you wearing or carrying anything that has also been in a cave since then (i.e., shoes, clothes, backpacks, flashlights, watches, phones, jewelry, etc.)?

If the answer is yes to both these questions, contact a ranger for more information.

Scientists conduct mid-winter surveys of bats in a lava tube cave. Disposable suits minimize the risk of contaminating bat hibernacula with White-nose syndrome. Photo © APS

Bat calls are recorded as bats enter and exit a cave, then analyzed with the help of special software. Scientists can then determine which species are present in each cave. Photo © NPS

Conservation Corner

If you're a biologist at Craters of the Moon, the only thing harder than finding a needle in a haystack may be finding a bat in a cave. The journey to find that bat likely began with boiling your shoes and ended with a flat-on-your-stomach crawl over jagged rocks through the damp innards of a cave. You'd be forgiven for wondering if all the challenges are worth the effort. For the biologist studying these elusive creatures of the night, the greatest challenge may be the race against time.

Some obstacles to studying bats are obvious: their small size and nighttime activity make them difficult to spot. With 11 different species at the monument, identifying individuals is difficult even for experts.

A bat’s home of choice – a lava tube cave – adds more challenges. Caves offer bats shelter from predators and moderate temperatures throughout the year, a subterranean refuge from a hostile world.

For humans, the dark cavernous passageways mottled with cracks and shadows can be hard to get to, let alone explore. Yet caves remain popular with people for the cool shade they provide on a hot day and the chance to experience something out of the ordinary. That's also why biologists study bats with a sense of urgency right now.

In 2005 a cold-loving fungus known to science as Geomyces destructans appeared in a cave in upstate New York. Likely hitchhiking from Europe on an unsuspecting visitor’s shoes or clothing, the biological intruder causes White-nose syndrome (WNS) in bats. In less than ten years it has killed an estimated 5 million bats across 22 states and 5 Canadian provinces, the equivalent of a smallpox epidemic for the bat world.

WNS poses additional challenges for biologists studying bats. During winter surveys of caves where bats hibernate – known as hibernacula – biologists donned disposable body suits and painstakingly decontaminated gear afterwards, including sterilizing their shoes in a 122°F water bath. These steps minimized the risk of introducing WNS into bats’ winter homes, when they are especially vulnerable. The upshot of all the effort: Three new hibernacula were found, confirming the monument’s caves provide important year-round habitat to several species of bats.

Monitoring continues this summer, presenting yet another challenge: bats that are active and perhaps widely dispersed or in maternity colonies, where mothers rear their young. Fortunately, biologists have a new technology to help find and identify them. Acoustic monitoring devices set up near cave entrances will record bat calls and new software can analyze those calls to aid in species identification.

Fortunately WNS is not yet a reality for bats at Craters of the Moon. Biologists will use this time to better understand the role of bats in the monument’s ecosystem, and several caves remain open to visitors who have been screened for WNS and receive a cave permit. That way, even if you never go looking for a bat in a cave you can help provide them a safe home for years to come.
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U.S. Fish & Wildlife Service