Some of the best birding in south central Idaho can be found in the 1,420-acre Castle Rocks State Park, a 150 year old ranch where cattle grazing continues even today. Good birding usually means high species diversity and numbers of birds, and Castle Rocks boasts over 140 species. Rangelands that are intensively used often results in less varied habitats and low diversity of birds. So what’s up? Is it really possible to have both cattle and birds on the landscape? What do the birds tell us?

Castle Rocks (and the Albion Mountains of which the park is a part) contains the northern-most population of pinyon pine, but also diverse habitat including: willow and cottonwood riparian areas, aspen stands, juniper and mountain mahogany woodlands, sagebrush steppe, pastures, and granite pinnacles that in themselves create specialized habitat for birds. With the exception of the pinnacles, cattle graze all of these habitats in the park.

Maintaining cattle on the landscape preserves the local traditions and historic ranch, and grazing lease fees provide a much needed source of revenue to operate the park. On the other hand, the mission of the Idaho Department of Parks and Recreation is to improve the quality of life in Idaho through recreation and resource stewardship. Castle Rocks occurs at a biogeographic crossroads and protects a rich ecological diversity. Furthermore, birding is one of the fastest growing outdoor recreational activities in the US, and 28% of Idahoans participate in this activity, according to a recent U.S. Fish and Wildlife study. A park manager must analyze these competing uses and practice good stewardship. One of the ways we can evaluate good stewardship is to listen to the birds, literally.

photos © Wallace Keck

[Continued page 2]
Park staff and volunteers have conducted bird surveys by sight and sound in Castle Rocks since 2002. Prior to opening to the public, the entire ranch was open to grazing. Like many bird species, cattle prefer riparian areas, the cover of trees, and thick vegetation that often grows in the understory. The riparian system was significantly degraded and poorly functioning. In 2005, the Idaho Department of Transportation was looking for a wetland mitigation project related to the City of Rocks Back Country Byway construction, and Castle Rocks became a favorable choice. As a result, 12 acres of the heavily grazed riparian area were fenced, cattle were excluded starting in 2009, weeds were treated, and a greater monitoring of wildlife began. Another wetland project of three acres was implemented along Almo Creek in 2008, and cattle were excluded that same season.

This past spring and summer two bird surveys were conducted along a half mile of Almo Creek. The survey passed through areas where cattle were excluded and areas where cattle were permitted to graze the riparian area. Areas of each were approximately equal in size, but the result indicated that nearly twice as many birds were found in the cattle excluded areas, and in most cases, species diversity was greater as well, even 40% greater. The survey results are merely anecdotal, but those involved in the survey were surprised to see such an obvious difference after just a few years of excluding a section of the riparian area from cattle.

But before one jumps to the conclusion that this story is about removing cattle from rangelands, consider: no reduction in grazing resulted, and water remained available to cattle through canals. More wildlife on the rangeland is good stewardship, and if this can be accomplished without the need to reduce forage consumption of cattle, both the park visitor and the permittee win. Fences do cost, but to those who value healthy rangelands and watchable wildlife, the price is worth it.

In addition to excluding cattle from riparian areas, park staff manages the open range to ensure that enough stubble height and cover remains at the end of the season so that the following spring sage-grouse leks remain successful. Likewise, wintering mule deer, elk, and moose all benefit from this careful management. Castle Rocks contains some of the healthiest sagebrush steppe habitat for grouse. Also in the spring and early summer, the irrigated pastures boast some of the greater breeding populations of Wilson’s snipe, mallard, and sandhill crane. The timing and movement of cattle on the pasture is designed to maximize wildlife diversity as well as the blooming of meadow flowers.

One of the more interesting observations this year related to cattle and birds involves the summer habitat preferences of pinyon jays. Park employees are participating with other agencies and organizations to understand the preferences and movements of Idaho’s rarest corvid. The study is just beginning, but pinyon jay flocks were most frequently observed in widely-spaced juniper, where cattle frequently graze. The old-growth pinyon in ungrazed areas did not appear to be preferred. Might cattle be an unwitting tool in managing for pinyon jays?

Observing birds is only one way to understand the health of public rangelands, but for this author it is certainly one of the more entertaining. Monitoring vegetation, observing the preferences of cattle, and meeting the needs of livestock strategically is another. Castle Rocks State Park strives to model successful grazing management and provide the watchable wildlife diversity visitors come to expect and enjoy. To be sure we are successful, I’ll be out birding.
The American Kestrel is North America’s smallest and most colorful falcon. Most of us are accustomed to seeing kestrels hunting from power lines or fence posts, or “hover hunting” in the air. Unfortunately, researchers believe the kestrel’s population status is changing from “common” to “of concern”. Data from the Breeding Bird Survey since 1966 suggest that populations of breeding kestrels have declined 47% across North America, and anywhere from 36% to 55% in Idaho. The time to study and conserve the American Kestrel is before it reaches threatened or endangered status, and now you can help.

The Peregrine Fund’s new American Kestrel Partnership is a research and conservation initiative supported by families, students, scouts, birders, researchers, teachers, and anyone else interested in kestrels. You can join the Kestrel Partnership as a citizen scientist and easily contribute to kestrel research and conservation by building or buying wooden nestboxes (kestrels are cavity nesters, like bluebirds); hanging them on posts, barns, or trees; and looking into the boxes once every 1-2 weeks from April through July to record the numbers of eggs and nestlings. After collecting the data, simply enter it on the American Kestrel Partnership’s website, and voila, you just contributed data to the largest kestrel research program in history!

Autumn is the best time to build and hang nestboxes, so that they are ready for kestrels in the spring, so don’t wait! To participate and learn more, check out the American Kestrel Partnership’s website: http://kestrel.peregrinefund.org

Citizen Scientists for Kestrels

by Matt Giovanni, Ph.D *
American Kestrel Partnership, Director; The Peregrine Fund

© Mia McPherson
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. 20 -Greening Your Halloween
Join the ReUse Market in crafting costume components from recycled materials at our costume-making stations and get your face painted to transform your look. Wear a costume or your “new” creation in the costume parade led by Eddy Trout at 12:00. If you dare, prepare to be frightened on a haunted wastewater tour! Tours depart at 12:30, 1:00 and 1:30. Tours limited to first 40 people, appropriate for ages 7 and up, closed-toe shoes required

Nov. 17 –Fall Fest
At 10:30, enjoy Idaho folk songs by performer John Thomsen. Plus take a hay ride tour on the outskirts of the wastewater treatment plant at 12:30 and 1:30! Tours limited to first 20 people (weather permitting), appropriate for ages 7 and up, closed-toe shoes required.

Thanksgiving Break - November 19-21 only
In addition to the hands-on fun of the exhibit hall, special Fall-themed activities and crafts will take place from 10:00 a.m. to noon, with a wastewater treatment plant tour at 11:00 a.m. (weather permitting) Tour limited to 40 people, closed-toe shoes required, no strollers. FREE admission! No pre-registration required.

Dec. 8–I’m Dreaming of a Green Christmas
With a little effort and imagination, you can help reduce the environmental impact of the holiday season. Jingle all the way to the Boise WaterShed to learn from the ReUse Market how to recycle old holiday cards into new cards, sew a stocking or bag, and make beautiful ornaments and decorations from used, everyday household items. Note: No wastewater treatment plant tour today.

Coeur d’Alene BLM Eagle Watch at Wolf Lodge Bay
Dec. 26-30; 10am-3pm
For the over 20 years the BLM, Idaho Fish and Game, U.S. Forest Service, and Coeur d’Alene Audubon have been celebrating the arrival of large numbers of bald eagles on Lake Coeur d’Alene. Eagles begin to trickle in from Canada and Alaska around the middle of November. Their numbers will steadily grow until they peak right around the Holidays. Eagle Watch is great opportunity to see these beautiful raptors up close and learn about their habits. Two interpretive sites will have telescopes, publications, and mounted specimens of eagles and osprey. Interpreters will be on hand to answer your questions and our scopes provide a wonderful up close view of bald eagles as they feast on the spawning kokanee salmon. From Interstate 90 east of Coeur d’Alene, take the Wolf Lodge Bay Exit (Highway 97) and head south. You can’t miss the big blue canopy at the Mineral Ridge Boat Launch. For more information contact: Carrie Hugo 208-769-5048.

Craders of the Moon National Monument and Preserve
18 miles southwest of Arco, on Hwy. 20/26/93; (208) 527-1300; http://www.nps.gov/crmo/
A Trip to the Moon: 9 a.m. to 3 p.m. on the hour, 25 minutes; Visitor Center
Part of the award-winning Outdoor Idaho series, this film provides an excellent introduction to the natural and cultural history of the Monument.

Among the Craters of the Moon: 9:30 a.m. to 3:30 p.m. on the half-hour, 17 minutes; Visitor Center
Created in 2005 by documentary filmmaker Steve Wursta, this is a shortened version of an hour long presentation about the fascinating life and adventures of explorer and park-founder, Robert Limbert.

Patio Talks: Daily at 3 p.m. and 1:30 p.m. Saturdays; 15 min.; Visitor Center
Enjoy a short presentation on the visitor center plaza. Check at the visitor center for topics.

Cave Walks: Daily at 1 p.m. and 9 a.m. Saturdays; 1½ hours, 1 mile; Caves Area trailhead
Follow the trail through seas of ropy lava into the strange underground world of a lava tube. Wear sturdy close-toed shoes, bring a flashlight, and a cave permit.

Deer Flat NWR
13751 Upper Embankment Rd. Nampa; (208) 467-9278; www.fws.gov/deerflat
All events are held at Deer Flat National Wildlife Refuge Visitor Center. Visit www.fws.gov/deerflat or contact 208-467-9278 or deerflat@fws.gov for more information.

Scout Day
Take a hike! Make a nature craft! Earn a badge! Scout day is an opportunity to meet other scouts, have fun, and earn wildlife badges for girl scouts or cub scouts. Saturday, Oct. 13, Nov. 3, and Dec. 1: 1-3 PM.

Nov. 13- 7pm; Wintering Raptor Population Trends
Breeding populations of raptors within the Morley Nelson Snake River Birds of Prey National Conservation Area (NCA) have been very well studied. Wintering raptors in this same area, however, have received very little attention. Neil will present his research on the population changes of wintering raptors in the NCA over the last 20 years. Using locally intensive surveys and historic Christmas Bird Count data, Neil explores whether habitat change, climate change, or both, are influencing changes in southwestern Idaho’s wintering raptors.

Oct. 27; 4-6:30pm Creepy Critter Encounters
Ghosts and ghouls are invited for some spooky fun at Creepy Critter Encounters. Join wild creatures on this moonlit evening for a slightly scary adventure. There will be activities for kids of all ages, including the chance to see a live owl, reptiles, and insects. Create your own trick or treat bag and learn about creatures of the refuge on a spooky hike, Stay until sunset to hoot for owls and howl for coyotes. Come in costume for a special treat! Bring a flashlight just in case.

[Continued page 5]
Thank You for Your Support!

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, 2012 through September 31, 2012. Idaho’s nongame wildlife thanks you ALL!

Fall Wildlife Events

**Foothills Learning Center**
3188 Sunset Peak Rd., Boise; (208) 514-3755
www.cityofboise.org/Bee/Foothills/index.aspx

Programs are FREE and no registration is required. Second Sat. Programs are from 10am to 2pm. All ages welcome! Free; no registration is required. Please leave pets at home, thanks!

**Nov. 10 – Animal Stories**
Join Joy Steiner and the Treasure Valley Storytellers for a day of whimsy, imagination, and tradition. Experience the original form of teaching about the natural world and its many wonders. Local storytellers will focus their skills on stories about animals. Be prepared for some great stories, and some fun crafts to go along with them.

**The World Center for Birds of Prey**
5668 W. Flying Hawk Lane; (208) 362-8687
(208) 769-5000; www.peregrinefund.org

October Frequent Fliers
Falcons, hawks, and owls will demonstrate their impressive flying skills at outdoor flight displays at The Peregrine Fund’s World Center for Birds of Prey through October 28.

The demonstrations will be held in a new, 300-person outdoor seating area called Raptor Ridge. The area, donated by Bill Belknap of Boise, is constructed of local sandstone and features a scenic backdrop of the Boise Valley.

•Time: 1:30 p.m. (weather permitting) Thursdays, Fridays, Saturdays, and Sundays in October. Arrive by 1:15 p.m., no late seating.

•Admission: $7 adults, $6 seniors, $5 youth 4-16, free to members

A discounted admission package for families will be offered for the Oct. 4-7 demonstrations. Two adults and two children will be admitted for $14, a savings of up to $10.
Idaho illustrator, artist, and educator Bill Carman created a unique poster to honor one of Idaho’s iconic watchable wildlife species—the mountain goat!

The poster can be easily framed and makes a great holiday gift!

About the poster:
- Border: White
- Text: Brown
- Paper: Heavy weight matte
- Size: 16” x 20”
- $15 unsigned
- $50 limited edition signed by artist

Copies of the poster are available from:
Idaho Department of Fish and Game
Watchable Wildlife Program
PO Box 25, 600 S. Walnut St.,
Boise, ID  83707

For more information, contact:
Deniz Aygen, Watchable Wildlife
deniz.aygen@dfg.idaho.gov
208/287-2750

Proceeds from the sale of the poster will benefit Watchable Wildlife viewing sites in Idaho!
Many people wonder how our wildlife fare during wildfires. We may think of fire as devastating to animals, but it is important to remember that wildfire and wildlife have coexisted for millennia. Periodic fire resets the ecological clock on landscapes, stimulating productivity and biodiversity in plant and animal communities.

The ability of wildlife to survive fire depends on their mobility and on the season, severity, rate of spread, size, and duration of the fire. In general, wildfire kills or injures a relatively small proportion of animal populations.

Large mammals like elk, deer, bears, and mountain lions are mobile enough to find a safe location in unburned patches or outside the burn. When mortality does occur, it is most likely when fire fronts are wide and fast moving, fires are actively crowning, and thick ground smoke occurs. The 1988 fires in Yellowstone killed only 1 percent of the area’s elk population, mostly by smoke inhalation. The Yellowstone fire’s later effects on habitat influenced the elk population much more dramatically than did direct mortality.

Because large mammals, such as deer and elk, depend on vegetation for forage, bedding, and cover, they may abandon burned areas if fire removes many of the habitat features they need. Thus, stand-replacing fires in shrub and forest habitats are more likely to trigger high rates of emigration than patchy or low-severity fires, at least in the short-term.

Most small mammals avoid fire by using underground tunnels, pathways under moist forest litter, stump or root holes, and spaces under rock, talus, and large dead wood. Small mammals that use surface-level nests, such as snowshoe hare and deer mice, are more vulnerable to fire-caused mortality. However, their high reproductive potential enables them to increase rapidly after fire and disperse readily into recovering areas.

Birds will fly from burning areas to avoid injury. Fortunately, the Mustang and Halstead fires ignited after most nestlings were on the wing and mobile enough to escape the fires. And many of our forest birds begin migrating in August, so may have departed before the fires reached their summer homes.

There is scant information on amphibian and reptile mortality from fire. These species likely survive fire by remaining in the soil beneath rocks, entering animal burrows, or by escaping to water. Their survival in retreats under flammable materials, such as logs or stumps, would depend on fire severity and moisture conditions.

The influence of fire on fish can be highly variable. In cases of high severity fire and high riparian fuel loads, local extinctions have been documented, particularly in areas where fish populations were isolated in small headwater streams. But fires that cover large areas are internally patchy, leaving areas of undisturbed aquatic habitat where fish populations may persist and recolonize disturbed areas.

Periodic wildfires are something that animals have adapted to after living in fire prone areas for centuries. The short-term loss of wildlife due to fire is usually far outweighed by long-term benefits. The “stimulation in biodiversity” and plant succession that occurs greatly benefits most wildlife populations.

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From the Field

Direct Effects of Wildfire on Wildlife

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

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