



On The Wing

Volume 38, Number 2

Boulder County Audubon Society Newsletter

Mar-Apr 2008

State of the Birds III: Isolated and Restricted Raptors

by Steve Jones

The Boulder County Avian Species of Special Concern List includes 30 species that are neither demonstrably rare nor rare and declining, but make their way onto the list because of their dependence on isolated or restricted habitats. These specialists nest in a limited number of locations in the county or occupy narrow habitat niches. Boulder County Audubon (BCAS) and the Boulder County Nature Association (BCNA) maintain nesting records for about half of these birds, many of them raptors. Here's how the birds of prey on the list appear to be doing:

Northern Goshawk: Little is known about local populations of this secretive forest hawk, but we did receive reports of at least three nests in 2007. Mike Figgs and Nan Lederer observed a successful goshawk nest near St. Malo, and Dave Hallock reported a successful nest near Rainbow Lakes Road. An historic nest at Heil Ranch remained active (Susan Spaulding, pers. comm.). Gregg Burch reported potential nesting activity near Burnt Mountain, just east of the Peak-to-Peak Highway. An historic goshawk nesting site in Lost Gulch appears not to have been active for several years (Linda Andes-Georges, pers. comm.).

Swainson's Hawk: Here's an apparent case of a grassland and other open country specialist "generalizing" its behavior, with positive results. Swainson's Hawk sightings reported to the Boulder County Wildlife Inventory have nearly doubled since the 1980s. What's remarkable is that many pairs seem to be nesting in small open space parcels within urban areas, particularly in Louisville and Broomfield (Blake Schmidt and Paula Hansley, pers. comm.).

Ferruginous Hawk: Though there are no nesting records for Ferruginous Hawks in Boulder County, they make it onto the list because of their affinity for grasslands and other open country. Boulder County wintering numbers of these majestic raptors have declined more than 80% since 1990 (BCNA 2007, BCAS 1979-2007). Boulder County research by Berry, Bock, and Haire (1998) suggests that there is a threshold level of habitat fragmentation that drives these hawks away from urbanizing environments.

(Continued on page 6)

BCAS 4th Tuesday Program Series

March 25, 7:30 p.m.

Preble's Meadow Jumping Mouse

Dr. Carron Meaney

Preble's meadow jumping mouse has elicited a lot of controversy. The USFWS has listed it as threatened, and now have proposed to delist it in Colorado. This talk will discuss the biology and some of the basic issues and regulatory factors relating to the listing/delisting decision. The talk will also touch on a project involving ledges installed in culverts to help these mice deal with the barrier effect of roads.

Carron grew up in French West Africa and moved around extensively as a young person, attending 17 different schools. She came to Boulder in 1970 and received a B.S., M.S., and Ph.D from the University of Colorado. She now works for Walsh Environmental in Boulder. She is about to complete a Natural Areas Inventory for the Town of Erie and works on the wildlife issues for wind farm projects in Colorado and Wyoming. She is chair of the Colorado Bat Society and co-author of *The Mammals of Colorado*.



Preble's meadow jumping mouse in hand. Note the long tail and large hind foot (Photograph by Bill Ervin)

Refreshments and Socializing at 7 PM

Program at 7:30

Meetings are held at the Unitarian Universalist Church of Boulder, 5001 Pennsylvania Ave. (west off 55th St. between Arapahoe and Baseline)

BCAS 4th Tuesday Program Series

April 22, 7:30 p.m.

The Last Flight of the Scarlet Macaw

Award-winning author **Bruce Barcott** will chronicle Sharon Matola's inspiring crusade to stop a multinational corporation from destroying critical habitat for Scarlet Macaws in Central America. His talk addresses the realities of economic survival in Third World countries and explores the tension between environmental conservation and human development

Bruce Barcott is a contributing editor for *Outside* magazine and author of *The Measure of a Mountain: Beauty and Terror on Mount Rainier*. His feature articles have appeared in *the New York Times Magazine*, *Mother Jones*, *Harper's*, and *Utne Reader*. He contributes reviews to the *New York Times Book Review* and the public radio show *Living on Earth*, and is a former Ted Scripps Fellow at the University Of Colorado.



Making It Possible

March—May Field Trips

Saturday, March 8th 7-10 a.m. Sawhill Ponds Wildlife Area. Welcome spring with an early morning hike and potluck breakfast at Sawhill Ponds, located off 75th Street between Valmont and Jay roads. Bring something sweet, warm, tropical or passionate to pass around. We should see raptors, ducks, and early-singing songbirds. Leader: Steve Jones stephen.jones@earthlink.net 303-494-2468

Friday, May 2, 9 a.m. "Champion Cottonwood Field Trip." Meet at Pella Crossing to car pool to see the largest plains cottonwood in the U.S. It stands 105 feet tall and measures more than 35 feet in circumference. It grows along Crane Hollow Road on Boulder County Open Space. Leader, Pascale Fried; call Carol Cushman (303-604-2250) for more information, and to reserve a space. We will spend some time birding at Pella Crossing after the field trip. Limit of 15 people.

Saturday, May 3, 8-10a.m. (arrive at 7:45a.m.) Roll and Stroll - A Birding Excursion for the Mobility-Challenged and Everyone Else! Leader: Mary Balzer (marybalzer@qwest.net), Scott Severs and Topher Downham. Join other birders using wheelchairs, strollers, walkers, crutches, or just plain legs, for a relaxed tour of the Sawhill Ponds located off 75th Street between Valmont and Jay roads. Meet at the information gazebo/picnic table at Sawhill Ponds Wildlife Area.

Saturday, May 10: International Migratory Bird Day at Walden Ponds. See page 7 for more details.

Sunday, May 11, 8 a.m.-1 p.m. Spring rendezvous and volunteer training for eco-stewards. New volunteers are most welcome. We will meet at the Meyers Gulch trailhead at Walker Ranch (8 mi. up Flagstaff Mountain Road on the right) at 8 and do a breeding bird, mammal, and recreationist survey; then have picnic lunch in the aspens. Bring a sack lunch, binoculars, rain gear, and writing implement. For information, call Steve Jones (303-494-2468).

Wednesday, May 28, 6-10 a.m. Laura Osborn (303-939-9273) and Steve Jones (303-494-2468) will lead a breeding bird survey in Meyers Gulch, at Walker Ranch. During the past two years we've documented more than 65 potential breeding species. Meet at the Meyers Gulch trailhead at 6 or at the Chautauqua Ranger Cottage parking area (just south of 9th and Baseline) at 5:40 to carpool.

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Jan, March, May, Sept, and Nov.

Next issue:

Deadline for materials for the May 2008 issue is Fri., Apr 18. To contact the editor, use the link in <http://www.boulderaudubon.org/newsletter.htm>

How Green are Biofuels?

Biofuels are widely expected to replace a growing portion of our current oil usage in the coming decades while simultaneously reducing our greenhouse gas (GHG) emissions. Recent studies cast serious doubts on these expectations. It's also important to recognize that biofuels differ widely in their total environmental effects.

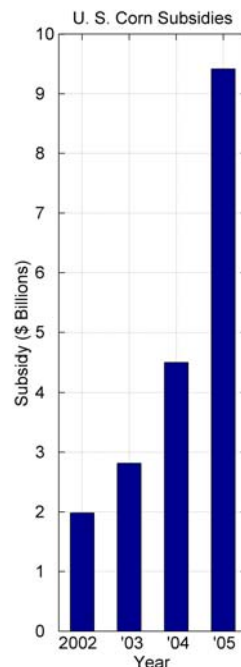
Several European countries have reduced biofuel production subsidies recently in recognition of the fact that many fail to reduce GHG emissions, and conversion of land to biofuel production often leads to substantial environmental harm.

A Swiss study, summarized in *Science* (Jan. 4), emphasizes the importance of considering the entire environmental effect when comparing potential biofuels. There is particular concern in the EU about forest clearing in SE Asia and Africa to produce palm oil to satisfy the mandate that 10% of all road fuels come from "green" sources by 2020. Tropical forest clearing is itself a major source of GHG emissions, and it also destroys valuable wildlife habitat.

The current approach in the U.S. is to subsidize production of ethanol from corn. Subsidies to growers in recent years are shown in the adjacent graph. Ethanol added to gasoline currently receives a subsidy of \$0.51 per gallon. The net environmental effect of the ethanol subsidy may be negative, but your taxes make ethanol production very profitable.

Corn is the feedstock for much of our industrial food chain—e.g., most animal products and the universal sweetener, high-fructose corn syrup. Thus, diversion of corn cropland to ethanol production has raised food prices worldwide. Because much soy cropland in the U.S. is being converted to corn, Amazonian forests are being cleared to produce soy, generating substantial GHG emissions.

A recent article by the Union of Concerned Scientists (UCS) says: "To fully assess the global warming impact of transportation fuels, we must measure their full life cycle emissions per unit of energy delivered. This poses an analytical challenge for a number of reasons. For example, plants capture carbon dioxide (CO₂, a potent heat-trapping gas) from the atmosphere during photosynthesis, but the impact of this carbon capture on biofuel emissions varies by feedstock."



In a Feb. 7 *Science Express* article, Searchinger, et al describe their analysis of the GHG changes resulting from biofuel production, with particular emphasis on the effects of changing land use. They point out that most previous studies count the carbon benefits from growing biofuel crops, but ignore the carbon costs. Thus, the CO₂ uptake by biofuel crops provides a net GHG benefit only if those crops collect more CO₂ than the plants they replace. Clearing forest land for biofuel crops results in a large immediate release of GHG and probably reduces the annual CO₂ sequestration as well.

In their words: "Using a worldwide agricultural model to estimate emissions from land use change, we found that corn-based ethanol, instead of producing a 20% savings, nearly doubles greenhouse emissions over 30 years and increases greenhouse gases for 167 years. Biofuels from switchgrass, if grown on U.S. corn lands, increase emissions by 50%. This result raises concerns about large biofuel mandates and highlights the value of using waste products."

We couldn't supply our current needs for transportation fuel if all of the farmland in the U.S. were converted to ethanol feedstock. We currently produce only about 3.5% as many gallons of ethanol per year as we consume of gasoline. It is clear that more efficient use of fuel is a long-term necessity. This means, but is not limited to, fewer trips with more efficient transportation.

Sources

Use of U.S. Croplands for Biofuels Increases Greenhouse Gases Through Emissions from Land Use Change, Timothy Searchinger, et al., <http://www.sciencemag.org/cgi/rapidpdf/1151861.pdf>

How Green Are Biofuels?, Jörn P. W. Scharlemann and William F. Laurance, *Science*, Jan. 4, 2008, p 43

Biofuels: an Important Part of a Low-carbon Diet, Union of Concerned Scientists, 2007, http://www.ucsusa.org/assets/documents/clean_vehicles/ucs-biofuels-report.pdf

Who's Fueling Whom? Why the Biofuels Movement Could Run out of Gas, Richard Coniff, *Smithsonian Magazine*, Nov 2007

An Oil Quandary: Costly Fuel Means Costly Calories, Keith Bradsher, *N.Y. Times*, Jan 19, 2008

Europe, Cutting Biofuel Subsidies, Redirects Aid to Stress Greenest Options, Elizabeth Rosenthal, *N.Y. Times*, Jan 22, 2008

Switch to Corn Promotes Amazon Deforestation, William F. Laurance, *Science*, 14 Dec 2007, p. 1721

The Omnivore's Dilemma: A Natural History of Four Meals, Michael Pollan, Penguin, 2007

Useful data sources:

<http://www.eia.doe.gov/>

<http://www.ethanolrfa.org/industry/statistics/>

<http://farm.ewg.org/farm/progdetail.php>

BOULDER COUNTY WILDLIFE INVENTORY, SEPTEMBER 2007

Gillian and Alex Brown, 4560 Darley Avenue, Boulder, CO 80305.

September usually sees the height of the fall migration with the second largest (after May) monthly total number of bird species. However, this year's total of 164 bird species for September tied with that of June. It is very comparable with last year's total of 166 species but a long way off the record 178 species seen in September 2000. Several birds that were missed during spring migration were seen this month such as **Nashville Warbler** and **Black-and-White Warbler**. In fact warbler migration was strong with particularly large numbers of **Wilson's Warblers** being reported. In fact on the plains **Wilson's Warblers** seemed to be more prevalent than even the usually more common **Yellow-rumped Warblers**. **Orange-crowned Warblers** were seen in far greater numbers than in the spring. One of the most unusual birds of the month was a male **Mourning Warbler** reported in Lafayette; this is only the second report of this species for the wildlife inventory with the previous being in 1982. As well as some late sightings of our breeding warblers, such as a single **Virginia's Warbler** and two **Common Yellowthroats**, there was a **Chestnut-sided Warbler** found on the tundra. Altogether thirteen species of warbler were reported. Vireos were also well reported with a **Bell's Vireo** at Pella Crossing being a most unusual sighting. This is the third report of this species for the wildlife inventory with the last sighting in May 2000. **Cassin's Vireo** was reported for the first time this year; this seems to be a species that is most commonly seen in fall migration. Several **Red-eyed Vireos** were also reported, but **Warbling Vireos** appeared to have already left the county.

Shorebird migration was also strong with **Short-billed Dowitcher** being seen for the first time since 2004 and **Red Phalarope** for the first time since 2005. **Stilt Sandpipers** were seen in two locations. A **Long-tailed Jaeger** seen on Boulder Reservoir only stayed long enough to be seen by a few observers; this was a new record for Boulder County although one was seen at Union Reservoir in October 1993. There was an influx of **Sabine's Gulls** into the county in the middle of the month with as many as nine birds being seen at Boulder Reservoir. **Common Tern** was reported in three different locations.

The fine weather in September meant that many birds still had young. Unfledged **Barn Swallows** that were reported still in the nest was surely a very late breeding record for this species. There appeared to be an influx of resident mountain birds out in the plains; Red Crossbills were seen out in Louisville and Lafayette and Clark's Nutcrackers were seen in Dowdy Draw. Possibly these birds were also migrating. We seemed to have more reports of rare species that could not be confirmed this month than usual. Into this category would fall a **Reddish Egret**, a **Wood Thrush** and a **Canada Lynx**. Of course, we do not include such sightings in the wildlife inventory but it is always tantalizing to wonder whether these species were really what was suggested.

CONTRIBUTORS TO THE SEPTEMBER INVENTORY

Linda Andes-Georges, Alan Bell, Alex & Gillian Brown, Cathy Comstock, Carol Cushman, Todd Deininger, Ted Floyd, Mike Freiberg, Steve Frye, Peter Gent, Brian Gibbons, Paula Hansley, Thomas Heinrich, Steve Jones, Bill Kaempfer, D.W. King, Steve Larson, Gene and Lynn Monroe, Christian Nunes, Laura Osborn, Nathan Pieplow, Pam Piombino, Peter Plage, Suzi Plooster, Bill Schmoker, Walter Szeliga, Oakleigh Thorne, John Tumasonis, John Vanderpoel, Wild Bird Center.

CONTRIBUTORS TO THE OCTOBER AND NOVEMBER INVENTORIES

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BOULDER COUNTY WILDLIFE INVENTORY, OCTOBER - NOVEMBER 2007**Gillian and Alex Brown, 4560 Darley Avenue, Boulder, CO 80305.**

October and November 2007 were in many ways very similar to October and November 2006 with several rarities that brought in birders from all over the state, but a paucity of reports of more common species. Even the monthly totals of bird species seen were nearly identical with 126 species seen in both October 2006 and 2007, while November 2007 had 121 bird species reported compared with the record 125 species seen in November 2006. However, the rarities were different. A **Ross's Gull** on Lagerman Reservoir had good supporting details but was unfortunately seen by only one observer. This was a new species for the wildlife inventory; there have been very few previous sightings in Colorado. **Sabine's Gulls** were seen in at least three different locations and stayed around long enough to be seen by many observers. It was also an excellent time of year to observe loons, grebes and diving ducks. A **Red-throated Loon** (last reported in 2004) stayed on Union Reservoir for at least two weeks. **Pacific Loon** was seen in at least three locations along with the more usual **Common Loons**. A **Red-necked Grebe** seen on Boulder Reservoir was a nice addition to our more normal grebes bringing the total number of grebe species seen to six. **White-winged Scoter** was reported for the first time since 2005. Other less usual duck species included **Barrow's Goldeneye**, **Black Scoter** and **Long-tailed Duck**.

Brant was reported for the first time since 2004, and **Tundra Swan**, **Snow Goose** and **Ross's Goose** were all new for the year. A huge number of **Sandhill Cranes** were observed flying south over Boulder County; 2102 birds were reported in October and 110 in November. Shorebird migration was winding down with just a few stragglers observed in October. Most warblers had already left with a single **Palm Warbler** being the only notable sighting. An **Ash-throated Flycatcher** seen at the end of October was both unusual and unseasonal. **Rusty Blackbird** was reported for the first time since 2003.

The first **Rough-legged Hawk** of the year was seen in October. These birds used to be common winter residents on the plains but are now extremely difficult to find. This must surely be due to the loss of much of their plains habitat to development. **Ferruginous Hawks** continue to be seen in fair numbers, but significantly less than previously. Hawk migration was going strong in October but, apart from one observer, went almost unacknowledged. Bluebird migration was also interesting as numbers of **Western Bluebirds** were as great as that of **Mountain Bluebirds**, with a handful of **Eastern Bluebirds** thrown in. The last Mountain Bluebird of the season was reported on 10 October which seems a very early departure date for this species which is usually one of the first to arrive and last to leave.



Steve Jones at breakfast following the 2007 winter solstice hike, an event he has led for many years.

Congratulations, Steve!

Over 400 people attended the 2008 *Daily Camera* Pacesetter Awards luncheon on January 31st at the Millennium Hotel. With a number of Boulder County Audubon Society members in attendance to share in the celebration, our Steve Jones received this year's Pacesetter Award for the Environment .

All who know Steve know of his decades of work with classroom students, Audubon, BCNA, government agencies and individuals and his ability to articulate and share his knowledge and enthusiasm in a way that has inspired many to not only explore, enjoy and appreciate nature but to become involved. There was a great outpouring of support and letter writing on Steve's behalf, making easy the job of those who nominated and selected him. Thank you, Steve, for sharing your time and talents with us and the community.

The *Daily Camera* is also to be commended for sponsoring this annual event which brings together and recognizes some of the multitude of dedicated individuals who contribute so much to our City in a great many ways.

State of the Birds III *(continued from page 1)*

Golden Eagle: Golden Eagles continue to thrive in Boulder County, with 12-15 nesting territories identified in the foothills and mountains. Twelve monitored Golden Eagle nest sites fledged 9 young during 2006 (Lederer 2007). The 1983-2006 average was 5.8 fledged young observed per year.

Prairie Falcon: 2007 was a good year for prairie falcons, with at least 13 young fledging from nests in the Boulder Mountain Park, alone (Lisa Dierauf, pers. comm.) In 2006 at least 21 young fledged from 5 Boulder County nests (Lederer 2007). It appears that this open country specialist may have adapted to fragmentation of its grassland habitat by increasing hunting activity in urban and suburban areas.

Peregrine Falcon: Two Peregrine Falcon nests in the Boulder Mountain Park fledged at least 6 young in 2007 (Lisa Dierauf, pers. comm.). From 2000-2007, approximately 3-5 pairs nested annually in the county, fledging 5-10 young each year (Lederer 2007).

Flammulated Owl: A 1992 BCNA study determined that Flammulated Owls were nesting in 10 of 15 roadless foothills canyons between Eldorado Springs and Lyons (BCNA, unpublished data). Flammulated Owls have nested continuously in Long Canyon, in the Boulder Mountain Park, since 1986, but numbers of detected owls have declined recently (BCNA unpublished data, Jones 1991). Calling males have been heard in Coulson Gulch during each of the past three years (Steve Jones, pers. obs.).

Boreal Owl: Though Boreal Owls have been observed near Brainard Lake, on Bryan Mountain, and near Heart Lake (Jones 1991), no studies of nesting populations have been initiated. Here's a great field project for someone who enjoys winter nights in the high country.

For the most part, we're doing a decent job of protecting nesting habitat for birds of prey. The breeding population exceptions are Northern Harrier (rare and declining; isolated and restricted) and Burrowing Owl (rare and declining; isolated and restricted), which hover on the brink of permanent extirpation from the county and were discussed in a previous article (see *On the Wing*, November-December 2007). The other exceptions are Ferruginous Hawk (isolated and restricted) and Rough-legged Hawk (unlisted), whose wintering populations have plummeted. Once again, it's the birds that nest and forage on the plains that are becoming most threatened.



State of the Birds—Literature Cited

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Bluebird Nest Box Monitors Needed

We need a few new volunteers for the 2008 season of monitoring nest boxes at Walker Ranch, Betasso Preserve, and possibly a new site near Caribou Ranch.

In three years of monitoring at Walker Ranch, we've seen a dramatic increase in nesting of formerly rare Western Bluebirds. For more about our observations, see <http://www.boulderaudubon.org/bluebirds07.htm>

Monitoring requires checking nesting progress in 10 to 13 boxes approximately weekly from late April to early July and recording the observations. Of course, it's also an opportunity for some birding and seeing the progression of wildflowers. For more about volunteering, see http://www.boulderaudubon.org/bb_volunteer.htm. To volunteer, use the link on that page or contact Marti Oetzel, 303-543-3712

"The Beetles Are Coming"

15th Boulder County Ecosystem Symposium

Saturday, April 5. Join us as we explore the roles of insects and fire in Front Range forests. This year's symposium features an inside look at the pine beetle infestation that has killed virtually all the lodgepole pines in Grand County and is currently spilling over the Continental Divide. As always, the symposium is free and open to all. Please bring your own plate, utensil, and cup, so we can eliminate paper waste.

Free registration begins at 8:30 a.m., at the University of Colorado Ecology Department's Ramaley Auditorium, just east of the main entrance to Norlin Library. All-day parking (\$3) is available at the UMC lot on Euclid and in a lot immediately north of Norlin Library.

Tentative Schedule

(more speakers will be added soon):

8:30: Registration and coffee/tea

9:05: Tom Veblen, "Historic Range of Variability of Fire and Insects in Front Range Forests."

10: Charles Rhoades, "Studying the Watershed Effects of Mountain Pine Beetle at the Fraser Experimental Forest."

11:05: David Leatherman, "Front Range Forest Insects and Birds--Lessons Learned."

12: Lunch

1:05: Chad Julian. Forest and forest insect management strategies at Heil Ranch.

1:50: Heather Swanson. "Forest Thinning and Forest Bird Communities."

The symposium is sponsored by Boulder County Nature Association, Boulder County Audubon, Colorado Native Plant Society, Boulder Open Space and Mountain Parks, Boulder County Parks and Open Space, and University of Colorado Ecology and Evolutionary Biology Department. Visit <http://www.bcna.org> for an updated schedule.

Pine Beetle picture above:

<http://www.ext.colostate.edu/pubs/insect/05528.html>



Scarlet Macaw
- Steve Jones

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International Migratory Bird Day

Saturday, May 10, at Walden Ponds

Dawn chorus walk begins at 5:30a.m. Other walks and general events are 7:30 - 11:30a.m. This year's theme is: Tundra to Tropics: Connecting Birds, Habitats, and People. Migratory birds travel long distances between breeding and non-breeding sites throughout the Western Hemisphere. In 2008, IMBD will explore the birds that make these fantastic journeys, the habitats on which they depend, and the people who are important to the conservation of birds and their habitats along the way. Please carpool to Walden Ponds as there is limited parking.

Boulder County Audubon Society

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Local memberships are an important part of the support that makes this newsletter and our other activities possible. We get very little return from national memberships. (NAS membership is not required for membership in the local chapter.)

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