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******************************************************************

#### Photographs and Illustrations

**Electrocuted Great Horned Owl**: Ken Giesen, an avian researcher with the Colorado Division of Wildlife, found this electrocuted Great Horned Owl dangling from a set of closely spaced, exposed wires on an electric utility structure near the town of Minnedosa, Manitoba.

*Ken Giesen* ........................................................................................................... Front Cover

**Mountain Plover**: Ken Giesen photographed this Mountain Plover at the Commanche National Grassland, where he is studying the responses of plovers to prescribed burns.

*Ken Giesen* ........................................................................................................... 213

**Monk Parakeet Nest**: A pair of Monk Parakeets, an alien species in North America, have recently nested in Colorado Springs. The nest pictured in this photo sits among the wires and transformers of an electric utility structure. While the birds do not belong on this continent, Colorado Springs Utilities was urged to leave the nest in place by local neighbors.

*RICHARD HARNESS* ............................................................................................ 224

**American Kestrel**: Although American Kestrels often perch on electric utility powerlines, they are small enough to avoid the hazards of electrocution under most--but not all--circumstances. Ken Giesen photographed this kestrel at Bosque del Apache National Wildlife Refuge in New Mexico.

*Ken Giesen* ........................................................................................................... 226

**Barn Swallows**: Once again, Isa Paulsen has sketched a marvelous rendition of one of Colorado's bird species. She uses colored pencils to produce her drawings, and at the age of 14, she has already won many awards for her work. This drawing features a pair of Barn Swallows perched on the wire of a bicycle brake.

*Isa Paulsen* ........................................................................................................... 231

**Brown Pelican**: Although this Brown Pelican was not THE bird discovered in Colorado in 1997, it none-the-less captures the species’ peculiar grace and charm.

*Ken Giesen* ........................................................................................................... 243

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Editor(s) Needed for the
Journal of the Colorado Field Ornithologists

Cynthia Melcher’s commitment to serve as CFO’s Journal Editor for 2-3 years will have run out once the January 2000 issue of the Journal goes to press. She is willing to continue as an advisor, Editorial Board member, and/or Assistant Editor for the Journal, but has upcoming commitments that preclude her from continuing as Editor-in-Chief. Please consider giving some time to take all--or a part--of the position, and/or help us find a replacement. This is a WONDERFUL opportunity to do something extremely valuable for the ornithological community of Colorado, promote bird conservation, meet/talk with many fascinating people, learn much about Colorado’s birds and field ornithologists, put your organizational or computer skills to use, and/or sharpen your editorial skills.

What is involved? The overall job of publishing the Journal entails handling Journal-related correspondence, soliciting articles/papers, coordinating journal staff, editing articles/papers, sending scientific papers out for peer review, handling layout and graphic design, and sending electronic layout to the printer--any or all of which the Editor-in-Chief may assign to staff Editors (see below). The job also entails coordinating journal mailings, for which the Editor has authority to hire a mailing service. The Editor also may appoint as many Journal staff members as she/he needs. Currently, there are several staff members able to continue, and several more are ready to sign up. We still need, however, an Editor-in-Chief to coordinate the other staff members.

With the guidance of both incoming and current editorial staff, Cynthia would like to appoint 4-8 people to a functional Editorial Board some time between fall 1999 and January 2000. Numerous people have already expressed interest in serving on the Editorial Board. The Board would meet with the current Editor(s) at least once each year (starting this winter) to help direct/guide the journal and handle any Journal-related issues that come up. In addition, Cynthia envisions that Board members will be available to advise the Editor(s) throughout the year, as time allows, some Board members also may be willing to assist with various facets of journal production.

What skills/equipment do you need? It depends on whether you want all--or some smaller part--of the job. Having access to a computer and e-mail (with attachment capability) is almost essential today--especially if we are to keep the Journal going out on time. The CFO Board is considering the allocation of funds for purchasing necessary equipment and software--and possibly e-mail service--for the person(s) who takes on the position of Editor-in-Chief or

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some significant part of the position. Your local community resources also
may provide some of what you need. In short, Cynthia can help you determine
what equipment/software/services you would need and how to get them.

How Much Does It Pay? Until now, the Editor position has been volunteer--
with expenses paid. Currently, the CFO Board is evaluating the possibility of
paying a stipend to the Editor(s), but because this entails changing by-laws
and ascertaining how much CFO can afford, the necessary decisions are taking
time--the Board hopes to make those decisions at its meeting in November
1999. Even if the Editor position is split into parts, the CFO Board may be
able to offer stipends to individuals who assume the more significant
responsibilities. A possible job breakdown follows:

1. **Editor-in-Chief**--appoints staff, oversees/coordinates production, ensures
deadlines are met, handles correspondence, solicits materials, delegates
submitted materials to appropriate staff members, checks/approves final
copy/layout; approximate time: 3-5 days/quarter;

2. **Science Editor**--appoints editorial assistants as needed, oversees/coordinates
science papers, contacts potential peer reviewers and sends papers to
reviewers, works with authors to improve style/organization, clarify points,
and meet reviewer criteria, sends final drafts to Editor-in-Chief for review,
submits graphics (e.g., tables, graphs, etc.) to layout producer/graphic
designer, solicits additional papers; approximate time: 3 days/quarter;

3. **Features Editor**--appoints assistants as needed, oversees/coordinates
popular articles/regular columns, contacts potential reviewers/fact-
checkers, works with authors to improve style/organization, clarify points,
and address problems, sends final drafts to Editor-in-Chief for review,
submits photos and artwork to layout producer/graphic designer, solicits
additional papers; approximate time: 3 days/quarter;

4. **Layout Producer/Graphics Designer**--handles all photos/graphics/artwork/
tables to prepare them for layout, prepares *Journal* layout with desktop
publishing software, sends draft layout to Editor-in-Chief and copy editors,
sends final copy to printer, works with printer as necessary; approximate
time: 3 days/quarter; and

5. **Assistant Editors**--a variety of people to handle minor copy editing and/or
occasional content editing on an as-needed basis (each assistant would be
committed to be available for editing a specific type of item for a given
issue(s) of the *Journal*; approximate time 1: 1 day/person/quarter.

If you are interested--or know anyone who would be--please contact Cynthia
Melcher by e-mail (birdswords@yahoo.com) or by phone (970/484-8373); or contact Leon Bright (719/561-1108; leon@aculink.net).
Thank you for your help!
A NOTE FROM THE VICE-PRESIDENT AND FIELD-TRIP COORDINATOR

Pearle Sandstrom-Smith
2823 5th Avenue, Pueblo, Colorado 81003
719/543-6427

As your new Vice-President and Coordinator for field trips, I must thank those who have flown this route before me. Thanks go to Bill Fink, who did a wonderful job the last few years of arranging a variety of trips. His flight pattern will be hard to follow. Add him to the flock of coordinators and trip leaders: Alan Versaw, Coen Dexter, Bill & Inez Prather, John & Lisa Rawinski, Ron Ryder, John Barber, Mark Janos, Duane Nelson, Rich Levad, Norm Erthal, Steve Bouricius, Brandon Percival, Joey Kellner, Jim Haskins, Rob Cavallero, and many more.

As Coordinator for field trips, I would like to provide three types of trips:
1. “Lookie-lou” trips that will be laid-back in pace and designed for those who want to spend time watching the birds they see;
2. “Gotcha Birdie” trips that will be fast-paced and designed for people seeking intense birding, complete with listing and searching for rare birds; and
3. “Educational” trips that will focus on increasing your knowledge about birds—including research, habitats, and any other ideas/activities suggested by members.

As a neophyte to organizing trips, I will be calling on CFO members for their continued support and ideas. I’ll try to maintain the standards set by my predecessors, and I hope to meet more of you on the field trips. You can contact me at: 719/543-6427 (other than that, I am not hooked up to electronic communication devices). You can also reach me via snail mail (yes, it still works) at: 2823 5th Avenue, Pueblo, CO 81003. See you out there!
UPCOMING CFO FIELD TRIPS

Saturday, 16 October 1999 -- "Suddenly Susan’s Banding Demonstration & Birding" (educational; WEATHER PERMITTED). Most people only read about banding, but this is a chance to participate! Join Susan Craig at the Hanna Ranch (Colorado Springs State Wildlife Area) parking lot at 8:00 AM for a morning with mist nets and little bags containing birds awaiting bands. The area can be surprising in terms of species encountered and the observing the impacts of flooding along Fountain Creek. To find Hanna Ranch, take I-25 to exit 123 (~15 miles south of Colorado Springs); go east to the parking lot. Dress in layers; bring lunch and your interest in continuing your education about birds. Call Susan for details at: 719/591-0322.

Saturday, 6 November 1999 -- Two Choices--North & South.
NORTH: Join John Barber & Dr. Ron Ryder at the Rawhide Power Plant Visitor’s Overlook at 8:00 AM for “Roamin’ Rawhide & Other Reservoirs in Larimer County” (lookie-lou). Landbirds at/around Rawhide’s cooling reservoir can be interesting (recall the 1998 Gyrfalcon?), and many “odd ducks” appear in the welcoming waters during fall migration. To find the overlook, take I-25 to exit 288 (~15 miles north of Ft. Collins); go west ~3 miles; turn right at Rawhide sign; take 1st left to overlook. Call John for details at: 970/484-9791.

SOUTH: Join Dave Silverman at Pueblo Reservoir’s South Shore Headquarters at 8:00 AM for “Going Gulling at Pueblo Reservoir” (lookie-lou). Pueblo Reservoir can be full of surprises in fall, including Great Black-backed, Sabine’s, and Thayer’s gulls (but no guarantees), scoters, and Oldsquaws. To find the meeting place, take I-25 to exit 101; go west on U.S. Hwy. 50 2-3 miles; turn left onto Colo. Hwy. 45 (Pueblo Blvd.); go south 3-4 miles; turn right onto Colo. Hwy. 96 (Thatcher Ave.); go west 2-3 miles to Pueblo Reservoir State Recreation Area entrance and follow signs to South Shore Headquarters. Dress in layers and bring lunch. Call Dave for details at: 719/489-3565.

Friday-Sunday, 3-5 December 1999 -- “Weekend Adventure with Smith's Longspurs & Various Eastern Birds in Kansas” (lookie-lou/gotcha birdie). Join Tom & Sara Shane at the Super 8 Motel parking lot in Great Bend, Kansas on Friday afternoon at 3:00 PM (if you cannot arrive until later, see emboldened times/places below for other opportunities to join the group). The group will drive to Quivira National Wildlife Refuge (NWR) to watch Sandhill Cranes come in to roost at sunset. Return to Great Bend Super 8 Motel parking lot at 7:00 PM and then go to a local restaurant for dinner. At 7:30 AM on Saturday, meet in the Great Bend Super 8 Motel parking lot, then depart for Cheyenne Bottoms and Quivira NWRs. At noon, the group will
drive to the east side of McPherson, Kansas--near the Wal-Mart just west of I-135 along U.S. Hwy. 56--to lunch at one of the restaurants there. At 2:00 PM, regroup at the north end of the Emporia, Kansas Wal-Mart parking lot and depart for favored longspur meadows north of Emporia, Kansas, where we will spend several hours searching for Smith’s Longspurs. Then drive to Emporia, & check in to your motel. At 7:00 PM, meet in the Emporia Super 8 Motel parking lot and go to dinner. At 7:30 AM on Sunday, meet in the Emporia Super 8 Motel parking lot, at which point plans for return trips/trips home to Colorado can be finalized. Depart for more longspur hunting around Emporia. If the birds cannot be found there, we will try an alternate site on our return trip near Newton, Kansas. NOTE: ALL TIMES LISTED ARE CENTRAL TIME!!! For arranging caravans/carpools from Pueblo, Colorado, contact Pearle Sandstrom-Smith at 719/543-6427. Each individual must make their own motel reservations. The Super 8 Motel reservation number is 800/800-8000; in Great Bend, it is 316/793-8486; in Emporia, it is 316/342-7567. There are other motels (e.g., Holiday Inn, Best Western) in the same areas. If bad weather is predicted for the weekend, call Pearle or Tom by Thursday evening (2 December) to find out whether the trip will be postponed to the following weekend (thus giving you time to cancel/change motel reservations). Bring lots of warm clothing, binoculars, scopes, snacks. Call Tom Shane for details at: 316/275-4616. If you plan to meet the group later than the beginning of the trip, PLEASE let Tom know so that he can be sure to look for you at the appropriate meeting place.

Friday-Saturday, 7-8 January 2000 -- “Gull ID Workshop and Field Trip” (educational, lookie-lou, gotcha birdie). Join Tony Leukering at the Pueblo Reservoir State Recreation Area South Shore Headquarters on Friday evening at 7:00 PM for a workshop on gull ID. Tony will show slides and invite discussion on tricks and tips for identifying confusing (year-round!) gulls. On Saturday at 7:30 AM, meet at the South Shore Headquarters for gull-watching and testing your new ID skills at Pueblo Reservoir. Dress warmly, bring lunch. Call Tony for details at 303/659-4348.

***********************************************************************

NOTICE TO FIELD TRIP PARTICIPANTS
Please contact the field trip leader at least one week ahead if you plan to participate. Trips often go where participant numbers must be limited or where notice of participants numbers is required. Contacting the leader in advance also helps him/her plan the best possible trip, ensures that you know where/when to meet, what to bring, etc. Please arrive no later than the scheduled meeting time; leaders may not be able to delay departure for late arrivals. Carpool drivers should inform passengers of their schedule prior to departure to avoid scheduling conflicts. Leaders will make every effort to keep the group together, and drivers should make every effort to stay with the group.
CFO WEBSITE

We invite you to browse the Colorado Field Ornithologists' website. If you don't own a computer, check your local library or ask one of the reference librarians to help you. Keep checking back, because new items and changes appear regularly on our website. The Internet "address" for the CFO website is: http://www.frri.com/~hopko

CALL FOR NOMINATIONS
FOR THE RONALD A. RYDER AWARD
FOR DISTINGUISHED SERVICE TO
COLORADO FIELD ORNITHOLOGY

SELECTION CRITERIA
1. For distinguished service to the Colorado Field Ornithologists and its goals.
2. For scholarly contributions to the Colorado Field Ornithologists and to Colorado field ornithology.
3. For sharing knowledge of Colorado field ornithology with the people of Colorado.

NOMINATION & SELECTION PROCESS
1. The Award will be given every year.
2. Only living persons may be nominated.
3. Nominations may be made by the membership at large.
4. The Board selects and approves an awardee for announcement at the Annual Colorado Field Ornithologists' Convention.
5. The Award will be a plaque designed to match the original plaque given to Dr. Ronald A. Ryder.
6. Nominations should be submitted in writing to the Award Committee Chairperson on or before February 1 to be considered by the Colorado Field Ornithologists' Board of Directors.

********
Submit nominations to Award Committee Chair:
Rich Levad, 2924 Ronda Lee Road, Grand Junction, Colorado 81503
970/242-3979; levadgj@mesa.kl2.co.us
CFO's New Project Fund: Application Guidelines

The Colorado Field Ornithologists' Board of Directors recently formed a new Project Fund Committee--Linda Vidal (Chair), Pearle Sandstrom-Smith, and Jim Chace--for granting funds to individuals/organizations seeking to conduct projects/research that will result in a lasting benefit to Colorado's birds and the habitats upon which they rely. Guidelines for applicants follow:

a. Applications should contain name, address, and telephone number of the person or organization applying for a grant.
b. Applications should include a description of the project: what will be done, who will direct the project, who will actually conduct the work, a timetable, and rationale (how does the project support CFO's Mission). CFO grants may be considered "matching funds."
c. Applications must be submitted by 1 December each year directly to the Project Fund Chair, Linda Vidal, at: 855 Wooden Deer Rd., Carbondale, Colorado 81623.
d. Projects must have anticipated start/completion dates.
e. Applicants must submit a complete budget. Projects should be realistic in terms of cost, volunteer resources, and time required to complete the project.
f. Travel expenses and purchase of equipment readily available from other sources (e.g., camera, spotting scope, office equipment) generally will not be funded.
g. After receipt of a grant and completion of the project, the applicant must submit a final written report to the Project Fund Chair. The report should include an accounting of money spent, time donated, etc.
h. All funds not used will be returned to the CFO Treasurer.

Any additional supporting materials (e.g., brochures, financial reports) that the applicant wishes to send with the grant application should be sent in quadruplicate, one for each of the four Project Fund Committee members.

Each year, applicants will be notified in February, after the winter CFO Board of Directors' meeting, as to whether or not they will receive funds.

Bequests for CFO's Project Fund

The CFO Project Fund Committee would like to encourage individuals to remember the CFO Project Fund in their wills. For more information, contact Linda Vidal at: 970/704-9950; or e-mail Linda at: vidal@rof.net. Thank you...
I censused birds within four study sites at the Ponnequin Wind Energy Station of the Public Service Company of Colorado. As of 1 May 1999, 21 towers were in operation. Two study sites have windmills and two are reference areas with no windmills. I used three census protocols: strip counts under the windmills, point counts for raptors, and plot counts perpendicular to the power lines. Counts were conducted during the year before construction and the year after construction. All four areas were censused weekly in the summer, twice monthly in the spring and fall, and monthly in the winter.

Avian surveys revealed no species with endangered, threatened, or special concern status at any of the sites. Horned Larks (Eremophila alpestris) and McCown’s Longspurs (Calcarius mccownii) (both nesting species at the sites) accounted for 84.8% of all songbirds observed on the project and reference sites. The remainder were mainly Lark Buntings (Calamospiza melanocorys) and Western Meadowlarks (Sturnella neglecta) (also nesting at the sites), although more than 20 species were observed in migration. Three raptor species [Golden Eagle (Aquila chrysaetos), Swainson’s Hawk (Buteo swainsoni), and Ferruginous Hawk (Buteo regalis)] accounted for 74.9% of the raptors observed at all sites; a few raptor nests were found within five kilometers (3.1 miles) of the project area. Territorial displays and hunting behaviors related to windmill operational heights were described during presentation of this paper.

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EDITOR’S NOTE: The Editor deeply regrets having accidentally omitted this abstract from the July issue (Vol. 33, No. 3) of the Journal of the Colorado Field Ornithologists. Sincere apologies go to Dr. Ryder for this error. Also, Dr. Ryder plans a follow-up paper that describes a few windmill-related avian mortalities he found after presenting this paper at the 1999 CFO Convention.
BIRD SPECIES AND SUBSPECIES DISCOVERED FOR SCIENCE IN COLORADO: A CORRECTION

1 Robert Righter, Research Associate and 2 Chris A. Blakeslee
1 Colorado Bird Observatory
13401 Piccadilly Road, Brighton, Colorado 80601
2 6759 East Lake Circle, Englewood, Colorado 80111

While changing the American Ornithologists' Union (AOU) Check-List regarding type locations for Burrowing Owl (Athene cunicularia), House Finch (Carpodacus mexicanus frontalis), and Lesser Goldfinch (Carduelis psaltria), Richard Banks of the AOU Taxonomy and Nomenclature Committee noted an error in the transposition of distances with regards to the Fountain Creek location described in those accounts. Originally published in the January 1999 issue of the Journal of the Colorado Field Ornithologists (33: 15-34), the second paragraph of the Burrowing Owl account on page 21 should be corrected to (changes made appear in boldface type):

"At the campsite along Fountain Creek sometime between 12-15 July 1820, a Burrowing Owl was captured and described by Long's expedition "naturalist" (Evans 1997). There is some controversy over the exact location of the Fountain Creek encampment for the nights of 12-16 July. According to Goodman and Lawson (1995) and Beidleman (personal communication), James' account (James 1823) described the camp at the southern edge of Colorado Springs. Bell's account, however, described the camp about three kilometers (1.8 miles) south of the town of Fountain or about 13 kilometers (8 miles) south of the location described by James. The compass readings taken by Lieutenant William Swift, the assistant topographer on Long's expedition, from the encampment to the top of Pikes Peak, and his mileage reading to Manitou, corroborate Bell's descriptions of the location in his journals. They also generally concur with readings taken by modern-day instruments (Goodman and Lawson 1995). We feel that the preponderance of evidence, as laid out by Goodman and Lawson, favors the location 3 kilometers (1.8 miles) south of the town of Fountain (38°40'N, 104°41'W)."

We suggest that you make the necessary changes in your copy of the original article, as the House Finch and Lesser Goldfinch accounts also refer to this location description in the Burrowing Owl account.
MOUNTAIN PLOVER (Charadrius montanus)
RESPONSE TO PRESCRIBED BURNS
ON THE COMANCHE NATIONAL GRASSLAND

Dan Svingen¹ and Kenneth Giesen²
¹ Comanche National Grassland
P.O. Box 127, Springfield, Colorado 81073
² Colorado Division of Wildlife
317 West Prospect Road, Fort Collins, Colorado 80526

Introduction
The Mountain Plover (Charadrius montanus) has declined drastically in the last three decades, with present populations estimated to be about one third of what existed 25 years ago (Knopf 1996). The species is currently proposed for listing under the federal Endangered Species Act of 1973. As a result of increased conservation concern, the plover receives special management attention on the Comanche National Grassland (CNG). Knopf (1996) recommended the use of prescribed burning to enhance the attractiveness of prairie for plovers. As an attempt to improve habitat for both migrating and breeding Mountain Plovers, approximately 1671 hectares (4130 acres) of shortgrass prairie have been burned at CNG since 1997. This note summarizes the plover's response to burns in 1998 and 1999.

Study Area and Methods
CNG is located in the southeastern corner of Colorado. All burning and monitoring activities were conducted on CNG’s Carrizo Unit in eastern Baca County. Areas burned had to meet two criteria: 1) the average slope of the ground surface had to be less than 2%, and 2) the dominant vegetation had to be shortgrass prairie. On 25 March 1998, approximately 793 hectares (1960 acres) of shortgrass prairie were burned in Pastures 14G and 7A; on 10 March 1999, approximately 878 hectares (2170 acres) were burned in Pastures 7B, 8E, and 13D. In 1998, unburned (control) sites included approximately 522 hectares (1290 acres) in pastures 13D, 8C, and 17A; in 1999, unburned sites included 728 hectares (1800 acres) in pastures 41, 5B, and 14M.

From 0630-1100 hours on 9 and 15 April 1998 and on 15 and 21 April 1999, we conducted counts of Mountain Plovers at both burned and unburned sites. Survey protocol consisted of counting along transects in each pasture. Transects were oriented north-south and spaced 0.40 kilometer (0.25 mile) apart. Starting at the east side of a given pasture, an observer would drive along the transect...
to points spaced 0.40 kilometer (0.25 mile) apart. At each point, the observer exited the vehicle, used binoculars to conduct a 3-minute scan 360° around the point, and recorded all Mountain Plovers observed; efforts were made to avoid double counting birds.

In 1998, we also conducted counts of Mountain Plovers in several CNG pastures (16H, 16FS, and 16N) that were burned in 1998 to improve range conditions (i.e., not burned for plovers). These areas had not been targeted for plover management because the average slope was more than 2% and/or because mid-height grasses dominated the habitat.

We estimated the average slope of each study site by referring to topographical maps (1:24,000 scale) of the area published by the U.S. Geological Survey. We used a 1998 quick-plot LandSat image and a dot-grid overlay to estimate the percent of active agricultural land cover within a 2-mile radius of each survey site. Conservation Reserve Program (CRP) land was not considered active agricultural land. Dominant vegetation types at each study site were determined from CNG’s range-inventory maps.

Results and Discussion
The number of Mountain Plovers on burned sites was two orders of magnitude higher than on unburned sites (Table 1). With 1998 and 1999 surveys combined, a total of 188 birds [0.1125 birds/hectare (0.0455 birds/acre)] was found on the burned sites, while only two birds were found on the unburned sites [0.0016 birds/hectare (0.0006 birds/acre)]. Because our surveys spanned 1- to 2-week periods during plover migration, the number of birds observed is not representative of the number of local breeders. Based on plover behaviors and subsequent survey work, many of the plovers observed in April were probably pass-through migrants. For example, surveys of the three burn sites in 1999 yielded 140 birds (Table 1); one week later only 46 birds remained at those sites (K. Giesen, personal observation).

The burn that received the highest use (pasture 13D) hosted no plovers the year before it was burned (Table 1), suggesting that prescribed burning may be a very important management tool for providing suitable Mountain Plover habitat in southeastern Colorado. A key question, however, is whether or not burns represent source or sink habitats for nesting Mountain Plovers. In 1999, K. Giesen (Colorado Division of Wildlife) initiated a 3-year study to examine this issue at CNG and Pawnee National Grassland (in northeastern Colorado). Of 45 nests found in burned sites at CNG during the first year of the study (1999 breeding season), 22 were successful, yielding a nesting success rate of 49%. The species’ nesting success elsewhere has ranged from 26-65% (Knopf
Table 1. Site characteristics and Mountain Plover survey results, Comanche National Grassland, 1998-1999.

<table>
<thead>
<tr>
<th>ID</th>
<th>Site</th>
<th>Approx. Size (hectares)</th>
<th>Survey Date</th>
<th>Year Burned</th>
<th>No. Birds</th>
<th>Slope (%)</th>
<th>Agriculture (%)</th>
<th>Dominant Vegetation*</th>
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<td>43</td>
<td>BOGR/BUDA</td>
</tr>
<tr>
<td></td>
<td></td>
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<td></td>
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<td></td>
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<td>Unburned Sites</td>
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<tr>
<td>8C</td>
<td></td>
<td>182</td>
<td>04/15/98</td>
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<td>1.80</td>
<td>30</td>
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</tr>
<tr>
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<td></td>
<td>130</td>
<td>04/15/98</td>
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<td>1.00</td>
<td>38</td>
<td>SPCR/BOGR**</td>
</tr>
<tr>
<td>13D</td>
<td></td>
<td>210</td>
<td>04/15/98</td>
<td>n/a</td>
<td>0</td>
<td>0.40</td>
<td>43</td>
<td>BOGR/BUDA</td>
</tr>
<tr>
<td>4I</td>
<td></td>
<td>259</td>
<td>04/21/99</td>
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<td>1.10</td>
<td>21</td>
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</tr>
<tr>
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<td></td>
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<td>0</td>
<td>0.80</td>
<td>28</td>
<td>BOGR</td>
</tr>
<tr>
<td>14M</td>
<td></td>
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<td>04/21/99</td>
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<td>0</td>
<td>0.70</td>
<td>14</td>
<td>BOGR/BUDA</td>
</tr>
</tbody>
</table>

* BOGR=Blue Grama (*Bouteloua gracilis*), BUDA=Buffalo Grass (*Buchloe dactyloides*), SPCR=Sand Dropseed (*Sporobulus cryptandrus*)

** Based on field visits and professional assessments of D. Svingen and Rangeland Management Technician, Earl Tanner, Blue Grama or Buffalo Grass had replaced Sand Dropseed as the most dominant grass species in these pastures at the time of burning.
If a nesting success rate of 49% is typical in burned sites, then burns at CNG would be considered source habitats. We anticipate that further research will reveal answers to this and other questions related to the role of burns in plover ecology.

Pastures that had been burned to improve range conditions were visited by small numbers of migrating plovers, but evidently the birds did not use these burns for nesting (D. Svingen, personal observation). These results suggest that our selection criteria for plover burn sites (average slope of less than 2%, dominated by shortgrasses) were valid. We also found that the suitability of a burn may be quite ephemeral, as burns that hosted plovers the year of a burn generally hosted no plovers in the following year (D. Svingen, personal observation). The only exception was a 1998 burn in which two plovers were found on 20 April 1999 (K. Giesen, personal observation), but the birds’ presence was attributed more to the presence of Black-tailed Prairie Dogs (Cynomys ludovicianus), which crop the vegetation very short, rather than to the burn itself.

Recommendations

We recommend that land managers continue to evaluate the usefulness of prescribed burning for managing Mountain Plovers. However, treatment is expensive ($25-50/hectare or $10-20/acre in 1999), thus potential burn sites must be prioritized. Based on previous research (Graul 1975), burn sites for plovers should encompass flat areas (i.e., less than 2% slope), with preference given to very flat sites (less than 1% slope). It is important to note, however, that the critical feature is a lack of topographic relief, as opposed minimal slope, per se (F. Knopf, personal communication). Therefore, extensive flat areas with gentle, smooth slopes should be considered, even if the overall slope is more than 2%. In addition, areas with extensive (more than 30%) bare ground should be favored.

Based on our small sample size (n=5) and the limited number of patch sizes with which we had to work [129-664 hectares (320-1640 acres)], we could find no relationship between burn size and numerical response of plovers. However, the cost per unit of land burned decreases as burn size increases, and plovers nesting in larger burns may be less susceptible to predation. Thus, we recommend that burns be at least 129 hectares (320 acres) in size.

We also recommend that managers avoid burning sites dominated by mid-height grasses (e.g., Stipa or Hilaria spp.) (D. Svingen, unpublished data) or cool season grasses [C3 grasses, especially mid-height or tall species like Western Wheat Grass (Pascopyrum smithii)]. This is particularly important.
where grazing will be excluded until warm season grasses (C4 grasses) emerge from dormancy. Once plants begin to emerge after burning, prescribed grazing should be used to keep regrowth within the birds’ range of tolerance [less than 10 centimeters (4 inches) high] (Knopf 1996) at least through the brood-rearing season (mid-June in southeastern Colorado). The emphasis should be placed on maintaining low vertical structure rather than deferring grazing to prevent cattle from trampling plover nests, as plovers have behaviors for reducing losses due to trampling (Knopf 1996).

Future research should take into account, and evaluate, the influences of surrounding agricultural land, as the burn site that attracted the most plovers (13D) was surrounded by the greatest percentage of agricultural land. Fallow fields, in particular, may help attract plovers to a given area during their spring migrations. It is possible that nearby fallow fields also provide additional nesting and brood-rearing sites (Gonzales 1979).

Acknowledgments
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Literature Cited
Nesting Mountain Plover at Commanche National Grassland
by Ken Giesen

While birding in southwestern Baca County, Colorado on 12 August 1998, I chanced upon a flock of approximately 30 Mountain Plovers (*Charadrius montanus*). The birds were feeding in a fallow field along County Road 25, one mile south of its intersection with County Road Q. I used a 15-60x zoom spotting scope to check each bird for leg bands. I did not find any banded birds, but a flurry of activity at the south end of the scattered flock piqued my curiosity. As I focused on the commotion, I was enthralled to see the plovers reacting to the sudden appearance of a Bullsnake (*Pituophis melanoleucus*) that I estimated was 91-122-centimeters (3-4-feet) long.

Plovers, which had been scattered over a 4-hectare (10-acre) area just seconds earlier, were running and flying to the snake’s location. As the birds arrived, they stood practically shoulder-to-shoulder while facing the snake, thus forming two lines (a total of 26 plovers) that paralleled each side of the now-motionless serpent. After a pause of perhaps one minute, the snake resumed crawling through the field. As it began to move, all 26 plovers turned to face the direction of the snake’s movement and followed along in what appeared to be two orderly
"escort" lines. Each line was spaced about 30 centimeters (1 foot) from the snake and began approximately 10 centimeters (4 inches) behind the snake’s head.

As the group moved through the field, three or four Horned Larks (*Eremophila alpestris*) and a Killdeer (*Charadrius vociferus*), which had been feeding in the same fallow field, joined the rear halves of the escort lines. Although no bird positioned itself directly in front of the snake, one to three additional plovers moved along 30 centimeters (1 foot) or so ahead of the snake, as if they were scouting out a route. After they had gone about 12 meters (40 feet), the Horned Larks seemed to lose interest (or energy) by dropping to the rear of the escort lines and then flying away to resume foraging. The Killdeer maintained its position in the rear third of the east escort line throughout the episode, and, as far as I could tell, it made no vocalizations.

Most of the Mountain Plovers also remained silent, although I could hear several different individuals utter mellow “weck” calls a few times every minute. As the entourage moved along, the plovers thinned out until there were only 12 birds still attending the snake. After traveling about 91 meters (300 feet), the snake turned and doubled back on itself. The lead escorts and “scouts” reacted to this change by jumping a few inches into the air and raising the frequency of “weck” calls. One plover, which had dropped out of the line several minutes earlier to resume feeding, came running back to rejoin its “comrades.” After a stalemate that lasted a minute or so, the snake turned again and resumed along its original course, at which point the escort reformed their lines. The stately progression continued until the snake entered the wheat stubble of an adjacent field. The entire journey covered a distance of at least 122 meters (400 feet) and lasted about 20 minutes.

After reviewing the literature available to me and consulting with plover researchers, Steve Dinsmore and Dr. Fritz Knopf, I believe that similar behavior among plovers has not been described previously. At any rate, it was a fascinating glimpse of Colorado’s fauna!
EFFECTIVENESS OF PERCH GUARDS TO PREVENT RAPTOR ELECTROCUTIONS

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Introduction
“Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 1996” (APLIC 1996) is currently the most comprehensive document on raptor electrocutions. It provides a wide range of engineering options to mitigate many electrocution problems. Although there is anecdotal evidence to suggest that many of these measures are effective, studies have not been published to document their effectiveness or durability. APLIC (1996) points out that additional studies are needed to evaluate remedial actions and improve “raptor-safe” standards. This paper evaluates perch guards used to retrofit utility structures with histories of raptor electrocutions.

Background
During February and March of 1992, an electrocution problem was discovered on the Mud Creek powerline located approximately 80 kilometers (50 miles) northeast of Thermopolis, Wyoming (Fig. 1). A utility company lineman found 25 dead Golden Eagles (Aquila chrysaetos) under a 6.4-kilometer (4-mile) section of line serving several oil wells in the area. Many of the carcasses appeared to be relatively fresh and bore evidence of electrocution (i.e., burned feathers), but most were in advanced states of decomposition (i.e., bleached bones, no flesh). An intensive follow-up survey by M. Garrett and a U.S. Fish and Wildlife Service (USFWS) Special Agent revealed an additional eight dead eagles along a 9.6-kilometer (6-mile) stretch of power line (Fig. 1). Although the second survey was made to remove the carcasses, there was no attempt to thoroughly remove all bones and feathers along the line.

The Mud Creek line is a 12.5-kV distribution line owned and operated by PacifiCorp. The typical powerline structure is a wood pole with a 2.4-meter (8-foot) long crossarm that supports three energized conductors (Fig. 2). The crossarm is mounted 30.5 centimeters (12 inches) below the pole top and is supported by two metal braces. On most of the poles, conductors are mounted on insulators supported by a single crossarm, with two insulators mounted only 61 centimeters (24 inches) apart on one side of the crossarm and a
single insulator mounted on the remaining side. The structures were particularly lethal to Golden Eagles due to insufficient conductor spacing (APLIC 1996). To prevent eagle electrocutions, APLIC (1996) recommends 1.52 meters (5 feet) between energized surfaces because the wrist to wrist distance of an adult eagle is approximately 1.4 meters (4.5 feet). Smaller distances between conductors can allow a raptor to span the distance between the wires with its wings, putting the bird at a high risk of electrocution. Managers should bear in mind, however, that the full wing span, including primary feathers, of an adult female Golden Eagle can span up to 2.3 meters (7.5 feet). Although feathers are excellent insulators, wet feathers may be 10 times more conductive than dry feathers (Nelson 1980). Thus, an eagle may risk electrocution when perching on a power pole during a storm, even if the conductor spacing is 1.52 meters (5 feet). Therefore, the 1.52-meter recommendation should be considered minimal spacing when considering raptor safety for powerlines.

During April 1992, PacifiCorp retrofitted the Mud Creek line to reduce the probability of additional electrocutions. Perch guards, designed to discourage birds from landing on dangerous locations of certain structures, are commercially available from several manufacturers. PacifiCorp decided to install "Eagle Guards (Fig. 2)," which are manufactured by Pacer Industries in Twin Falls, Idaho, on the Mud Creek line. The Eagle Guards are constructed...
Figure 2. A typical three-phase tangent structure with "Eagle Guard."

of PVC pipe and have spring-loaded bases to allow easy installation. They have a protective coating to prevent UV deterioration and are self-draining to reduce problems associated with freezing and thawing.

Eagle Guards were installed on flat tangent (conductors placed side by side on a horizontal plane) structures that were configured with two closely spaced conductors on one side of the crossarm (i.e., most poles); labor and material cost approximately $8,000. All flat tangent poles along the eastern 6.4 kilometers (4 miles) of the line were fitted with perch guards; along the western 3.2 kilometers (2 miles) of line, only those poles where electrocutions had occurred were fitted with perch guards. Perch guards were not installed on pole tops because it could encourage the birds to roost lower on the poles near energized conductors (Bridges 1998), where the risk of electrocution is high. (Perch guards also may shift problems onto other line segments.) Approximately two years after installation of the perch guards, 13 poles were damaged by a grass fire and subsequently reconstructed to "raptor-safe" construction standards.

By agreement with the USFWS, PacifiCorp re-surveyed the retrofitted line during the fall of 1992 and the late winter of 1993 to inspect for additional raptor electrocutions. Two dead eagles were found below one pole during the fall after retrofitting with perch guards, and two additional carcasses were found during the following winter below two separate perch-guarded poles (Fig. 1).
Methods
On 23 October 1997, we re-surveyed all retrofitted and new structures along the eastern-most 6.4-kilometer (4-mile) section of the Mud Creek line (Fig. 1). An area including 4.6 meters (15 feet) on both sides of the centerline and a 7.6-meter (25-foot) radius around each pole was surveyed. Surface visibility was excellent due to the sparse vegetative cover in the area. The line spans open rangeland supporting a variety of grasses and low shrubs, but with few trees. The topography consists of rolling, dissected hills.

At each pole location we recorded the pole-top configuration and the presence or absence of perch guards. Carcasses were classified as old or new. Scattered old bones (bleached out) were assumed to be remains missed during the carcass collection prior to retrofitting. Fresh or whole carcasses were assumed to be mortalities that occurred after the perch guards were installed or after pole reconstruction and follow-up surveys in March 1993.

Results
The Mud Creek line consisted mainly of three-phase (three energized conductors) flat tangent structures fitted with perch guards (n=54, Table 1). Slight variations of this structure type included a three-phase tangent with double crossarms (n=1) and a three-phase tangent with lightning arresters (n=1), both of which were also retrofitted with perch guards. The next most common structure (n=13) was the three-phase delta tangent (center conductor mounted on the pole top; not fitted with perch guards). These poles replaced flat tangent structures destroyed during the 1996 grass fire. Three additional structure types (Table 1), one of which was fitted with a perch guard and all of which were built to raptor-safe standards, comprised the remainder of the structures.

We found remains of 25 raptors under the 72 structures (Table 1). Remains of 24 birds consisted of bleached, brittle bones. No feathers were present with any of these remains. We found only one carcass with feathers and flesh, an immature Red-tailed Hawk (*Buteo jamaicensis*). This carcass was found under a pole fitted with a perch guard, but the perch guard was pushed forward out of its proper position. No burn marks were detected on the carcass or the pole.

Discussion
Raptor usage of utility structures is often correlated with areas of abundant prey (Benson 1981). Although no small mammals were detected during the survey, evidence of raptors using utility structures was observed. Several poles had fresh fecal droppings on, and around, the structures. One Golden Eagle was also observed perching on a vertical structure (no perch guard). The fresh raptor mortality that we discovered along the retrofitted line was under a three-
Table 1. Structure types and raptor remains found along the Mud Creek distribution power line.

<table>
<thead>
<tr>
<th>Three-Phase Structures</th>
<th>No. Structures</th>
<th>No. w/ Perch Guards</th>
<th>No. Old Raptor Remains</th>
<th>No. New Raptor Carcasses</th>
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<tr>
<td>Tangent with Single Crossarm</td>
<td>54</td>
<td>54</td>
<td>18</td>
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<td>0</td>
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<tr>
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</tr>
<tr>
<td>Tangent Delta Configuration*</td>
<td>13</td>
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<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Vertical* (no crossarms)</td>
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<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Double Dead-end with Cutouts*</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Transformer with Bushing Covers*</td>
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<td>0</td>
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<td>0</td>
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<tr>
<td><strong>Totals</strong></td>
<td><strong>72</strong></td>
<td><strong>57</strong></td>
<td><strong>24</strong></td>
<td><strong>1</strong></td>
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</table>

*Constructed to raptor-safe standards.
phase tangent structure with a perch guard that was not properly mounted. The guard was lying in an almost horizontal position, instead of standing vertical. It is uncertain how the guard was pushed forward. This was the only perch guard that was improperly positioned.

Given just one recent raptor mortality along the line and evidence of use by raptors, we believe that the "Eagle Guard" may be effective in preventing most bird electrocutions. Although four dead eagles were found below poles fitted with perch guards in 1992-1993, the perch guards may have reduced the hazards to raptors since that time. This conclusion, however, is confounded by at least two possible factors. First, results indicate reduced use of the area by eagles, possibly due to a lower abundance of prey than there was during the early 1990s, thus it remains unclear whether reduced usage was due to the effectiveness of perch guards or a difference in prey populations, or both. Second, additional electrocuted birds may have gone undetected, because birds killed in remote areas may be scavenged before carcasses are discovered (Olendorff et al. 1981). The old raptor remains that were present during our 1997 survey proved to further confound our results, underscoring the need for carcasses to be cleared completely from existing problem lines during future studies.

All dead raptors found at (or near) the bases of electric utility poles should be reported to the utility company and the USFWS so that appropriate action may be planned. Commercially available products are available to address raptor electrocution problems on power lines, and our results suggest that loss of raptors due to electrical power operations may be largely avoidable. Although a number of products have been recommended to address raptor electrocutions on power lines (APLIC 1996), research is needed to replicate this study and to evaluate the effectiveness of other products that may reduce hazards to raptors.

Literature Cited


Each year, untold numbers of migratory birds become electrocuted on, and/or collide with, unsafe electric utility structures and powerlines. Since the 1940s, electric cooperatives, investor-owned utilities, and municipal utilities alike have developed electrification systems across the United States. Unfortunately, this has brought thousands of hazardous structures into habitats used widely by raptors and other migratory birds. As a result, tens of thousands of dead birds have been found on, under, and around utility lines, while countless other mortalities have gone undetected and/or unreported.

Raptors and other migratory birds are frequently attracted to the supporting structures associated with electric utility powerlines, particularly in remote areas where prey is plentiful and natural perches are rare. Birds will use the poles and related structures for roosting, scanning for prey, feeding, and other activities. Unfortunately, many utility structures are extremely hazardous to birds perching on them. A potpourri of exposed conductor lines, jumper wires, ground wires, and other hardware items without adequate spacing between them can allow a bird—especially a large bird—to bridge the gaps between such hardware. When this happens, electrocution is highly probable, and it becomes even more likely when the bird is wet.

During the 5th World Conference on Birds of Prey and Owls (which convened in South Africa in 1998), individuals from around the world shared concerns about dangerous powerlines in their countries. As developing countries begin to implement rural electrification programs, the same electrocution/collision problems that have plagued our birds are now cropping up throughout many other regions of the world. With all of its expertise and technology for reducing bird mortalities along powerlines, the United States could be a world leader in resolving these problems, but we haven’t even stopped the carnage on our own soil.
Since the 1970s, various conservation organizations, falconer groups, and natural resource agencies in the United States have repeatedly brought this issue to the attention of utility managers, yet only a few utilities have taken a proactive approach to the problem. Rather, the majority do nothing until and unless bird mortalities are discovered--and reported--along their powerlines; even then they may drag their feet. In other words, birds are dying unnecessarily because most utilities have disregarded the law.

**Raptor Electrocution Problems in Colorado and Utah**

In a recent court case, the U.S. Fish and Wildlife Service (USFWS) charged Moon Lake Electric Association (MLEA) with six counts of violating two bird-protection laws: the Migratory Bird Treaty Act (MBTA) and the Bald and Golden Eagle Protection Act (B&GEPA). Specifically, the court found that at least 12 Golden Eagles (Aquila chrysaetos), four Ferruginous Hawks (Buteo regalis), and a Great Horned Owl (Bubo virginianus) had been electrocuted between 1996 and 1998 along MLEA powerlines; it remains unclear just how many other birds have died along their powerlines. The lines in question stretch across remote areas of western Colorado and eastern Utah--arid, treeless country where raptors are plentiful.

The charges against MLEA were based on the fact that bird mortalities were occurring at certain structures over and over again, and the fact that MLEA had failed to act in a timely and proactive manner. Over a number of years, MLEA had been warned repeatedly by the USFWS that migratory birds, including eagles and other raptors, were becoming electrocuted along sections of its powerlines. Further, the USFWS and Chevron Oil Production Company--which extracts oil from wells served by the problem powerlines--had requested MLEA to retrofit all structures that had killed, or were likely to kill, migratory birds. Years later, however, the utility had retrofitted only some of the dangerous structures--and only structures that had already killed birds. Finally, the USFWS had no recourse but to take the utility company to court. MLEA argued that the bird-protection laws were directed only to those who intentionally kill protected birds. The court, however, pointed out that the law does not differentiate between intentional and unintentional killing, and, by NOT retrofitting structures known to cause mortalities, MLEA had indeed entered the realm of intentional killing. The utility's manager, Grant Earl, felt that MLEA was singled out while the electrocution problem pervades the entire electric-service industry, yet the USFWS had given MLEA plenty of time to comply with the federal laws before the utility was finally charged in federal court.

Eventually MLEA pleaded guilty to three counts of violating the MBTA and three counts of violating the B&GEPA. According to Richard Caschette, first
assistant U.S. Attorney for Colorado, this was the first time an electric utility company has been served with a criminal conviction for violating either law. Federal Judge Lewis T. Babcock, who presided over, and wrote the opinion for, this precedent-setting case, accepted MLEA's plea agreement. The plea agreement requires MLEA to: hire a consultant to oversee development of an avian protection plan and the retrofitting of ALL structures dangerous to migratory birds; pay $50,000 in fines; and pay $50,000 in restitution to a non-profit organization that works to conserve raptors and other migratory birds. Overall, this case sends a very strong message to electric utilities throughout the United States that they must take the bird protection laws seriously and initiate effective remedial actions immediately. There is plenty of technology, and supplies are readily available, for retrofitting dangerous structures, and generally retrofitting involves simple installations of relatively inexpensive equipment.

What Can You Do To Help Resolve The Raptor Electrocution Problem? Unfortunately, the majority of raptor electrocutions go undetected and/or unreported, thus making it nearly impossible to resolve electrocution problems. Another unfortunate outcome of unreported bird mortalities--especially eagle mortalities--is that the carcasses go to waste instead of being made available to Native Americans who use bird carcasses and feathers in their religious ceremonies. Presently, the typical wait for Native Americans seeking eagle carcasses from the National Eagle Repository is four years. Therefore, it is of extreme importance that raptor mortalities (and those of any other native, migratory bird species) be reported immediately to the USFWS so they can address electrocution problems and salvage raptors for the National Eagle Repository.

Whether you are a birdwatcher or a professional field ornithologist, the probability is high that eventually you will--or have already--come across a raptor (or other bird species) carcass. Please do not trespass on private property to obtain a closer view of a suspected mortality, and, unless you have a federal salvage permit, it would be a violation of the MBTA to touch or take the bird. However, you should report the mortality to Leo Suazo at the U.S. Fish and Wildlife Service in Lakewood as soon as possible--timeliness is critical to salvaging the bird while it is still intact, thereby increasing the chances of determining the cause of death and salvaging the bird for Native American use. Even if the carcass is old and/or somewhat dismantled, it should be reported. Leo can be reached by phone at: 303/274-3560, or by e-mail at: Leo_Suazo@mail.fws.gov. Leo will need to know:

1) when and where you found the bird (be as specific about location as possible, keeping in mind that another party will have to find the bird to collect it;
note ID numbers on utility poles, as well as landmarks and mileages, etc.);
2) which species is involved (if you are not sure, estimate the bird’s size and describe its characteristics);
3) numbers on—and colors/materials of—any bands or other ID tags on the bird; it is also important to indicate the precise positioning of any ID items (i.e., the left or right leg or wing; if there is more than one band per leg, indicate which band type/color is positioned higher up the leg and which is lower down);
3) details of the conditions under which you found the bird (e.g., stormy weather, at the base of utility pole with a transformer, etc.);
4) other details that may help determine why the bird died (e.g., burned feathers or flesh); and
5) your name and contact information, the date of your call.
MONK PARAKEETS (*Myiopsitta monachus*)
NESTING IN COLORADO

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In 1967, individuals associated with the pet trade legally imported 35,000 Monk Parakeets (*Myiopsitta monachus*) to North America. Not long after that, the inevitable escapes--and/or intentional releases--took place. Because the species is native to temperate regions of South America, it is possible for these birds to establish feral populations in other temperate regions. That is exactly what has happened in the United States. Since 1967, Monk Parakeets have become established along much of the eastern Atlantic coast, particularly in Florida. They have also been found in California, Nebraska, Oklahoma, Michigan, and Ohio. If these alien, feral birds become abundant, it is estimated that Monk Parakeets could cause millions of dollars of agricultural losses, thus measures to eliminate them have been initiated in some states.

Monk Parakeets now occur in Colorado as well. About two years ago, a pair (presumably escapees) appeared in Colorado Springs, which is located approximately 1859 meters (6100 feet) above sea level at the foot of the central Rocky Mountains. In 1998, the pair built a nest on a set of utility transformers (see photo on opposite page) and successfully raised two young. Although Monk Parakeets are adapted to temperate climates, heat given off by the utility transformer may have enhanced their nesting success. By the same token, roosting in the nest during severe weather (if they should choose to do so) could increase their chances of overwinter survival.

When utility personnel discovered the nest, they attempted to remove it. They quickly discovered, however, that area residents had “adopted” the parakeets and were very protective of them; they provided food and water for the birds and objected to having the nest removed. Even though Monk Parakeets are alien to the United States, exempting them from protection by state and federal laws, the utility has decided to leave the nest where it is and simply trim it back on occasion to preclude electrical problems. Utilities in the southern United States also report having problems with Monk Parakeets nesting on their utility structures. One utility even started fencing off its transmission towers when children were discovered climbing the high-voltage towers to collect young parakeets for local pet shops.
American Kestrel Perched on a Utility Wire
by Ken Giesen

AMERICAN KESTREL (Falco sparverius):
A FAILED NESTING ATTEMPT

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Summary
During the spring of 1999, I put up a nest box for American Kestrels (Falco sparverius). A pair of kestrels promptly inhabited the box and began their breeding cycle. The nest failed four to five days after the pair had begun incubation, and the kestrels left the area. Upon examining the nest, I found the partially broken shell of a single kestrel egg. I suspect the cause of the failure to be immaturity of one or both of the kestrels. Next year, I will rehang the box and try again.

Installing a Nest Box
On 20 February 1999, I attended a workshop on American Kestrels (Falco sparverius) conducted by the Raptor Center at the Nature Center in Pueblo, Colorado. I purchased a kestrel nest box made according to "modified" specifications of a nest-box plan found in Woodworking for Wildlife: Homes
for Birds and Mammals by Carroll Henderson, published by the Minnesota Department of Natural Resources. (It was not clear how the plan had been modified.) Raptor Center volunteers used these plans to construct the boxes, which were then offered for sale to workshop participants. On 7 March, my husband and I hung the nest box 4.6 meters (15 feet) from the ground on a 10.7-meter (35-foot) high pole located about 61 meters (200 feet) behind our house. We placed the box according to the instructions given at the workshop: select an open area (e.g., a field, large grassy area, prairie, or park), mount the box on a pole or building 3.0-9.1 meters (10-30 feet) high, and orient the box so that the entrance hole faces east.

**Observations**

**Territoriality, Pairing, and Courtship**

Within a few days, European Starlings (*Sturnus vulgaris*) became interested in the box; Northern Flickers (*Colaptes auratus*) showed interest in the box as well. However, a male kestrel that we suspect had wintered in the area took over on about 23 March. He claimed the box as his by entering it many times a day and defending it from the persistent starlings. I observed another male kestrel that also seemed to have an interest in the box, but the kestrel who had wintered there defended the box and successfully chased away the second male.

Around 7 April, a female kestrel arrived. During the first few days, she appeared only occasionally and spent very little time in the immediate area of the nest box. After about five days, both kestrels were seen near the nest box for most of the day. The female entered the nest box several times a day and perched in the entrance looking out for short periods of time (less than five minutes). There seemed to be no nest building, as such, for I did not see either bird carrying anything into the nest box. However, I did see both birds defend the nest box against starlings.

Courtship lasted for approximately 29 days--from the female kestrel’s arrival around 7 April until the birds began to incubate on about 5 May. At first, courtship behaviors were tentative, consisting of the female allowing the male to sit within 10 feet of her on a utility wire for short periods of time. Then they began to copulate approximately five times per day and enter the nest box for longer periods of time (up to 15 minutes), usually one at a time, but sometimes both at the same time. On occasion, the male offered food to the female, but at this stage it was often rejected and he would eat it himself. As courtship progressed, the kestrels continued to go in and out of the nest box and perch in the entrance. Copulation, which usually took place on the flat top of a utility pole and after much calling and tail-pumping on the part of the female, began.
to occur more frequently—up to 12-15 times a day. In addition, the male gave food to the female two to three times a day, and I began to find food cached near the nest.

Food-caching, Feeding Behaviors, and Diet
Kestrels are known to cache food for short periods of time, even when it is plentiful (Ehrlich et al. 1988). Often the female will consume only part of the prey given to her by a courting male and then store the rest (Stokes 1979). The first such cache was discovered on 18 April; it was a headless mouse in the top of a Ponderosa Pine (*Pinus ponderosa*) that was 1.5 meters high (5 feet) and 23 meters (75 feet) from the nest box. Nearly every day after that, my family and I found whole mice and parts of mice in that tree and in two nearby spruce trees, which stood 2.4 meters high (8 feet). When we found a partial mouse, the head was always missing, and then the remainder disappeared within 24 hours. I did not see the birds actually place their prey in the trees, but occasionally I observed them eating mice while perched at the top of one of the trees. On 3 May, my husband found a small snake carcass near the top of a 1.5-meter (5-foot) high tree in the front yard. The snake was there for several days and then disappeared on 7 May; perhaps the kestrels removed it.

I observed both birds scanning for prey while they perched on utility wires or fence posts and while hovering over the area behind our yard; however, I did not actually see them catch any of their prey. The kestrels brought their prey to the vicinity of the nest box before eating. The male usually perched on a utility wire to feed, and he would tolerate the female’s presence while feeding; in fact, she often begged from him. At first, the female ate while perched on the flat top of the nest-box pole, but then she seemed to prefer eating closer to the ground in small trees or the tops of shrubs. She guarded her food and did not allow the male near her while she ate; if he approached her, she would move away from him, try to cover the food, and then finally fly away with it.

Typical kestrel diets include rodents, insects, birds, lizards, and snakes (Clark 1987). Although mice, which are plentiful in the area, comprised most of the prey I saw the kestrels eat, I did see them consume one lizard and two small birds. In addition, we found a small, headless Killdeer (*Charadrius vociferus*) chick under one of the food-cache trees. During the previous summer, there had been a heavy population of grasshoppers in the area, thus I had anticipated that the kestrels would feed on grasshoppers and feed them to their young once they hatched.

Incubation and Nesting Failure
Around 4-5 May, I noticed changes in the kestrels’ behaviors that indicated
the onset of incubation. One of the kestrels--usually the female--was in the box nearly all the time, although there were occasional short periods of time (less than three minutes) when both were out. The male would bring a mouse and perch on the utility wire near the nest box, the female would fly out and take the mouse, and then the male would enter the box. Generally, the female ate right away and then flew to the roof of the nest box, at which point the male would fly out and she would re-enter the box and stay there until the male brought food again. These exchanges happened three to four times a day.

On 10 May, after having been away from home for two days, I noticed that both kestrels were out of the nest box for long periods of time. They were copulating and spending only short periods of time (one to two minutes) in the nest box. Apparently, the nesting attempt had failed, and after 12 May they were gone. Because kestrels sometimes renest after a nesting failure (Ehrlich et al. 1988), I left the nest box in place, but the pair did not return. During the remainder of the breeding season, no birds showed interest in the nest box, not even the ever-present starlings.

On 16 August, my husband and I took the nest box down to examine its contents. We found a single egg that was two-thirds intact, but broken open at both ends. It was bluntly oval in shape and less than 3.8 centimeters (1.5 inches) long (the broken ends made it difficult to measure precisely). It was a pale pinkish-tan with darker speckling overall, which matched the description and photos of kestrel eggs found in the *Field Guide to Western Birds’ Nests* (Harrison 1979). Nothing else was in the nest.

Possible Causes of Failure
Nest failure or abandonment among kestrels can be caused by human disturbance (Snyder and Snyder 1991). It is possible that this was a factor for the kestrels using our nest box, although kestrels have been known to nest successfully near areas of human activity (Kingery 1998). We were careful to keep away from the nest area when working in our yard, but a road-construction project nearby could have upset the kestrels. A few local people, mostly on horseback, but sometimes on foot, occasionally use the open space along the creek behind our yard; however, none of these activities appeared to bother the kestrels.

Weather may have been a factor, as there was an unseasonably high amount of rainfall--and temperatures were cool--at about the time the kestrels began to incubate. Although I never saw the adults out of the box for more than three minutes, the egg could have been chilled due to moisture seeping into the box. I studied plans for kestrel nest-box plans in Stokes (1998) and Needham (1995).
and compared them to our nest box. The primary difference was that all the
plans called for ventilation and drainage holes, but there were no such holes in
our nest box when I purchased it, nor did I add any. The references further
suggested putting wood chips or shavings in the bottom of the nest box. However, at the workshop I attended, we were told that this wasn’t necessary,
so I did not add any materials. Kestrels do not add nesting material to natural
cavities or nest boxes (Harrison 1979), but the natural cavities they use probably
contain some rough materials or have a more rounded, or irregular, shape,
which could prevent the eggs from rolling around and breaking. Such materials
also may afford insulation from cold and moisture.

Predation is always a possible factor when a nest fails. Other birds commonly
prey on eggs and nestlings (Ehrlich et al. 1988), and we have noted owls,
larger hawks, Common Ravens (Corvus corax), American Crows (Corvus
brachyrhynchos), Black-billed Magpies (Pica pica), and European Starlings
in the area. In addition, snakes, mice, rats, and squirrels inhabit the area.
However, the majority of these potential predators would not have been able
to access the kestrel nest. Generally, predators either swallow eggs whole,
carry them away, or break them apart in (or near) the nest. Because the egg we
found in the box was broken, predation cannot be eliminated. We found no
droppings of either birds or mammals in the nest.

Desertion—by one or both birds of a pair—can cause nest failure, but both
kestrels were present and still behaved as a mated pair for up to two days after
they stopped incubating. However, birds will avoid empty eggshells (Ehrlich
et al. 1988), which may explain why the kestrels abandoned the box and left
the area; perhaps they left to renest elsewhere. This same phenomenon also
may explain why no other birds showed interest in the nest box after the kestrels
left.

I suspect that the egg and nest were abandoned by the kestrels due to
inexperience/immaturity on the part of one or both of the adults. Normally,
estrels lay three to five eggs per clutch (Harrison 1979) and begin incubation
once the penultimate egg has been laid (Stokes 1979). However, even though
the kestrels had behaved as though they were incubating for at least five days,
there was only one egg in the nest and no evidence of more eggs—a possible
sign of immature birds. It was not clear whether the egg was broken by one of
the kestrels or by a predator after the pair had stopped incubating.

I intend to put the box up again next year and hope that kestrels will nest in it
successfully. I plan to make some minor changes by adding drainage and
ventilation holes, and I will place wood chips in the bottom of the box. The
site where I put the box, however, seemed to be ideal, so I will not change the location.

References and Literature Cited


DOCUMENTING AND SHARING YOUR BIRD SIGHTINGS
(Or, "I know there are folks who want to know what I see, but how do I get the word to them?")

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I suspect that, on a daily basis, Coloradans pose the question I included as this article's subtitle to one of the compilers, editors, chairpersons, writers, and researchers of various bird magazines, educational publications, records committees, hotlines, list-servers, chat-lines, or regional summaries. If you are new to birding or this part of the country, or you have been fortunate to see something that is likely to be of interest to others, you may be confused by all the traditional and modern ways to share information. Those not in the field with you may want to enjoy special birds that you see. Furthermore, your sightings may not be useful to science and other ventures if you do not document them quickly and appropriately.

This article is my attempt to help you understand some of the different systems used for reporting birds in general (Colorado birds in particular), what sort of information to provide to those systems, and how/when to get reports to the appropriate persons. Keep in mind that I could not include all the reporting systems out there, but at the end of this article I have included names, mailing addresses, phone numbers, and e-mail addresses of people who manage reporting systems in Colorado. Every day more systems are implemented, but the good news is that people affiliated with most of these reporting systems communicate with each other, and bird sightings reported to one system often go to other reporting systems.

Which Sightings to Share
First, you need to know what may be of interest. This varies considerably from system to system, but you can bet that records of species that occur way out of their normal ranges, are new to an area or state, or occur "out of season" will be interesting to most of the record keepers. The Colorado Field Ornithologists' Colorado Bird Records Committee (CBRC) keeps records for all species recorded in Colorado, and prepares the official Field Checklist of Colorado Birds, which identifies the species recorded in Colorado. The Checklist includes a coding system that lets you know the species' occurrence and breeding status in Colorado, and it indicates which species should be documented when observed in Colorado. If you observe an unlisted species,
you will definitely want to document your sighting. **When possible, include photographs and/or videotapes with your record, and try to get other observers to see the bird and verify the observation.**

Second, if you detect an **unusual trend**, even something as simple as “the warblers were two weeks early” or “hummingbirds seemed more common than ever before,” you should document it. When combined with other such reports, these data may, in fact, help confirm the occurrence of significant **changes in trends, patterns of distribution, or some nuance of what birds are doing in a given season**. Most birding periodicals, regional summaries, and local clubs are interested in these data for their published materials. Electronic mailing lists and “chat-rooms” share this information regularly among their subscribers, and managers of electronic bulletin boards often ask you to send them notes so they can produce summaries of various kinds. **One rule of thumb is, “When in doubt, send it in!”** As you become more familiar with what reports other people submit, and how the data are used, you will probably refine your methods.

**How/Where to Share Your Sightings**

**Rare Bird Alerts or "Hotlines"** -- The term “hotline” or “rare bird alert” (RBA) ordinarily refers to a phone-answering system set up to record and rapidly distribute information about recent sightings of rare birds. They often include directions to current “hotspots” and news about upcoming events. They have been in existence for many years and are used widely by birders. In recent years, this concept has been expanded to the Internet, where you can usually find details about areas where you want to bird and how to report what you have seen.

The Denver Field Ornithologists sponsors the only phone **RBA in Colorado**. The tape usually is updated when new sightings are sent to the Compiler, currently Norm Erthal; about 175 updates per year are typical, although there may be as many as 30 in one month (e.g., May). How you get the information to Norm can vary to meet your needs and time constraints (see phone and e-mail addresses at the end of this article). He closely monitors the phone system, so this is the most effective way to “get the word out” or update the tape with what you have seen. For first state records and very rare birds, Norm will update the tape immediately if he is contacted at home or at work. When you call the hotline, the introductory message tells you when the tape was last updated, what to do if you have information to add, and then gives the latest information about recent sightings. Normally, you have the opportunity to leave a message at the end of the tape or by pressing one of the keys on your phone. The hotline/RBA system is the only real way that folks without computer
access, or folks away from their computers, can get timely updates; with the advent of cell phones, you can even get—or provide—updates from the field. Often this is the only way to get information in time to go see a rare bird (after all, avian critters do have wings and often-tight schedules!). The American Birding Association (ABA) publishes a list of all the known RBAs in the country, which is an effective way to stay informed about areas where you may travel.

Electronic RBAs and List-servers -- Most of the electronic, "on-line" rare bird reports include information from their area of origination or their state RBA. The date of the most recent update is listed, and at the bottom of the report will be an e-mail address or phone number that you can use to contact someone when you have observations to share with people in that region. Your sighting can then be included when the report is updated. Generally the reports are not changed daily, and some are not even updated weekly, so when time is of the essence, and others may wish to see a special bird, bulletin boards can be undependable. Go for the phone call, or better yet, notify both systems.

A relatively new, increasingly popular and very fast way to share information is through electronic list-servers for those who choose to subscribe to these systems. As a subscriber, you receive any messages that are sent for general distribution to the membership list. This includes bird sightings and observations about nearly anything that might interest birders and field ornithologists; in the same way, any message that you send to the list is distributed immediately to all subscribers. In Colorado, the list-server of this type is called COBIRDS, and it has become a model for many other states. Almost 500 people are currently enrolled. The system has very few rules, and it is up to the subscribers to provide updates and bird reports. List-servers are proving to be easy tools for quickly getting reports to a very large group of birders. Subscribers are eager to share, so it is also a great way to learn new things about birds and birding, but use this medium wisely and carefully, as many people will read—and interpret differently—your messages.

To subscribe to COBIRDS, send an e-mail message addressed to: listproc@lists.colorado.edu (no subject heading is necessary), and type the message: subscribe cobirds and then type your first and last name right afterwards on the same line. Also, it is advisable to delete any e-mail signature files that you use before sending a command to a list-server.) After you have subscribed, you can post your sightings by addressing your e-mail messages to: cobirds@lists.colorado.edu. There is no charge for becoming a subscriber.
Internet Websites -- There are hundreds of Internet websites that report bird sightings, field-trip data, upcoming meeting and convention schedules, and addresses of folks that you may want to contact. The Colorado Field Ornithologists' website is a good example. You can find it at: http://www.frii.com/~hopko. Rachel Kolokoff of Fort Collins does a remarkable job of keeping it updated with a wealth of interesting information.

Publications -- Most seasoned birders know that one key to good identification includes taking careful notes in the field. You don't have much time to record notes while you observe the bird, but the more focused you are on the details you see, and the sooner you do record what you see, the better your documentation will be if you choose to submit the record and share your sightings with others. The first category of potential recipients of rare bird documentation would be the compilers of regional and national summaries. Local bird clubs and organizations also may publish newsletters and pamphlets that include various tidbits of local bird information. Their summaries can range from a simple, short note about exciting birds to a more detailed, seasonal summary, written and edited every quarter of the year. Ask around about the nature clubs near where you live and you are likely to find several. Their publishing and record-keeping protocols will vary greatly.

Journal of the Colorado Field Ornithologists' "News from the Field" column -- On a more statewide level, there will usually be one group that assumes the daunting task of reporting bird sightings on a regular basis, usually in a professional-quality publication. In Colorado, the Journal of the Colorado Field Ornithologists (JCFO), a quarterly periodical, is such a publication. Each issue contains a "News from the Field" column that summarizes submissions of bird observations in Colorado. On occasion, significant events will merit their own stories, including illustrations or pictures, if available. The Editor of the "News from the Field" column may vary from season to season--and certainly every few years. However, you can find out quickly where to submit your reports for the column by: contacting the current JCFO Editor or "News from the Field" Editor (listed on the inside of the front cover of the JCFO), or by reading instructions provided in the introductory paragraphs of recently published "News from the Field" articles in the JCFO. Currently, Peter Gent of Boulder compiles reports and writes the column for fall (August-November) and winter (December-February) seasons (which are published in the April and July issues, respectively), and Tony Leukering of Brighton compiles reports and writes the column for spring (March-May) and summer (June, July) seasons (which are published in the October and January issues, respectively).
It would be VERY helpful to the "News from the Field" Editors if you would submit your observations--preferably in columnar or tabular format--in the order as follows:

SPECIES NAME (in taxonomic order--see the Field Checklist of Colorado Birds), DATE OF OBSERVATION, NUMBER OF BIRDS OBSERVED, LOCATION (including county)

North American Birds' (formerly American Birds, and, before that, Field Notes) -- Moving on to the national level, there are several organizations and publications that also summarize bird records on a seasonal basis, including the American Birding Association's (ABA) newly restructured publication, North American Birds. The ABA also prepares a monthly newsletter, "Winging It," which includes short summaries of the rarest birds observed in the United States and articles about birding in various parts of the country. North American Birds is published quarterly, in concert with the migrations and movements of birds, and offers a national summary as well as regional accounts. The seasonal periods are structured the same way they are for the JCFO: December-February (winter), March-May (spring), June and July (summer), and August-November (fall); reports of birds observed should be submitted accordingly.

Seasonal reports should go to the applicable Regional Editor(s) as soon as possible after the seasonal period has ended, and not later than the 20th of the month that follows a given seasonal period. Each person who has seen any birds of interest during a given season is encouraged to provide a written summary that includes pertinent details to the applicable regional Editor. In North American Birds, Colorado reports are lumped with those from Utah, Nevada, and Wyoming in a column entitled Mountain West Region, for which Van Truan and Brandon Percival (both of Pueblo, Colorado) are the current Regional Editors. For some regions, there are sub-regional compilers that gather and summarize data for specific portions of a region and then submit their summaries to the appropriate Regional Editors. It is important to note that while all submitted documentation is reviewed, not all can be included in the summaries. However, all contributors are identified in the published report. It is good idea to provide enough detail with your report to help support the record, especially reports of very rare birds or birds that represent identification challenges.

Other Publications -- There are many other publications that include information about short and long-term trends, sightings of significance, research projects, and many other interesting observations. The scope of these publications ranges from broad regions to more local areas. Some examples
of these other periodicals are the *Auk*, the *Condor*, and the *Wilson Bulletin*, which are available in the libraries of many universities and natural resource agencies. They also publish instructions about how to submit information and papers for their consideration.

**Colorado Bird Records Committee: Rare Bird Reports and Documentation** -- Okay, so now you know what to report, how and when to send in your reports, and, therefore, how to share your data. Well, almost. What about birds that are not seen in Colorado every year, have never been seen in Colorado previously, or have a “U” (unusual) or “R” (rare) next to their names on the *Field Checklist of Colorado Birds*? (Note, this checklist is prepared by the Colorado Field Ornithologists and published by ABA; the checklists are distributed by ABA Sales.)

In every state, there is an official Bird Records Committee that carefully maintains that state’s official list of bird species. The Colorado list currently includes 463 species. The CBRC, a standing committee of the Colorado Field Ornithologists, has reviewed documentation, kept and updated the official state list, and maintained the bird-record archives for more than 25 years. One of the CBRC’s main jobs is to review documentation on the birds they consider to be rare in Colorado, and of course, all species not already included on the state checklist. The CBRC reviews the records for each calendar year and then publishes a report of its findings in the *JCFO*. The 1997 report is published in this issue of the *JCFO*. To submit documentation to the CBRC, use a Sight Record form. A copy of the form is always printed on the inside of the *JCFO*’s mailer (thus making it easy to separate from the journal), and it is posted on the Colorado Field Ornithologists’ website. You can also request forms from the CBRC Chair. The form should be filled out as completely as possible as you refer to the drawings, photographs, and notes that you should have made in the field. Then send your Sight Record form, photos, drawings, etc. to the CBRC Chair. If you didn’t make notes, do not despair, but do write up the report while the details are fresh in your mind and send it in. Record only what you are certain about having observed or heard. The seven-person CBRC reviews the documentation submitted, votes to “accept” or “not-accept” the record, and then the CBRC Chair compiles the results. All information submitted to the CBRC is retained in the record archives at the Denver Museum of Natural History. An updated list of rare and unusual bird species for which the CBRC requests documentation is published in the *JCFO* periodically; the latest such list was published in Volume 32, No. 1 (January 1998) on pages 43-44.
As an important closing point, most of those seeking bird-sighting information in Colorado try hard to share information as well, as timing allows. You should send your reports to any or all groups you wish, however, the “Mountain West Region” Editors for *North American Birds* usually send documentation forms that they receive to the CBRC and *JCFO*’s “News from the Field” Editors, and vice versa. Finally, reports posted on the Colorado RBA and COBIRDS should be followed up by a written summary and/or documentation form that you then send to the CBRC and/or the Mountain West Region Editors, and to the Editors of *JCFO*’s “News from the Field.” People failing to take this important step may not see their reports published anywhere. It is not appropriate to expect editors and compilers—already very busy people—to ferret out your informal postings, nor do these postings constitute/replace official reports and documentation forms.

I hope this article answers some questions and gives you some insight on how information and documentation about birds normally flows within Colorado’s community of birders and field ornithologists. Thanks go to my wife, Paula, and to Mark Janos, Norm Erthal, and Peter Gent for helpful comments in reviewing this article.

**Names, Addresses, Phone Numbers, and E-Mail Addresses to Help You**

**CFO home page:** http://www.frii.com/~hopko

**Colorado Rare Bird Alert** (sponsored by Denver Field Ornithologists): 303/424-2144

**Norm Erthal,** Compiler for the Colorado RBA: 303/291-7401 (work); 303/424-6747 (home); normanpe@aol.com (h) or erthaln@state.co.us (w).

**Van Truan,** Co-Regional Editor for *North American Birds*: 1901 Court St., Pueblo CO 81003

**Brandon Percival,** Co-Regional Editor for *North American Birds*: 835 Harmony Dr., Pueblo West CO 81007; flammowl@juno.com

**Tony Leukering,** Co-Compiler for the *Journal of the Colorado Field Ornithologists*’ News from the Field column: 13401 Piccadilly Rd., Brighton CO 80601; GreatGrayO@aol.com

**Peter Gent,** Co-Compiler for the *Journal of the Colorado Field Ornithologists*’ News from the Field column: 55 South 35th St., Boulder CO 80303; gent@ucar.edu

**Bill Lisowsky,** Chair of the Colorado Bird Records Committee: 2919 Silverplume Drive, Ft. Collins, CO 80526; 970/225-6827; ncswpl@aol.com

**American Birding Association:** PO Box 6599, Colorado Springs CO 80934-6599; ABA Sales: 800/634-7736
RECENT ORNITHOLOGICAL LITERATURE PERTAINING TO COLORADO, NO. 6

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If the reader is aware of any paper regarding Colorado birds in journals not reviewed regularly in this section, I would appreciate a reprint or a full citation for the paper so that I may include it in this feature.


Linkhart, B.D., and R.T. Reynolds. 1997. *Territories of Flammulated Owls* (*Otus flammeolus*): is occupancy a measure of habitat quality? (pages 250-254). This study, conducted in Teller Co., Colorado, revealed that territories most consistently occupied by breeding pairs consisted of habitat with the highest percentage of old-growth Ponderosa Pine (*Pinus ponderosa*) and Douglas-fir (*Pseudostuga menziesii*).


Sheffield, S.R. 1997. *Current status, distribution, and conservation of the Burrowing Owl* (*Speotyto cunicularia*) in midwestern and western North America (pages 399-407). Breeding Bird Survey data are used to discuss the current status of the Burrowing Owl's population. Although declining in many areas, southeastern Colorado retains one of the highest densities of Burrowing Owls in North America. The author suggests that the owl is a model sentinel species of the health of western grasslands.
The Colorado Field Ornithologists' Board of Directors proudly announces that the computer-automation project for the Colorado Bird Records Committee (CBRC) records has been completed. Now it is available for use by interested researchers, universities, government agencies, and individuals. This effort began in 1997, with the goal of modernizing the record log of rare bird sightings, thus providing fast access to official decisions made by the CBRC and greater ease in sharing the data with others. More than 1700 records, some dating back to 1873, are stored in the database, which includes pertinent information about each report, such as location, dates, observer(s), and the official accession number.

The data will be available electronically; in addition, one can request an electronic copy by sending a written request to the CBRC Chair. Electronic transfer of the data is preferred; to open the data file, you will need software compatible with a file in Microsoft Excel 97 format. Upon request, the data will be sent free of charge via diskette to Colorado universities and other public institutions. All other interested parties must provide a 3-1/2" floppy diskette and a stamped self-addressed diskette mailer (SSDM) with sufficient postage. Printing the document in easily legible font requires more than 60 pages, therefore no paper copies will be provided.

Anyone interested in receiving a copy of the database should send a diskette and SSDM to: Bill Lisowsky, CBRC Chair; 2919 Silverplume Drive, Fort Collins, Colorado 80526; to arrange for an electronic file transfer, contact Bill via e-mail at: ncswpl@aol.com.
REPORT OF THE COLORADO BIRD RECORDS COMMITTEE:
1997 RECORDS

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This report covers the rare bird records reviewed by the Colorado Field Ornithologists’ Bird Records Committee (hereafter the RC or the Committee) for 1997. The Committee evaluated 109 records of 71 species (and one hybrid) submitted by 58 observers. Seventeen of the reports were accompanied by photographs and 10 with sketches or field drawings. Of the 109 records, 105 received definitive votes by the RC through initial circulation and re-circulation; they are presented herein. An additional four records received non-definitive votes (Gyrfalcon #1997-22, Eurasian Collared-Dove #1997-47, Painted Bunting #1997-105, and Purple Finch #1997-108). According to RC Bylaws, these records will be discussed and resolved at a meeting of the Committee, and the results will be published in a subsequent RC report. Ninety-three of the 105 definitive records were accepted, for an acceptance rate of 89%. The majority of records are for birds observed in 1997. Per RC Bylaws, all “accepted” records received 7-0 or 6-1 votes to accept--either on the initial circulation or on the re-circulation. All records that were “not accepted” received less than four votes to accept (3-4, 2-5, 1-6, or 0-7) either on initial circulation or on re-circulation.

As a result of the 1997 circulation, three species--Tufted Duck, Crested Caracara, and Royal Tern--were added to the official Colorado bird checklist. The Colorado list stands at 463 species as a result of these additions. Other potential first state records (Pacific Golden-Plover, Monk Parakeet, Chuck-will’s-widow and Tropical Kingbird) were not accepted. Accounts of all three additions to the Colorado list, and the four unaccepted records, are included in this report.

Other highlights of this report include accepted records of Arctic Tern (two records), Lesser Nighthawk (four records), and Cerulean Warbler. The report also covers records from the incredible fallout of spring migrants at Lake Henry in southeastern Colorado on 8-9 May 1997 (Truan and Percival 1997).

Committee News
The Committee’s membership at the close of 1998 was: Mark Janos (Chair), Joey Kellner, Bill Lisowsky, Joe Mammoser, John Rawinski, Bob Righter, and Vic Zerbi. With the RC’s endorsement, the C.F.O. Board of Directors appointed Tony Leukering and Chris Wood to replace Mark Janos and Bob Righter as
their terms expired at the end of 1998, and Bill Lisowsky was appointed Chair for the years 1999-2001. Tony will serve the remainder of Bill Lisowsky’s vacated term (until 2000) and Chris will serve from 1999-2001. Vic Zerbi agreed to serve an additional term (1999-2001).

Committee Functions
All records reviewed by the RC become archived at the Denver Museum of Natural History, 2001 Colorado Boulevard, Denver, Colorado 80205-5798. In addition, all written documentation, photographs, videotapes, and sound recordings are housed at the Museum, where they remain available for public review. The Committee solicits documentation on all species published in its review list (Janos 1998). The Committee also seeks records of species occurring on unusual dates or in unusual locations for Colorado, and records of species previously unrecorded in Colorado. Please send your documentation to: Bill Lisowsky, RC Chair, 2919 Silverplume Dr., Fort Collins, Colorado 80526; or send it to the Colorado Field Ornithologists’ Records Committee, c/o Zoological Collection, Denver Museum of Natural History, 2001 Colorado Boulevard, Denver, Colorado 80205-5798. Documentation forms are available on the inside of this journal’s mailer and on the CFO website at: http://www.frii.com/~hopko.

Report Format
This report is divided into three parts. Part 1 consists of accepted records. Parts 2 and 3 consist of records that were not accepted—for reasons related to questionable identification, natural occurrence, or origin. Species are listed in current A.O.U. taxonomic order (American Ornithologists’ Union 1999). Within each species account, records are listed chronologically by first date of occurrence. Included with each accepted record is the location/county where the bird was found, date(s) of occurrence, record accession number (note the new number format that provides a four-digit year; e.g., 1997-55), and the initials of observers who submitted reports. If known, the initials of reporting observers who discovered the bird(s) are underlined. The date span follows the submitted record date(s). Records are sight records unless otherwise noted. An asterisk (*) prior to a species’ name indicates that the species is not currently on the RC’s review list. For species with 15 or fewer Colorado records, the number of records accepted by the RC through this reporting period follows the species’ name (in parentheses). Note that some of these numbers are corrected from previous reports, now that the records have been computerized.

Abbreviations Used in the Report: Co.=County; CC=Community College; Cr.=Creek; L.=Lake; NP=National Park; R.=River; Res.=Reservoir; SP=State Park; SWA=State Wildlife Area; WE=Wildlife Easement
Part I: RECORDS ACCEPTED

RED-THROATED LOON (Gavia stellata): A basic-plumaged bird was at North Sterling Res. (Logan Co.) 6 Nov 1994 (JR; 1997-3). An alternate-plumaged adult was at John Martin Res. (Bent Co.) on 10 May 1997 (SD; 1997-4). The same day an immature-plumaged bird was at a pond near Snyder (Morgan Co.) (DL, photos; 1997-109).

YELLOW-BILLED LOON (Gavia adamsii) (12): A juvenile bird was at Chatfield Res. (Jefferson Co.) from 13 Oct 1997 through at least 6 Dec 1997 (PG, JBH, JK; 1997-5). October 13 is a very early arrival date for this species anywhere in the lower 48 states.

RED-NECKED GREBE (Podiceps grisegena) (13): A basic-plumaged adult was described from Warren L. near Ft. Collins (Larimer Co.) on 27-28 Nov 1996 (DE; 1997-7). Another basic-plumaged bird was at Pueblo Res. (Pueblo Co.) from 26 Oct to 1 Nov 1997 (MJ; 1997-6). A third basic-plumaged adult was at Douglas Res. (Larimer Co.) on 10 Nov 1997 (SD; 1997-8).

BROWN PELICAN (Pelecanus occidentalis) (10): An immature bird was observed at Barr L. (Adams Co.) on 23 Sep 1996 (TL; 1997-9). Although this coastal wanderer is rarely seen inland, there has been a flurry of records in Colorado during the last 10 years.
*CATTLE EGRET* (*Bubulcus ibis*): An alternate-plumaged adult was at a pond north of Harvey Gap near Silt (Garfield Co.) at 1829 meters (6000 feet) in elevation on 10 May 1997 (KP; 1997-10). This record was circulated due to the unusual mountain location.

GLOSSY IBIS (*Plegadis falcinellus*) (12): The four accepted records in 1996 were followed by only one in 1997, a single, alternate-plumaged bird 7.6 kilometers (4.7 miles) west of Las Animas (Bent Co.) on 24 Apr 1997 (MJ; 1997-11).

TRUMPETER SWAN (*Cygnus buccinator*): Two immature Trumpeter Swans were described from North Sterling Res. (Logan Co.) on 16 Nov 1997 (SD; 1997-12). A single adult was seen at a gravel pond near Dotsero (Eagle Co.) from 18-29 Nov 1997 (JM; 1997-13). Another adult shared time between Gaynor L. and Little Gaynor L. (Boulder Co.) from 7 Dec 1997 through 10 Jan 1998 (DVK, RO; 1997-14). This individual shared its stay with an adult Tundra Swan (*C. columbianus*), which afforded observers nice comparisons of the two species. Trumpeter Swan has become nearly as regular as Tundra Swan in Colorado in recent years.

EURASIAN WIGEON (*Anas penelope*): An adult male in breeding plumage frequented an area of Ft. Collins that included Edora Park and City Park L. (Larimer Co.); it was seen sporadically by many observers from 3 Jan through 10 Apr 1997 (BL, photos; 1997-15).

TUFTED DUCK (*Aythya fuligula*) (1): This overdue first state record was of an alternate plumaged male floating with other diving ducks at a small pond in Cottonwood Marsh at Walden Wildlife Habitat (Boulder Co.). It was discovered by Myron Plooster, who promptly notified the local birding community. It was ultimately seen by many observers during its stay 21-23 Mar 1997 (MP, PG, MJ, TL, sketch, LN; 1997-16). This record was accepted by a vote of 7-0.

BLACK SCOTER (*Melanitta nigra*): Two records of four individuals of this species were accepted in 1997: two females at Big Johnson Res. (El Paso Co.) 8-30 Nov 1997 (BBH, MJ; 1997-19); two females at L. Henry (Crowley Co.) on 8-16 Nov 1997 (MJ; 1997-20).

*OLDSQUAW* (*Clangula hyemalis*): A winter-plumaged female was on a gravel pit pond at Dotsero (Eagle Co.) on 3 Dec 1997 (JM, sketch; 1997-18). This report was circulated and included here due to the mountain location.

CRESTED CARACARA (*Caracara plancus*) (1): This interesting, first Colorado record was an adult bird found injured near Trinidad (Las Animas Co.) on 29 Sep 1997 (GE, photos; 1997-21). For an interesting account and a full description of this occurrence see Evans (1998). Strong evidence in favor of this individual’s wildness was provided by Sigrid Ueblacker, an experienced raptor rehabilitator. The bird was bleached-out looking
and showed no wear in the tail feathers, nor was there abnormal bill or toenail growth—all signs of a wild bird. Upon being taken into captivity, the bird’s behavior was typical of one experiencing its first contact with humans. This record was accepted by a vote of 6-1.

*MOUNTAIN PLOVER (Charadrius montanus):* An alternate-plumaged adult was in the sandy, open flats adjacent to sagebrush near Blue Mesa Res. (Gunnison Co.) on 13 Apr 1997 (KP; 1997-24). This location in the interior mountains of Colorado is unusual.

HUDSONIAN GODWIT (Limosa haemastica): An alternate-plumaged male was at Duck L. (Larimer Co.) on 2 May 1996 (DE, photos; 1997-25).

RUDDY TURNSTONE (Arenaria interpres): There were three accepted records of this species in 1997: two alternate plumaged males on 30 May 1997 at John Martin Res. (Bent Co.) (TB, CL; 1997-26); a juvenile at L. Cheraw (Otero Co.) on 5 Sep 1997 (MJ; 1997-27); and an adult in basic plumage at L. Holbrook (Otero Co.) on 21 Sep 1997 (MJ; 1997-28).

*BAIRD’S SANDPIPER (Calidris bairdii):* This very unusual record was of a basic-plumaged adult along Newlin Creek (Fremont Co.) at 1737 meters (5700 feet) in elevation on 22 Dec 1996 (TL; 1997-29). It was discovered during the Penrose, Colorado Christmas Bird Count and was very well documented by the observer.

SHORT-BILLED DOWITCHER (Limnodromus griseus): Three records of this species were accepted: one juvenile at Fruitgrower’s Res. (Delta Co.) on 18 Aug 1995 (RL, photos, CD, sketches; 1997-30); an alternate-plumaged female at Lower Latham Res. (Weld Co.) on 17 May 1997 (PG, DQ; 1997-31); and four juveniles at Jumbo Res. (Logan Co.) on 27 Aug 1997 (SD; 1997-32).

RED PHALAROPE (Phalaropus fulicaria): Two observers had the good fortune to discover a brilliant alternate-plumaged female Red Phalarope at Antero Res. (Park Co.) at 2713 meters (8900 feet) in elevation on 8 June 1997 (TL; 1997-33). Less spectacular was a basic-plumaged bird at Duck L. (Larimer Co.) on 20 Sep 1997 (SD; 1997-34).

LAUGHING GULL (Larus atricilla): A basic-plumaged adult was at Prewitt Res. (Washington Co.) on 21 Oct 1997 (HK, UK; 1997-35).

LITTLE GULL (Larus minutus) (15): A juvenile in striking plumage was found among thousands of Franklin’s Gulls (L. pipixcan) at L. Holbrook (Otero Co.) on 12 Oct 1997 (MJ, field sketch; 1997-36).

MEW GULL (Larus canus) (13): A basic-plumaged adult was at Union Res. (Weld Co.) on 8 Mar 1997 (PL; 1997-37).

GREAT BLACK-BACKED GULL (Larus marinus) (15): A first-summer bird was at Nee Noshe Res. (Kiowa Co.) on 26 Apr, 2 May, and 16 Jul 1997 (MJ, photos; 1997-39). The adult at Pueblo Res. (Pueblo Co.) Co.)

**BLACK-LEGGED KITTIWAKE** (*Rissa tridactyla*): A first-winter bird was at Cherry Creek Res. (Arapahoe Co.) on 12 Nov 1997 (RO; 1997-41).

**ROYAL TERN** (*Sterna maxima*) (1): This first record for Colorado was discovered by Duane Nelson at Nee Noshe Res. (Kiowa Co.) in the course of doing field work on Least Terns (*S. antillarum*) and Piping Plovers (*Charadrius melodus*) in the Lower Arkansas R. Valley. Only seven lucky birders observed this individual during its stay 15-16 Jul 1997 (MJ, field sketches, DN, photos, DS, sketch; 1997-42). For a complete account of this occurrence see Nelson (1999). This record was accepted by a vote of 7-0.

*COMMON TERN* (*Sterna hirundo*): One alternate-plumaged adult was in an unusual location—the Blanca Wetlands, San Luis Valley (Alamosa Co.) on 25 May 1997 (PSS, AS; 1997-43). Two basic-plumaged birds were in western Colorado near Dotsero (Eagle Co.) on 16-17 Oct 1997 (JM; 1997-44).

**ARCTIC TERN** (*Sterna paradisaea*) (6): There were two records of this species accepted in 1997: a definitive alternate-plumaged bird at Colorado River SP (Mesa Co.) on 31 May 1997 (TL, RL; 1997-45); and an alternate-plumaged adult at Lower Latham Res. (Weld Co.) on 20 Sep 1997 (BG, sketch, JH; 1997-44).

**WHITE-WINGED DOVE** (*Zenaida asiatica*): An adult bird summered at Fruita (Mesa Co.) from 2 May through 8 Aug 1997 (PC, photos, RLa; 1997-48).

**INCA DOVE** (*Columbina inca*) (6): A single bird was in a yard in Cascade (El Paso Co.) from 18 Jan through 8 Feb 1997 (SB; 1997-49).

**LESSER NIGHTHAWK** (*Chordeiles acutipennis*) (12): The accepted records of this southwestern U.S. species have continued to mount since acceptance of the second Colorado record near Montrose (Montrose Co.) on 10 June 1987. Despite numbers of sight records, there has never been documentation of a calling bird in Colorado. An adult male was found along the Poudre R. in Ft. Collins (Larimer Co.) on 10 Sep 1995 (DL; 1997-51). Great photographs by David Leatherman accompanied a record of an adult male and female seen by many behind Lamar CC in Lamar (Prowers Co.) 8-10 May 1997 (DL, photos, DQ; 1997-52). A male was in the riparian grove just south of L. Holbrook (Otero Co.) on 12 May 1997 (MJ, field sketch; 1997-53). Finally, an adult female was described from along the Poudre R. in Ft. Collins (Larimer Co.) on 28 May 1997 (DL; 1997-54).

**MAGNIFICENT HUMMINGBIRD** (*Eugenes fulgens*) (5): An adult female came to a hummingbird feeder at a residence in Roxborough Park (Douglas
Co.) in the fall of 1997. Although this individual was seen by many birders over a period of time, the RC only received one written report, for 18 Oct 1997 (CW; 1997-56).

**ANNA'S HUMMINGBIRD** (*Calypte anna*) (6): A male was at a residence in Boulder (Boulder Co.) from 5-10 Dec 1997. Although reports of this individual made the local press, along with photos, the news did not reach the general birding public (VD, photos; 1997-57).

**BLACK PHOEBE** (*Sayornis nigricans*): One adult was near Lake City (Gunnison Co.) on 24 May 1997 (KP: 1997-58).

**SCISSOR-TAILED FLYCATCHER** (*Tyrannus forficatus*) (9): A single adult was found in open country south of Springfield (Baca Co.) on 24 May 1997 (DQ; 1997-62). A fall-adult male was observed near Rustic (Larimer Co.) on 5 Aug 1997 (BL, photo; 1997-63).

**WHITE-EYED VIREO** (*Vireo griseus*): During the last 10 years, there has been an upsurge in Colorado records of this species. An adult was at L. Henry (Crowley Co.) on 9 May 1997 (MJ; 1997-68). A second individual was at Chatfield SP (Jefferson Co.) on 25-27 Aug 1997 (KS; 1997-69).

**GRAY VIREO** (*Vireo vicinior*): Although this species is not on the RC's review list (Janos 1998), occurrences outside its known range on the western slope of Colorado are unusual. An adult was near Colorado City (Pueblo Co.) on 8 Sep 1997 (DSi; 1997-70).

**YELLOW-THROATED VIREO** (*Vireo flavifrons*): It was a banner spring for this species in Colorado, with five individuals, all adult birds, reported and accepted by the RC for the period of 2-14 May 1997. In addition, one adult bird was present at Ft. Lyon WE (Bent Co.) on 3 May 1996 (BP; 1997-72). The 1997 records: one along Willow Cr. at Lamar CC in Lamar (Prowers Co.) from 2-3 May 1997 (MJ; 1997-73); one in the riparian area below the dam at Two Buttes Res. (Baca Co.) on 4 May 1997 (MJ; 1997-74); one in the trees at the edge of Nee Noshe Res. (Kiowa Co.) on 10 May 1997 (SD; 1997-75); one at Rocky Ford SWA (Otero Co.) on 12 May 1997 (MJ; 1997-76); and finally another adult at Ft. Lyon WE (Bent Co.) on 14 May 1997 (MJ; 1997-77).

**BLUE-HEADED VIREO** (*Vireo solitarius*) (2): The abundance and pattern of occurrence of this recently “split” species is not well known in Colorado and there are just two documented records for Colorado (AOU 1997, Janos 1997). An adult bird was reported from Ft. Collins (Larimer Co.) on 20 Sep 1997 (DL; 1997-71).

**CAROLINA WREN** (*Thryothorus ludovicianus*): This bird was present in Van Truan's backyard in Pueblo (Pueblo Co.) for some days before and after the single report that was received for 23 Sep 1997 (MJ; 1997-64).

**GRAY-CHEEKED THRUSH** (*Catharus minimus*): Two records were received and accepted in 1997. The first was a single bird on 9-12 May
1997 at L. Henry (Crowley Co.) (MJ; 1997-65). Another single bird was at Crow Valley Campground (Weld Co.) on 19 May 1997 (MP; 1997-66). In general, observers of Catharus sp. thrushes in Colorado have not considered the possibility of Bicknell's Thrush (C. bicknelli) in evaluating such sightings (see National Geographic Society 1999).

**VARIED THRUSH** (*Ixoreus naevius*) (11): An adult male was at a Colorado State Forest Service nursery in Ft. Collins (Larimer Co.) on 16 Dec 1995 (DE; 1997-67).

**BLUE-WINGED WARBLER** (*Vermivora pinus*): An adult bird was along Willow Cr. at Lamar CC in Lamar (Prowers Co.) from 1-5 May 1997 (MJ; 1997-78). A second bird was in the trees at Ft. Lyon WE (Bent Co.) on 9 May 1997 (MJ; 1997-79).

**GOLDEN-WINGED WARBLER** (*Vermivora chrysoptera*): There was one report of this species in 1997--a single bird at L. Henry (Crowley Co.) on 11-12 May 1997 (MJ; 1997-80).

**“BREWSTER’S” WARBLER** (*Vermivora pinus X V. chrysoptera*): This rarely reported hybrid was described from Bluff L. in Denver (Denver Co.) on 11 May 1997 (BPh, sketch; 1997-81).

**YELLOW WARBLER** (*Dendroica petechia*): This record documents a winter occurrence of the species on the Barr Lake Christmas Bird Count. The two birds were a female and a probable male behind the Brighton sewage ponds along the S. Platte R. (Adams Co.) on 28 Dec 1997 (BK, TL; 1997-82).

**BLACK-THROATED BLUE WARBLER** (*Dendroica caerulescens*): There was a mountain record of this species in 1997: a male in breeding plumage at Cub Lake Trail in Rocky Mountain NP (Larimer Co.) on 26 Jun 1997 (WR; 1997-83). The bird sang persistently from a grove of mature aspens and conifers at about 2560 meters (8400 feet) in elevation. The mid-summer date and tireless singing by this individual indicates that it had established a breeding territory in the area. There are no nesting records of this species in Colorado.

**BLACKBURNIAN WARBLER** (*Dendroica fusca*): This species made a good showing in Colorado in 1997, with four records submitted and accepted: three in the spring and one in the fall. A female was in the trees at Ft. Lyon WE (Bent Co.) during a windstorm on 2 May 1997 (MJ; 1997-84). An alternate-plumaged male was in the trees at the southwest corner of Milton Res. (Weld Co.) on 16 May 1997 (RQ; 1997-85). A singing adult male pleased observers at the L. Hasty campground below the dam at John Martin Res. (Bent Co.) on 17 May 1997 (MJ; 1997-86). Finally, a fall-plumaged female was discovered by Brandon Percival at Valco Ponds in Pueblo (Pueblo Co.) on 26-27 Sep 1997 (MJ; 1997-87).
YELLOW-THROATED WARBLER (Dendroica dominica): A singing, white-lored individual was discovered by Brandon Percival at the L. Henry grove (Crowley Co.) on 22 May 1997 (AS; 1997-88).

*GRACE’S WARBLER (Dendroica graciae): This record documents a small breeding colony of Grace’s Warblers in a mixed Ponderosa Pine/Douglas-fir woodland at the south end of Sapinero Mesa near Lake City (Gunnison Co.) at 2682 meters (8800 feet) in elevation. The record documented at least four singing males on 24 May 1997 (KP; 1997-89).

PINE WARBLER (Dendroica pinus) (15): Brandon Percival discovered an immature, fall-plumaged male at Valco Ponds, Pueblo (Pueblo Co.) on 5 Dec 1997 (BP, MJ, RO; 1997-90). It was present until at least 8 Feb 1998 and was seen by many observers.

PRAIRIE WARBLER (Dendroica discolor) (13): A singing male was present at Bonny Res. (Yuma Co.) on 1 Jun 1997 (HK, UK, DQ; 1997-91). A first-fall male was in Cottonwood Canyon (Baca Co.) on 22 Aug 1997 (CW; 1997-92).

BAY-BREASTED WARBLER (Dendroica castanea): An alternate-plumaged male was described from near Queens SWA near Eads (Kiowa Co.) on 11-12 May 1990 (VD, RD; 1997-93).

CERULEAN WARBLER (Dendroica cerulea) (3): The beautiful female Cerulean Warbler discovered during the CFO convention (25-26 May 1997) in Monte Vista by Drew Smith was the outstanding migrant landbird find of the year (see Smith 1997); it foraged in some trees around Home L. SWA (Rio Grande Co.). Smith found it during a rain squall on the afternoon of 25 May, and it delighted scores of observers that day, and the next day when it was unexpectedly still present (PG, MJ, HK, AS, sketch, PSS; photos; 1997-94).

PROTHONOTARY WARBLER (Protonotaria citrea): An adult male was along Willow Cr. behind Lamar CC at Lamar (Prowers Co.) on 4-5 May 1997 (MJ; 1997-95). A second male was in Gregory Canyon (Boulder Co.) on 20 May 1997 (PG; 1997-96). A first-fall female was in the L. Henry grove (Crowley Co.) on 22 Aug 1997 (CW; 1997-97).

WORM-EATING WARBLER (Helmitheros vermivorus): A single bird was at the grove at L. Henry (Crowley Co.) from 9-12 May 1997 (MJ; 1997-98).

KENTUCKY WARBLER (Oporornis formosus): An adult male was found at Crow Valley Campground (Weld Co.) on 30 May 1997 (JH; 1997-100).

MOURNING WARBLER (Oporornis philadelphia) (14): A breeding-plumaged male was at Fountain Creek Regional Park (El Paso Co.) on 23 and 25 May 1997 (BM; 1997-101).

CANADA WARBLER (Wilsonia canadensis): A first-year female was banded
HEPATIC TANAGER (*Piranga flava*) (15): On 15 May 1994, an adult male was at the south edge of Mesa de Maya (Las Animas Co.), where it is known to breed (TV; 1997-103).

SCARLET TANAGER (*Piranga olivacea*) (15): A breeding-plumaged male was present at North Shanahan Ridge, City of Boulder Open Space (Boulder Co.), on the interesting dates of 9-12 Jun 1997 (DEv; 1997-104).

*BALTIMORE ORIOLE* (*Icterus galbula*): A breeding-plumaged male was at a residence in Boulder (Boulder Co.) on 28 Aug 1997 (MP, SP, photo; 1997-106).

PURPLE FINCH (*Carpodacus purpureus*): A male was at the Red Rocks Trading Post near Morrison (Jefferson Co.) from 25 Dec 1997 through 10 Jan 1998 (TL, RO; 1997-2).

**Part 2: RECORDS NOT ACCEPTED - Identification Questionable**

TUFTED DUCK (*Aythya fuligula*): A report of a male frequenting small ponds along the South Platte R. in Adams County on 22-26 Apr 1997 was not accepted by a vote of 3-4 (photos; 1997-17). Most RC members felt that the bird in question was a hybrid with another *Aythya* sp., perhaps Ring-necked Duck (*A. collaris*).

PACIFIC GOLDEN-PLOVER (*Pluvialis fulva*): This report was of a single bird seen flying and heard calling at Barr L. SP (Adams Co.) on 4 Sep 1996 (1997-23). Due to the brevity of the observation this record was not accepted by a 0-7 vote. The single observer submitted the report to document possible sightings of this species in the event that a pattern of occurrence develops. There is no documented record for this species in Colorado.

LESSER BLACK-BACKED GULL (*Larus fuscus*): A report of a basic-plumaged adult at Union Res. (Weld Co.) on 8 Nov 1997 was not accepted by a vote of 2-5 (1997-38).

SNOWY OWL (*Nyctea scandiaca*): This report was for a bird seen briefly--in flight only--on 26 Dec 1997 near Boulder (Boulder Co.). Questions of confusion with albino raptors or with a falconer’s white-morph Gyrfalcon (*Falco rusticolus*) known to be present in the area came up among RC members. Upon re-circulation of the record, the Committee voted not to accept by a vote of 3-4 (1997-1).

CHUCK-WILL’S-WIDOW (*Caprimulgus carolinensis*): A report of a single bird near Lyons (Larimer Co.) on 10 Sep 1994 was seen and described too briefly to be identified confidently, thus it was not accepted by a vote of 0-7.

DUSKY-CAPPED FLYCATCHER (*Myiarchus tuberculifer*): There were
two reports submitted in 1997 and neither was accepted. The first was a single-observer record of a single bird at Hannah Ranch SWA (El Paso Co.) on 3 Apr 1997. The bird was observed singing. Several issues brought up by RC members included: the very early date [more typical of Say's Phoebe (Sayornis saya) in Colorado]; the initial observer's unawareness that the Dusky-capped Flycatcher is rare in Colorado; and a written description that did not fully eliminate Say's Phoebe. The vote was 0-7 not to accept (1997-59). The second record presented a difficult task for the Committee: A singing bird was described from VanBibber Park, Arvada (Jefferson Co.) on 10 Oct 1997 (1997-60). Most Committee members felt that similar species, particularly Ash-throated Flycatcher (M. cinerascens), were not ruled out. Upon re-circulation of the record, the RC voted 2-5 not to accept the record. A second Colorado record (11 May 1883 in Fort Lyon was the first) of this species still awaits some lucky finder. A tape recording of the song, if heard, or identifiable photographs would be desirable to document this species in Colorado.

TROPICAL KINGBIRD (Tyrannus melancholicus): A single bird was present for about five minutes at Black Forest (El Paso Co.) on 13 Sep 1997. The date and location of this observation are tantalizing, but the first Colorado record will have to wait for a bird that stays longer and perhaps either vocalizes or poses for a camera. The RC voted 0-7 not to accept (1997-61).

SWAINSON'S WARBLER (Limnotlypis swainsonii): A single bird was seen and described near the site of the Cerulean Warbler on 25 May 1997 at Home L. SWA (Rio Grande Co.). The written description was supplemented with photographs that the majority of the RC felt ruled out Swainson's Warbler (photos; 1997-99).

PURPLE FINCH (Carpodacus purpureus): An adult male was reported in a yard in Boulder (Boulder Co.) on 28 Feb 1997 (1997-107). The report was felt to be too brief, and, upon re-circulation the record was not accepted by a vote of 3-4.

Part 3 RECORDS NOT ACCEPTED - Establishment of Introduced Population Questionable

MONK PARAKEET (Myiopsitta monachus): The occurrence of this species in Denver (Jefferson Co.) 21 Sep-6 Oct 1997 was well-documented by the observer in a written report and photographs submitted to the RC. The Committee voted 0-7 not to accept based on the lack of evidence that the population is well-established and self-sustaining (photos, 1997-50).
Key to Contributors
Toni Brevillier (TB), Steve Buettner (SB), Pam Church (PC), Coen Dexter (CD), Steven Dinsmore (SD), Rudy Dionigi (RD), Virginia Dionigi (VD), David Ely (DE), Daniel Evans (DEv), Gale Evans (GE), Peter Gent (PG), Brian Gibbons (BG), BB Hahn (BBH), JB Hayes (JBH), Joe Himmel (JH), Mark Janos (MJ), Bill Kaempfer (BK), Joey Kellner (JK), DW King (DWK), Hugh Kingery (HK), Urling Kingery (UK), Ron Lambeth (RLa), David Leatherman (DL), Paul Lehman (PL), Tony Leukering (TL), Rich Levad (RL), Cindy Lippincott (CL), Bill Lisowsky (BL), Bill Maynard (BM), Jack Merchant (JM), Duane Nelson (DN), Larry Norris (LN), Ric Olson (RO), Brandon Percival (BP), Bert W.M. Philippus (BPh), Myron Plooster (MP), Suzi Plooster (SP), Kim Potter (KP), David Quesenberry (DQ), Jack Reddall (JR), William C. Rowe (WR), Pearle Sandstrom-Smith (PSS), Karleen Schofield (KS), Dick Schottler (DS), David Silverman (DSi), Andrew Smith (AS), Thomas VanZandt (TV) and Christopher Wood (CW).

Acknowledgments
The Committee wishes to thank all the observers who submitted reports for evaluation in 1997. I thank Peter Gent and Brandon Percival for helpful comments that greatly improved the manuscript.

Literature Cited
NEWS FROM THE FIELD: THE SPRING 1999 REPORT
(MARCH - MAY)

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With the recent change of editors for this column, I expected that the number of submissions from Colorado’s birders would be low. However, there were even fewer than expected, so I relied extensively on Brandon Percival’s summaries of rarities, as posted on the COBIRDS electronic bulletin board, and Brandon’s draft of the seasonal report for the Mountain West Region in North American Birds. Thanks, Brandon! Please, send your reports of bird sightings for spring and summer periods to me at the mailing/e-mail addresses listed above. For fall and winter reports, mail your sightings to Peter Gent at: 55 South 35th St., Boulder, CO 80303 or gent@ra.cgd.ucar.EDU. Please list birds in AOU taxonomic order and include the date(s), number of birds, and locations of your observations—in that order; tabular format is preferred.

Reports from areas away from the Front Range and the Great Plains were exceedingly sparse, and even birders from the northern Front Range provided few reports. Peter Gent, Cynthia Melcher, and I are developing a new reporting system that we hope will increase the number of reports that we receive, as we find it easier to write these summaries if we have information about which to write. I apologize in advance for any names spelled incorrectly or initials not referenced in the observer list—without reports from the observers, I am reduced to repeating others’ mistakes.

Note: The reports contained herein are largely unchecked, and the author does not vouch for their authenticity. Underlined species are those for which the Colorado Bird Records Committee (CBRC) requests documentation. Observers are begged, pleaded with, and otherwise beseeched to submit such documentation to the RC Chair, Bill Lisowsky; the CBRC can never get too many documentation forms. Speaking as a member of the CBRC, I’d like to see more reports, particularly multiple reports on the same bird, and, even more particularly, reports from all the original finders of the various rarities. Too many of us are allowing a small number of people to document all of our birds for us. The Colorado Field Ornithologists’ web site (http://www.frii.com/~hopko) has a link to the rare bird Sight Record reporting form that can be submitted to the CBRC electronically; the same form is also printed on the inside cover of this journal’s mailer. Please, please use it.
Spring 1999 was a slow, wet departure from winter, with mountain snows falling as late as May. This produced reports of all three species of rosy-finchesc lingering below normal breeding elevations into May in Clear Creek and Summit counties. The abundant rains and snow melt produced very high lake levels, greatly restricting available shorebird habitats. The few sites with “good” water levels (e.g., Neesopah Reservoir in Kiowa County—which was actually good because of high water levels, and Blue Lake in Kiowa and Bent counties) produced good numbers and varieties of shorebirds (e.g., 22 species at Neesopah seen by Duane Nelson on 5 May).

Five species of grebes were the spring highlight in Summit County, where focused birding by S. Bonfield and T. Leukering helped to fill numerous gaps in what was known about the mountain distributions of many species. I encourage all readers to bird the mountain counties, keep good records of exactly what you saw and where, and report those records to the “News From the Field” editor. A perusal of Colorado Birds (Andrews and Righter 1992) and the Colorado Breeding Bird Atlas (Kingery 1998) will reveal places where one could fill in more gaps.

The gull bonanza of winter 1998-1999 continued with a vengeance into spring; this was particularly true in the Loveland area, where N. Komar and S. Dinsmore—who obviously had little else to do but scrutinize gull flocks—reported a new high number for Glaucoous Gull in Colorado, and two to three Lesser Black-backed Gulls. Hopefully, their success will encourage others to sift through sizable flocks of gulls in the future, particularly in early spring when gulls that breed in the Arctic are moving north through Colorado.

At least 386 species were observed in Colorado during Spring 1999 (including resident species that went unreported but were obviously in the state). That is an incredible number and it would be interesting to track this number for every season. To do so, Peter Gent and I need your help: it would simply entail sending us a checklist of the species you see each season. Please consider doing this.

**Abbreviations:** A&R=Andrews and Righter (1992); Alternate=alternate (breeding) plumage; Basic=basic (winter) plumage; Chatfield=Chatfield Reservoir; CNG=Comanche National Grassland; CVCG = Crow Valley Campground (in PNG); imm.=immature; LCC=Lamar Community College; ph.=photographed by; PNG=Pawnee National Grassland; RC=Colorado Bird Records Committee; Res.=Reservoir; Two Buttes=Two Buttes State Wildlife Area, Baca/Prowers (but mostly in Baca). County names are italicized. The initials of observers (first and last initials—unless otherwise noted) who submitted reports are listed in parentheses; all cited observers (and initials when they vary from first and last) are listed at the end of this article.
Red-throated Loon: This species is rare in Colorado at any time, particularly in spring, thus a report of one from El Paso on 4/23 (JJ, mob) was a surprise.

Pacific Loon: Like the previous species, Pacific Loon is much rarer in spring than in fall, which means that the bird at Chatfield on 4/23-25 (JBH, JK) was unique.

Common Loon: Four were found this spring--two in Alternate on Pueblo Res. on 4/3 (BPe), one in Basic on 5/4 (BPe, mob), and one in Alternate at Lamar on 5/25 (TL, RL, DF).

Yellow-billed Loon: The wintering bird at Pueblo Res. stayed at least until 3/18 (BPe).

Horned Grebe: Two in Alternate were at Silverthorne on 4/23 (SB); A&R had reported no Summit records.

Eared Grebe: One in Alternate was at Silverthorne on 4/30 (TL, SB); there are few previous Summit records.

Western Grebe: A flock of up to 10 loitered in Silverthorne from 4/20-5/31 (SB), but only one individual was present after mid-May; it stayed into the summer. A&R reported no Summit records.

Clark's Grebe: One was observed among the Western Grebes in Silverthorne on 4/30 (TL, SB)--apparently a first record for Summit.

Least Bittern: Two birds at Ft. Lyon, Bent from 5/3-29 (TD, TM, BPe, mob) instilled hope that they would breed at that site; there are few confirmations of breeding in Colorado.

Little Blue Heron: Three adults graced Colorado this spring, with singles at Boulder on 4/25 (PGe), Ft. Collins on 5/20-21 (WL, DL, mob), and Upper Queens Res., Kiowa, on 5/22 (JK).

Tricolored Heron: Two adults were found at Lake Holbrook, Otero, 5/16-17 (MJ, BPe, DSm).

Yellow-crowned Night-Heron: Two adults provided enjoyment for a few birders this spring, with one at Boulder on 5/22 (CBg, DF, ph. TL, mob) and one at Lamar on 5/26 (DSi).

Glossy Ibis: A plethora of "Glossies" was reported this spring. Not long ago, the species was considered an "accidental spring migrant" in Colorado (A&R) with only three accepted records. Now it seems to be reported more often each spring and fall. I urge caution in the identification of this species and all reports should be backed up by firm details on the precise facial pattern and eye and leg coloration. Additionally, all reports should be submitted to the RC. Six were reported, all adult birds, with one each in Arapahoe on 4/26-28 (LAB, BB, mob), Bent on 5/9 (TJ) and 5/16-21 (DSm, BBH), Bent (again) on 5/16 (TJ), Larimer on 5/12-13 (NK), and two in Weld from 5/14-17 (DWa, BPe, mob).
White-faced Ibis: Despite the lack of records for Summit reported in A&R, S. Bonfield found her annual flock at Silverthorne (four on 4/20). The highest reported total was 250 birds at Westcliffe, Custer on 4/29 (H&UK).

Snow Goose: Two individuals tarried in Bent on 5/16 (DSm).

Ross’s Goose: Two were somewhat late in Larimer on 5/2 (NK, PS).

Trumpeter Swan: An imm. along Boulder Creek in Boulder stayed through the season into summer (M&SP, mob).

Tundra Swan: The wintering adult in Kiowa stayed until at least 3/7 (DSi, DJ) and a migrant was found at Bonny Res., Yuma on 4/1 (JRo).

Eurasian Wigeon: Three males were found this spring; one bird wintered in Ft. Collins at least until 3/22 (TD), and two migrants appeared, one in Weld on 3/9 (JHi, DM) and one at Bonny Res. on 5/8 (GP). Females must be coming through and, though they’re very difficult to separate from female American Wigeons, I urge all to look for them.

American Black Duck: One was in Weld on 5/27 (NK), an odd date for this typically early spring migrant. This record will be reviewed by the RC, as are all records of this very rare species in Colorado.

Hybrid dabbling ducks: Single Blue-winged x Cinnamon Teal (presumably both males) were found in Teller (JJ) and Larimer (SD) on 5/1; a Blue-winged x Green-winged Teal was in Larimer on 4/12 (SD); a Gadwall x Northern Shoveler was at Lower Latham Res., Weld on 5/21 (TL, MJ, BPe, mob); and a Eurasian x American Wigeon was in Larimer on 4/12 (SD). (What is SD doing to all those ducks?)

Greater Scaup: Two laggards were reported at Sugar City, Crowley, on 5/3 (TD, TM). Due to wear, male Lesser Scaup can become very white-sided by May, and I caution observers on identifying scaup late in spring; use head shape and bill size and pattern to confirm identifications.

White-winged Scoter: A female of this rare-in-spring species was reported from El Paso on 5/5 (DE).

Oldsquaw: The only one reported this season was a female in Adams on 3/9 that was seen for a few days more (TB, mob).

Barrow’s Goldeneye: Normally this species is rare on the eastern plains, but males were found in Crowley on 3/5 (BPe, TD) and in Otero on 3/21 (MJ, BPe, JN).

Hooded Merganser: Two laggards: a female at Barr Lake 5/1-25 (NG, mob) and a male in Rocky Ford 5/25 (TL, DF, RL).

Dinosaur Ridge Hawkwatch: Spring 1999 saw a good flight past the hawkwatch (near Morrison, Jefferson) with a total of 5024 raptors (plus Turkey Vultures) on 62 dates between 3/1 and 5/9. This is the third-highest total in the nine years of complete counts (1991-1999). The data below are presented as follows: species name, total count, (date range),
and, if applicable, peak count for one day, and (peak count date). These data are reported by Jerry Liguori, Dakota Meshko, and Kirstie Bay and are courtesy of the Denver Museum of Natural History and Colorado Bird Observatory.


**Northern Goshawk:*** An adult (the same bird reported in fall 1998?) was at Cottonwood Canyon, *Baca* on 4/7 (TD) and a juvenile was in *Weld* on 4/24 (DL); this species is rare in spring on the plains.

**Red-shouldered Hawk:*** Two juveniles were reported this spring, one in *Boulder* on 5/17 (TD) and one in *Prowers* on 5/30 (JPr). In eastern North America where this species is common, it is a very early migrant with virtually all passage completed past Whitefish Point, Michigan (on the shore of Lake Superior), by early May. Most recent Colorado reports have occurred in May. I urge extreme caution in identifying juveniles of this species in May. Juvenile Broad-winged Hawks are very similar in appearance to juvenile Red-shoulders and are later migrants, moving through areas of latitude similar to those of Colorado in May. Additionally and most importantly, juveniles start molting their primaries on the journey north. Once a young Broad-winged Hawk molts five or six primaries, it is left with a wingtip pattern exceedingly similar to that of a juvenile Red-shouldered Hawk.

**Merlin:** A tardy individual was detected in *Jefferson* on 5/11 (JK, SSt).

**Black Rail:** As many as four were heard in marshes in *Bent* from 5/7-28 (BPe, MJ, mob).

**Sandhill Crane:** A late individual was seen migrating over Chatfield on 5/16 (JK, JRo).

**American Golden-Plover:** One to two were at Blue Lake (Adobe Creek Res.), *Bent/Kiowa*, from 5/17-22 (TL, PGa, JK). This species is much rarer in spring than in fall in Colorado.
Piping Plover: One in Larimer on 4/29 (SD) provided one of the few Colorado records away from the eastern Arkansas River Valley.

Whimbrel: This species was more common than usual, or at least detected more often, this spring. At least 38 individuals were counted from 4/24-5/24, with significant records including a flock of 13 migrating north over CNG, Baca, on 5/6 (TL, DF, HK); a flock of three on the ground just north of Two Buttes in Prowers on 5/10 (TL); and singles in the San Luis Valley on 5/13 at Monte Vista (JRa) and 5/18 at San Luis Lake (JRa). A&R reported no records in the SLV, thus these may be the first local records.

Hudsonian Godwit: As with the preceding species, more than usual numbers of Hudsonian Godwits were found this spring with a single at Lower Latham Res. 4/21-22 (JHi, SD, mob) and two each in Pueblo on 5/2 (ph. PHu), Kiowa on 5/7 (MJ, BPe, mob), and Weld on 5/13 (BPr).

Ruddy Turnstone: Zerbi laid eyes on three turnstones in Alternate in Kiowa on 5/6 (VZ)--the only report this spring of this rare, but regular, migrant.

Sanderling: A flock of seven surprised Rashid at Lake Estes, Larimer, on 4/30, as the location is at an unusually high elevation for this species. It is normally an uncommon migrant on the plains.

Dunlin: Four were found, one in Weld from 4/16-19 (TD) and three at Neesopah Res., Kiowa, on 5/5 (DN).

Short-billed Dowitcher: An amazing three Short-bills were reported this spring; one of an unreported race at Barr Lake on 5/8-9 (DSc, PGe), an L. g. caurinus at Union Res., Weld, on 5/13 (BPr), and an L. g. hendersoni near Kersey, Weld, on 5/20-21 (WL, DL, mob). As of 1991, there were only two spring records for the state (A&R). Additionally, the L. g. caurinus race is a migrant along the Pacific coast and would be a first for Colorado. I urge the observer to submit details to the RC.

American Woodcock: One was reported at Lamar on 5/11 (BG). If accepted by the RC, this would be the first spring record for Colorado (contra the "casual status in spring" listed in A&R--all five previous records were most likely fall migrants).

Laughing Gull: An adult was found at the Walsh sewage ponds, Baca, on 5/9 (ph. TL, DSv, HK).

Mew Gull: A bird in Second Basic was observed during the winter at Jim Hamm Park, Boulder, and Union Res., Weld, and stayed until at least 3/31 (JD).

Herring Gull: This species was found a little later than normal in the first few days of May in Larimer and Weld (NK, PS).

Thayer's Gull: Many Thayer's were reported well into spring, much later than is normal for this high-arctic-breeding and early-spring-departing gull.
Iceland Gull: An individual in First Basic was found at Pueblo Res. on 4/17 (VAS, KE, JPe, JB, JRe). One wonders if this was the same individual that was in the area in early January. The January report would be the first Colorado record if accepted by the RC.

Lesser Black-backed Gull: Larimer was host to at least two imms. 4/3-29 (NK, SD).

Glaucous Gull: After the previous winter’s influx, a probable new high count of six Glaucous Gulls occurred in Weld and Larimer until 4/19 (SD, mob). One was also reported from Boulder on 4/19 (BS).

Great Black-backed Gull: An individual in Second Basic tarried briefly at Cherry Creek Res. on 5/2 (BB) and the wintering adult in Kiowa stayed until at least 5/7, a new late date (DSi, DJ).

Caspian Tern: Seemingly everywhere this spring, though with one observer seeing the lion’s share, singles were in Larimer from 4/21-29 (NK, mob); Boulder on 4/26 (LK, mob) and 5/22 (DF); Stagecoach Res., Rio Blanco, on 5/18-19 (DF); and at John Martin Res. on 5/25 (RL, DF, TL).

Common Tern: This is a rare spring migrant, so singles in Crowley on 5/7 (MJ, BPe) and at Bonny Res. on 5/11 (BPe) were of interest.

Least Tern: An adult in Colorado City, Pueblo, on 5/11 (DSi) was in a very odd location.

Eurasian Collared-Dove: The inexorable spread of this species continues on the eastern plains. The colony at Rocky Ford continues with at least six still present after last winter’s large numbers (where did the other 25+ birds go?). Most of the bunch in Springfield (12+ in winter) also pulled a vanishing act. However, at least one pair stayed, with the female being caught in the act of incubating 5/6-10 (HK, DF, ph. TL) for the first state nesting record. The nest eventually failed. Additional reports include: three in Lamar in May (DN); one at Holly, Prowers, on 5/17 (TL, PGA); one in Sterling on 5/22 (SM); and two in late May at Vineland, Pueblo (JWi).

White-winged Dove: Three were reported in Colorado this spring, with singles in Springfield on 4/9 (G&JH), in Lamar on 5/3 (G&JH), and one in the San Luis Valley (location?), where they are truly rare, on 5/15 (JRa). Observers are cautioned that now that Eurasian Collared-Doves are part of the eastern Colorado avifauna, any dove with some white in the wing is not necessarily a White-winged Dove.

Black-billed Cuckoo: One was reported from Hasty, Bent, on 5/23 (TH).

Western Screech-Owl: One singing in Franktown, Douglas, on 4/12 (H&UK) was outside the species’ known range.

Long-eared Owl: The Grand Junction owl crew (RL, GG, mob) found fewer nests in Mesa and Delta this spring compared with their totals in 1998. Hopefully, additional focused effort on this species will determine causes.
of year-to-year fluctuations in numbers, though mouse numbers are probably the primary cause. They did, however, find 18 nests, and at least 21 young fledged from nine of the nests.

**Short-eared Owl:** One was at PNG on 4/30 (JK, NE), where they have been reported only rarely in recent years.

**Northern Saw-whet Owl:** One sang nearly nightly from 3/1-4/27 in Franktown, Douglas (H&UK).

**Lesser Nighthawk:** Another great spring for this species in Colorado produced a total of five birds: three females at LCC on 5/9 (RO, mob); a female at Lake Henry 5/15-16 (BPe, mob); and a male at Two Buttes on 5/30 (JPr).

**Common Poorwill:** A female at LCC on 5/8 (DF) was east of its normal range. However, since the species breeds in the western parts of the Dakotas, Nebraska, and Kansas, many migrants undoubtedly go undetected on the plains.

**Whip-poor-will:** A nightjar that flushed several times at LCC on 5/2 (BPe, mob) was reported as this very rare eastern species. Pending acceptance by the RC, this occurrence would constitute the ninth Colorado record. Observers are cautioned that Common Poorwill (see above) is under reported on the plains and is much more likely there than is Whip-poor-will.

**Black Swift:** One was identified over Springfield on 5/6 (DSv). This record will be reviewed by the RC, as not only would this be the eastern-most report for Colorado, it is also early for this normally late-spring migrant. Observers are cautioned that ANY out-of-season and/or out-of-range swift should be studied carefully, as several species could potentially get lost in North America. Observers of large swifts on the plains should particularly attempt to rule out White-collared Swift (*Streptoprocne zonaris*), a species with a history of vagrancy to the U.S. as far north as Michigan. Additionally, other species in the *Cypseloides* genus provide real identification headaches and are remotely possible vagrants to the U.S. Kudos to Svingen for immediately realizing the importance of this record and the care he took to identify the bird. Another Black Swift was reported from Boulder on 5/12 (TD), and 15-20 were found near the Grand Mesa in Delta on 5/28 (RL).

**Vaux’s Swift:** A well-observed swift detected by experienced observers (DQ, RO) in Boulder on 5/23 was identified as this species. If the record passes muster with the RC, it would become a first for Colorado. Similar to the problem noted in the Black Swift novella above, identification of *Chaetura* species can be exceedingly difficult and observers of possible Vaux’s should carefully study all features, listen carefully for vocalizations, and attempt to get photographs and/or tape recordings.
Ruby-throated Hummingbird: An adult male was well-observed at the LCC on 4/30-5/1 (BPe, PGa). If accepted by the RC, this would constitute Colorado’s fourth record (pending acceptance of the two reports currently in circulation).

Black-chinned Hummingbird: A female graced a yard in Littleton on 5/12-13 (TJ) for a rare Denver-area record.

Acorn Woodpecker: The breeding group at Durango continues (fide K. Stransky), with at least seven there on 4/11 (PGa).

Red-bellied Woodpecker: Of at least four present in the winter in Otero, at least one male stayed until at least 3/5 (BPe, TD); this species is rare in the Arkansas River drainage.

Yellow-bellied Sapsucker: The two wintering birds (male and female, both imm.) in Pueblo City Park stayed at least until 3/14 (GW) and a male (migrant?) was found in Colorado Springs 3/21 (AV).

Red-naped Sapsucker: Three individuals were found on the plains, where they are normally rare--one at Ft. Collins on 4/16 (DL), one at Barr Lake from 4/21-24 (NG, mob) that furnished a first local spring record, and one at Ft. Lyon on 5/7-8 (MJ, mob).

Olive-sided Flycatcher: One was at Springfield on 5/7 (HK, TL, DF). Though this isn’t a particularly odd sighting, A&R do not depict the species as having occurred in Baca other than at Two Buttes.

Eastern Wood-Pewee: An individual in full song on 5/1 in Bent was a nice surprise (MJ, mob).

Empidonax sp.: A very early migrant observed clearly at LCC on 4/16 (BPe) was thought to be an Acadian Flycatcher, a species not previously identified in Colorado. The RC will review this record.

Alder Flycatcher: A calling individual was seen at Bonny Res. on 5/18 (BPe). Familiarity with this species’ call note (as compared to that of Willow Flycatcher) is exceedingly helpful in identifying Alder Flycatchers in Colorado. However, Heindel (1997) provided a cautionary note on call notes of these two very similar species.

Least Flycatcher: Spring 1999 was an incredible season for this species in eastern Colorado. Most observers reported seeing many more than usual at the various migrant hot spots on the plains (VZ, TL, BPe), with one observer recording 13 this spring (BPe).

Gray Flycatcher: Rare in eastern Colorado away from the southeastern foothills, individuals were detected at Ft. Collins on 4/18 (DL) and in Bent on 5/8 (BPe, mob).

Black Phoebe: The only individuals reported this spring were two at the historical site at Uravan, Montrose, on 3/17 (RL, KP). However, wait for the summer report.
Eastern Phoebe: At least 10 were reported north of the species’ typical range in Colorado (southeastern canyon riparian habitat), with the most interesting reports including one each at Walden Ponds, Boulder, (JT) and at Chatfield (GP), both on 5/2.

Vermilion Flycatcher: Beautiful red males were found in El Paso on 5/2 (fide SCR) and at Chatfield on 5/15 (JK), the sixth or seventh that has graced the latter location over the years.

Ash-throated Flycatcher: A calling individual at Pueblo on 4/11 (BPe) was exceedingly early and another individual at Ft. Collins on 5/12-13 (NP, NK) was north of its normal range.

Cassin’s Kingbird: Out-of-range individuals included two at Aiken Canyon, El Paso, on 5/22 (AV) and one near Kit Carson, Cheyenne, on 5/24 (TL).

Scissor-tailed Flycatcher: A male was in northern Baca on 5/4 (G&JH, DSi, mob) with another in southern Baca on 5/14 (VZ). As is typical for this Will-o’-the-wisp species, both individuals were seen only by those who found them (but wait and see what the summer season report shows).

White-eyed Vireo: At least four individuals were observed this spring with one each in Bent from 5/3-12 (BPe, mob); near Ft. Lyon on 5/16-18 (DSm, BBH, mob); at Bonny Res. on 5/16-19 (RO, DQ, mob); and at Two Buttes on 5/30 (JPr); the second and fourth birds were singing males.

Blue-headed Vireo: Singles were reported in Prowers on 4/25 (DSi), a perfect date for this early migrant, and in Pueblo on 5/11 (DSi). However, these two reports pale in comparison to the possible first San Luis Valley record at the Monte Vista cemetery, Rio Grande, on 5/13 (JRa). Observers are reminded that this is still a very rare species in Colorado and all sightings should be documented and submitted to the RC.

Cassin’s Vireo: Four were reported in the state in the first half of May (mob). This species is much more common in the fall than in the spring in Colorado.

Yellow-throated Vireo: An amazing six birds were found in eastern Colorado during a narrow window of only eight days. Single birds were in Prowers from 5/9-12 (LR, JRa, mob), Boulder on 5/12-13 (GW, GGo, PGe), Jefferson on 5/12 (KS), Crowley on 5/15 (BD), El Paso on 5/15 (AV), and Kiowa on 5/16 (TJ).


Bushtit: Three were found at Rocky Ford, 3/3-5 (SO, mob). This species is rare in eastern Colorado away from the foothills and A&R did not depict previous Otero records.

Carolina Wren: The wintering individual at Boulder stayed until late April (MW) and it—or another one—showed up in nearby Gregory Canyon,
Boulder, from 5/3-8 (PH). Another was singing at LCC on 5/16 (RW, JWa, BM).

**Winter Wren:** Three were found in eastern Colorado in March (mob).

**Sedge Wren:** One extremely elusive individual was at Valco Ponds, Pueblo on 3/23 & 4/4 (BPe).

**Eastern Bluebird:** There were two interesting records for this species, both occurring on 5/5; one at Chatfield (H&UK) and another, a female, at the Dinosaur Ridge Hawkwatch, Jefferson (ph. JL).

**Gray-cheeked Thrush:** An incredible eight individuals were reported this spring. One was found at each of five locations: near Ft. Lyon on 5/2 (RO, MJ, mob); at LCC from 5/4-8 (BPe, VZ, TL); at the Hasty campground, Bent, on 5/5-7 (VZ, mob); at Two Buttes on 5/15 (DSv); and at Ft. Collins on 5/20 (MJ). To finish up, Janos found three at Lake Henry, Crowley, on 5/23 (MJ).

**Wood Thrush:** Singles were found in Bent on 4/20 (TD) and at Two Buttes on 5/10 (TL). Quite a few long-time Colorado birders finally caught up with this species in the form of a singing male present along the Cache la Poudre River, Ft. Collins, from 5/16-21 (DL, mob).

**Curve-billed Thrasher:** A migrant was near Holly, Prowers, on 5/17 (TL, PGa), only a few miles from the Kansas line.

**Warblers:** Because so much time and energy are expended by Colorado birders in search of warblers at various migrant hot spots on the plains, there were too many reports this spring of various semi-rare to rare species to enumerate them all. Therefore, the following synopsis provides the number of records and the span of dates for 15 species. There were 21 Tennessee Warblers (4/25-5/21); 14 Nashville Warblers (4/28-5/15); 22 Northern Parulas (4/13-5/26); 17 Chestnut-sided Warblers (4/29-5/25); 10 Magnolia Warblers (4/13-5/24); five Black-throated Blue Warblers (5/9-28); seven Black-throated Gray Warblers, which are rare on the plains (4/24-5/14); seven Townsend's (5/7-17); nine Black-throated Greens (5/1-18); 32 Black-and-whites (4/16-5/23); 18 Blackpoll Warblers, a low spring total (4/30-5/23); 33 American Redstarts (5/1-23); 10 Worm-eating Warblers, which is a very large number for one season in Colorado (4/20-5/15); 13 Ovenbirds (4/30-5/22); and 33 Northern Waterthrushes, which is a low number for a spring season in Colorado (5/1-24).

**Blue-winged Warbler:** One was reported from Lake Estes, Larimer, on 5/9 (SR) and another was reported from Gregory Canyon, Boulder, on 5/12 (PH).

**Golden-winged Warbler:** The only one found this spring was a male in Boulder on 5/20 (PGe, JV).

**Cape May Warbler:** A female was found at Lake Henry on 5/24 (BPe, MJ, BD, JRo).

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Townsend’s x Hermit Warbler: The second record for Colorado of this reasonably-regular hybrid was recorded when Janos and others found one at the Hasty Campground, Bent, on 5/8 (MJ, mob).

Hermit Warbler: Two adult males of this very-rare-in-Colorado species were found, one at the Hasty Campground, Bent, on 4/24 (MJ, BPe, VZ) and one at Jim Hamm Park, Boulder, on 5/17 (DWK, PGe, mob).

Blackburnian Warbler: Three males were detected this spring, one at each of three sites: Colorado Springs on 5/12 (JHu), Lake Henry on 5/15 (BPe, BD, BBH, DSm, mob), and CVCG on 5/27 (JHi, NE).

Yellow-throated Warbler: Three individuals graced Colorado this spring, with individuals at the Lamar Cemetery 5/1-7 (BPe, mob), Ft. Collins on 5/11 (SBa), and at Chatfield on 5/16-17 (JK, mob).

Pine Warbler: A singing male was found at Lake Henry on 5/21 (JK), a surprisingly-late date for this typically early spring migrant (though one showed up in June in 1998 in Baca).

Prairie Warbler: The CFO field trip in early May found a singing male at the LCC on 5/8 (BD, mob).

Palm Warbler: Only two individuals were found this spring, with birds at Bonny Res. on 5/8 (CB) and at Ft. Lyon on 5/16 (DSm). Presumably, both were the paler, western race, but this information was not reported.

Cerulean Warbler: What would constitute only the fourth Colorado record if accepted by the RC, an adult male was a wonderful surprise at Two Buttes on 5/4 (TD, BPe, mob).

Prothonotary Warbler: The only report for this spring was a male at Fountain Creek Reg. Park, El Paso on 5/15 (LS).

Louisiana Waterthrush: One individual of this Colorado rarity was reported from the Last Chance rest stop, Washington, on 5/8 (IS). In this species’ core range, it is a very early migrant with some individuals arriving at Colorado latitudes by late March; migration at those latitudes is completed in April. Colorado birders are cautioned about identification of waterthrushes, particularly in May, because Northern Waterthrushes are quite variable in plumage and bill size, and they can look surprisingly similar to Louisiana Waterthrush, particularly with respect to the white superciliaries and underparts. Throat pattern and behavior are more definitive features, but all aspects of plumage and behavior should be studied.

Kentucky Warbler: A female was found at Lake Henry on 5/7 (BPe, MJ, mob).

Mourning Warbler: An incredible four males were discovered this spring—one elusive bird at the LCC from 5/9-17 (RO, MJ, DN, mob); one at Prewitt Res., Washington, on 5/14 (JK, NE, mob); one banded at Lykins Gulch, Boulder, on 5/16 (ph. JHa); and another at Lake Henry that, on its
first day at the location, was found within five meters of a male MacGillivray's, from 5/17-21 (TL, PGa, mob).

**Hooded Warbler:** An amazing 17 (spanning 4/23-5/26) were recorded this spring, the largest number ever recorded in a spring season in Colorado. The most interesting of the records included a singing male at Barr Lake from 4/24-5/3 (mob); another male at CVCG from 4/24-30 (DL, mob); a female at Gregory Canyon, Boulder, the site of last year’s nesting, on 5/12-13 (PGe, GW, mob); a male at Rocky Mountain National Park, Larimer, on 5/19 (B&GC); and a female at Lake Estes on 5/21 (SR).

**Canada Warbler:** A male was found in a truly surprising place--30 miles east of Meeker, Rio Blanco, on 5/27 (DH). If accepted by the RC, it would constitute the first Western Slope record for this very rare Colorado species.

**Summer Tanager:** Eight were discovered in eastern Colorado this spring.

**Scarlet Tanager:** A female was found at the LCC on 5/9-10 (BPe, RK, VZ).

**Green-tailed x Spotted Towhee:** A towhee, apparently of this mixed parentage, was found in El Paso on 5/20 (JWe). As more and more birders are combing Colorado’s habitats, more records of this formerly-rare hybrid combination come to light. I am aware of at least four records in the past four years.

**Eastern Towhee:** An individual was reported from Bonny Res. on 5/15 (RO, DQ). Observers are cautioned that hybrid Eastern x Spotted towhees are probably more likely in Colorado than are pure Eastern Towhees. Ideally, plumages and vocalizations should be studied on suspected Eastern Towhees, as Eastern-like birds with Spotted-like vocalizations are probably hybrids.

**Rufous-crowned Sparrow:** This species was found in relative abundance at Cañon City--seven on 5/27 (RW, JWa)--after having been discovered at this location for the first time on the Penrose CBC last winter. A&R depicted the species as occurring in Colorado only along the southern border in Las Animas and Baca. Field workers for the Colorado Breeding Bird Atlas turned up many records farther north in northeastern Las Animas, southern Otero, and southwestern Bent (Kingery 1998). Colorado Bird Observatory personnel also found them in north-central Las Animas (Leukering and Dombroski 1999, this issue). Thus, this is a significant extension of our knowledge of this species’ range in Colorado, and observers are urged to look for this species in the intervening areas in western Las Animas and in Huerfano.

**Sage Sparrow:** There were two records of this species in the Denver-Boulder area this spring--two at Walden Ponds, Boulder on, 4/3-4 (PGe, LK) and another at Chatfield on 4/3 (GP). Both records occurred in the short
window in early spring that is typical for migrants found on the eastern plains.

**Fox Sparrow:** An individual of the Rocky Mountain race, *P. i. schistacea*, was found at Barr Lake on 4/26 (DF, TL, SBo, NG), providing only the second local record of this form. The plumage, morphology, and call notes of Fox Sparrows vary geographically and the species is a strong candidate for splitting into as many as three species.

**Harris's Sparrow:** Quite a few lingered late this spring, with four still in the Mullineauxs' yard in Arvada on 5/7 with the latest there on 5/16 (D&DM). The latest in Colorado was a singing male at CVCG on 5/22 (mob).

**Golden-crowned Sparrow:** One was in Dolores, *Montezuma* on 4/22 (fide BPe) and another was at Barr Lake from 4/26-5/8 (JD, DSc, mob). Unfortunately, the latter report did not mention whether or not the bird was banded, as it could possibly have been the individual banded at Barr Lake by Colorado Bird Observatory staff the previous October--the first county record for Adams.

**Lapland Longspur:** A male was found at CNG, *Baca*, on the incredibly late date of 5/5 (DSv).

**Chestnut-collared Longspur:** Interestingly, a late male of this species was with the male Lapland mentioned above (DSv).

**Northern Cardinal:** One was at Carrizo Canyon, *Baca* on 4/5 (CB) and another--a singing male--was at Cottonwood Canyon, *Baca*, from at least 4/6-5/30 (BPe, TD, mob). Another individual was found in northeastern Colorado during the CFO field trip on 5/1 (BPe), though the precise location was not reported. The most outlandish record was of a female south of Crestone, *Saguache*, on 4/28 (fide S. Schneider and L. Bright). If correct, this would be a first San Luis Valley record.

**Pyrrhuloxia:** A male at a feeder in Durango, *La Plata* on 5/2-3 (photo by unknown person--let the CBRC know if this was your photo; fide K. Stransky) would be only the third Colorado record if accepted by the RC. This report continues the apparent lack of a pattern being established by this species in Colorado. The first was in winter near the Kansas border and the second was in summer/fall at 3050 meters (10,000 ft.) in elevation!

**Rose-breasted Grosbeak:** At least 45 were found in Colorado this spring.

**Painted Bunting:** An appreciative audience of hundreds of birders enjoyed an adult male at the Nature Center feeders at Barr Lake during its long stay from 4/21-27 (MC, TL, ph. TD). This bird was many a birder’s first for Colorado. Another male returned in late May to Cottonwood Canyon, *Baca*, for its sixth year (F&JD, M&SP, mob).

**Rusty Blackbird:** The five overwintering birds at Pueblo stayed until at least 3/6 (DFO).
Baltimore Oriole: A male was at Lake Henry on 5/9 (RO, DQ). A male (the same bird?) has been at this site every spring since 1989.

Rosy-Finches: Late-spring snows kept rosy-finches visiting feeders well below tree line in Clear Creek and Summit well into May (SB, TL, CB). S. Bonfield reported the following from her Pebble Creek Ranch, Summit, feeders: up to 12 Gray-crowned until 5/8, with at least two birds of the Hepburn’s race on 5/2; up to four Blacks until 5/8; and up to 75 Brown-cappeds until 5/17.

Purple Finch: A bird in female plumage was photographed at Coal Creek Canyon, Jefferson, on 4/11 (GE). A report of five on 4/11 from Nunn, Weld, lacked sufficient details to rule out Cassin’s.

Common Redpoll: One was seen at the PNG Work Center near CVCG on 3/7 (DWe); this is the third consecutive year for this species at this location. Another was at Lake Estes, Larimer, on 4/3 (SR).

Literature Cited

Cited Observers
Scott Bailey (SBa), John Bellmon, Sue Bonfield (SBo), Christine Bradley (CB), Bob Brown, Lea Ann Brown (LAB), Tamie Bulow, Cliff Bruning (CBg), Mike Carter, Colorado Field Ornithologists (CFO), Susan Craig (SCR), Bill & Gretchen Cutts (B&GC), Denver Field Ornithologists (DFO), Bob Dickson, Todd Dilley, Stephen Dinsmore, Fred & Jo Dirckx (F&JD), Jon Dunn, David Elwonger, Gary Emerson, Norm Erthal, Keith Evans, Doug Faulkner, Peter Gaede (PGA), Nelda Gamble (NG), Peter Gent (PGc), Glenn Giroir (GG), Gragg Goodrich (GGG), Bob Goycoola, Tom Habitzel (TH), Glenn & Jeane Hageman (G&JH), BB Hahn (BBH), Paula Hansley, Joe Harrison (JH), J.B. Hayes (JBJ), Dona Hilkey, Joe Himmel (JH), Jane Hunter (JHu), Paul Hurtado (PHu), Mark Jaasos, Dave Johnson, Jeff Jones, Tina Jones, Harry Kahler, Joey Kellner, D.W. King (DWK), Hugh & Urling Kingerly (H&UK), Rachel Kolokoff, Nick Komar, Liz Kreider, David Leatherman, Tony Leukering, Rich Levad, Jerry Liguori, William Lisowski, Bill Maynard, Don Merrill, Steve Messick, Tim Mitzen, Diana & Don Mulineaux, Duane Nelson, Jim Newell, Ric Olson, Stan Oswald, Nick Panella, Greg Pasquiarello, Brandon Percival (BPe), Jim Peters (JPe), Myron & Suzi Plooster (M&SP), Kim Potter, Bill Prather (BPr), John Prather (JPr), David Quesenberry, Scott Rashid, John Rawinski (JRA), Lisa Rawinski, Jack Rensel (JRE), Joe Roller (JRo), Ira Sanders, Karleen Schofield, Dick Schollner (DSc), David Silverman (DSi), Lisa Sinke, Drew Smith (DSm), V. Arnold Smith (VAS), Bob Spencer, Steve Stachowiak (SS), Dan Svingen (DSV), Ia Svingen, Paul Sweet, John Turnason, John Vanderpoel, Alan Versaw, Glenn Walbek, David Walman (DWA), Jim Watts (JWA), Rosie Watts, Duane Weber (DWe), Jeff Webster (JWE), Joan Williams (JWI), Marvin Woolf, Vic Zebri; mob=many observers
CFO ADOPTS THE AMERICAN BIRDING ASSOCIATION’S AND THE ORNITHOLOGICAL COUNCIL OF NORTH AMERICAN ORNITHOLOGICAL SOCIETIES’ CODES OF ETHICS

In 1998, the Colorado Field Ornithologists’ (CFO) Board of Directors determined that CFO should have a code of ethics to guide the activities and actions of all CFO members and non-members associated with CFO. Rather than “reinventing the wheel,” the CFO Board of Directors decided that the best approach was to adopt two sets of ethics code already promulgated by two prominent groups in North America: the American Birding Association (ABA) and the Ornithological Council (OC) of North American Ornithological Societies. Both organizations generally conduct different activities, thus their codes of ethics cover very different realms. However, because CFO’s activities, publications, funding grants, and members overlap both realms, the Board felt it best to adopt both sets of code.

The ABA invites any and all birdwatchers to abide by their code of ethics, and they advertise their code widely. They also invite anyone to republish the code and adopt it for their own use. That code of ethics, as currently published on ABA’s Internet website, is provided below in its entirety.

The OC expects all scientists involved in avian research and publication to abide by its code of ethics, as published in *Guidelines to the Use of Wild Birds in Research* by A.S. Gaunt and L.W. Oring (Editors) in 1997. We expect no less of anyone that CFO funds for scientific studies and/or anyone whose papers and articles are accepted for publication in the *Journal of the Colorado Field Ornithologists*. Because the OC’s code of ethics is lengthy, CFO Board member, Jim Chace, agreed to write a synopsis of the OC code. That synopsis is also presented below. Anyone seeking further study of the OC’s code can contact Jim Chace at: Dept. of EPO Biology, Campus Box 334, University of Colorado, Boulder, CO 80309-0334; 303/492-6685; Jameson.Chace@colorado.edu.

The CFO Board asks each CFO member, and any non-member involved with CFO in any capacity, to read through CFO’s code of ethics and abide by the code with the spirit of thoughtfulness and conservation in which they were conceived.

ABA Code of Birding Ethics

1. Promote the welfare of birds and their environment.
   a). Support the protection of important bird habitat.
b). To avoid stressing birds or exposing them to danger, exercise restraint and caution during observation, photography, sound recording, or filming. Limit the use of recordings and other methods of attracting birds, and never use such methods in heavily birded areas, or for attracting any species that is Threatened, Endangered, or of Special Concern, or is rare in your local area.

Keep well back from nests and nesting colonies, roosts, display areas, and important feeding sites. In such sensitive areas, if there is a need for extended observation, photography, filming, or recording, try to use a blind or hide, and take advantage of natural cover.

Use artificial light sparingly for filming or photography, especially for close-ups.

c). Before advertising the presence of a rare bird, evaluate the potential for disturbance to the bird, its surroundings, and other people in the area, and proceed only if access can be controlled, disturbance minimized, and permission has been obtained from private land-owners. The sites of rare nesting birds should be divulged only to the proper conservation authorities.

d). Stay on roads, trails, and paths where they exist; otherwise keep habitat disturbance to a minimum.

2. Respect the law, and the rights of others.

a). Do not enter private property without the owner’s explicit permission.

b). Follow all laws, rules, and regulations governing use of roads and public areas, both at home and abroad.

c). Practice common courtesy in contacts with other people. Your exemplary behavior will generate goodwill with birders and non-birders alike.

3. Ensure that feeders, nest structures, and other artificial bird environments are safe.

a). Keep dispensers, water, and food clean, and free of decay or disease. It is important to feed birds continually during harsh weather.

b). Maintain and clean nest structures regularly.

c). If you are attracting birds to an area, ensure the birds are not exposed to predation from cats and other domestic animals, or dangers posed by artificial hazards.

4. Group birding, whether organized or impromptu, requires special care. Each individual in the group, in addition to the obligations spelled out in Items #1 and #2, has responsibilities as a Group Member.

a). Respect the interests, rights, and skills of fellow birders, as well as people participating in other legitimate outdoor activities. Freely share your knowledge and experience, except where code 1(c) applies. Be especially helpful to beginning birders.

b). If you witness unethical birding behavior, assess the situation, and
intervene if you think it prudent. When interceding, inform the person(s) of the inappropriate action, and attempt, within reason, to have it stopped. If the behavior continues, document it, and notify appropriate individuals or organizations.

5. Group Leader Responsibilities (amateur and professional trips and tours)
   a). Be an exemplary ethical role model for the group. Teach through word and example.
   b). Keep groups to a size that limits impact on the environment, and does not interfere with others using the same area.
   c). Ensure everyone in the group knows of and practices this code.
   d). Learn and inform the group of any special circumstances applicable to the areas being visited (e.g., no tape recorders allowed).
   e). Acknowledge that professional tour companies bear a special responsibility to place the welfare of birds and the benefits of public knowledge ahead of the company’s commercial interests. Ideally, leaders should keep track of tour sightings, document unusual occurrences, and submit records to appropriate organizations.

OC Code of Ethics

Part I
A. Overview

"Consistent with long standing interests in conservation, education, research, and the well-being of birds, the Ornithological Council endorses the following guidelines and principles for scientists conducting research on wild birds. ... Investigations often involve risk of injury or death to the experimental subject. Risks that threaten the health or existence of populations are far more serious. Except under extraordinary circumstances, experiments that threaten the stability or existence of populations are proscribed."

"Humane treatment of wild vertebrates in field research is essential for ethical, scientific and legal reasons."

B. Relationships among Concerned Organizations


C. General Considerations (taken directly from OC’s Guidelines, except where noted)

1. Procedures with animals must avoid or minimize distress and pain to the animals, consistent with sound research design.
2. Procedures that may cause more than momentary or slight pain or distress to the animals should be performed with appropriate sedation or analgesia.

3. It is unethical to allow an animal to suffer severe or chronic pain that cannot be relieved.

4. Methods of euthanasia will be consistent with recommendations of the American Veterinary Medical Association panel on euthanasia.

5. The living conditions of animals held in captivity at field sites should be appropriate to satisfy the standards of hygiene, nutrition, group composition and numbers, refuge-provision, and protection from environmental stress necessary to maintain that species in a state of health and well-being.

6. Taxa chosen should be well-suited to answer the question(s) posed.

7. The investigator must have knowledge of all regulations pertaining to the animals under study, and must obtain all permits necessary for carrying out proposed study.

8. Individuals of threatened or endangered taxa should not be removed from the wild except in compliance with applicable regulations.

9. Investigators must be familiar with the study species and its response to disturbance.

10. Every effort should be made prior to any removal of animals to understand the populations status of the taxa studied, and the numbers of animals removed from the wild must be kept to a minimum. This statement should not be interpreted as discouraging study or collection of uncommon species.

11. Except in the most extraordinary circumstances, procedures likely to affect the stability or existence of a population are proscribed.

12. Studies should use the fewest animals necessary to answer reliably the questions posed.

13. The usefulness of specimens should be maximized by preserving not only skins but also carcasses, skeletons, DNA samples, and specific tissues.

14. The principle investigator must ensure that all personnel associated with the project have been properly trained.

Part II

Presented is a summary of the OC's Guidelines, paraphrased with a minimum amount of text, with the intention of retaining the original meaning. Emphasis is placed on conditions that authors for CFO or research funded by CFO would be most likely to encounter (i.e., laboratory research is not emphasized as much as field research conditions).

I. Permits -- All researchers must be aware of the regulations that protect wild birds and obtain the necessary permits for their work. Any possession, capture, handling, collecting, marking, transporting, or disturbing of native birds, their nests, or their eggs requires some kind of special licenses or permits. Nearly all bird species in North America are protected by a large
variety of laws, including the salvage or possession of any portion of dead birds.

II. Investigator Impacts

"Ornithologists have an obligation to assess their research for potential negative effects on their study populations as well as on the environment in general, and to minimize such effects. Although research may further scientific knowledge, investigators should weigh any potential gain in knowledge against the consequences of disruption. In assessing the consequences of disruption, however, it should be borne in mind that, although short-term adverse effects may result from research activities, populations usually recover rapidly, and research often yields long-term positive effects for the affected populations."

Two important types of observer-caused disturbance are addressed: disturbance that causes biases in the data collected, and disturbances that effect the status and well-being of the study subjects themselves. Such disturbances include: Nest visitation, aircraft overflights, and approach to sensitive areas.

III. Collecting and Trapping -- Ornithological research often involves the judicious collecting of birds in the field, and specimens are then deposited in museum collections. The collection of scientific specimens typically has no lasting effect on avian populations. Humane scientific methods of trapping and shooting are those that kill the bird instantly but avoid injury to the body parts. Collecting should always be conducted so as to leave the habitat as undisturbed as possible. Systematists should search for suitable specimens in extant collections before conducting fieldwork.

IV. Marking -- It is essential to the welfare of the birds and the integrity of the research that the marking procedure not adversely affect the behavior, physiology, or survival of individuals. For a marking procedure to be effective, it should meet as many of the following criteria as possible (Marion and Shamis, 1977, Bird Banding 48:42-61).

a. The bird should experience no immediate or long-term hindrance or irritation.

b. The marking should be quick and easy to apply.

c. The marking code should be readily visible and distinguishable.

d. The markings should persist on the bird until research objectives are fulfilled.

e. The bird should suffer no adverse effects on its behavior, longevity, or social life.

f. Careful records should be made of all aspects of the marking procedure. Specific guidelines for metal bands, colored plastic leg bands, dyes and UV markers, neck collars, nasal discs and saddles, wing markers,
radio transmitters, and electronic tags are provided within the document.

V. Transport of Wild Birds -- It is frequently necessary to transport birds, whether as part of an experimental protocol or to move research birds from capture sites to the laboratory or other holding facilities. Transport of all warm-blooded animals is covered by provisions of the Animal Welfare Act, and specific requirements are stated within.

VI. Housing and Captive Breeding -- Maintaining birds in captivity is expensive, time consuming, and requires special expertise. The living conditions of birds should be appropriate for each species and contribute to their sound health and comfort. Housing, feeding, and non-veterinary care should be directed by a person trained and experienced in the proper care, handling, and use of the species being maintained.

Specific guidelines are outlined for quarantine and isolation, prevention, diagnosis, treatment and control of diseases, separation by species, daily care, caging, housing and maintenance, considerations for aquatic birds and raptors, record keeping, disposition of birds after experiments, variations on standard procedure, and zoonoses.

VII. Minor Manipulative Procedures

"The collection of tissue samples, experimental manipulations using injections and implants of hormones/drugs, playbacks of tape-recorded vocalizations, and presentation of decoys are fundamental tools for ornithologists. Most if not all of these activities require permits from federal and/or state agencies."

Specifics on blood and tissue collection, collection of food samples, cloacal lavage, injections and insertion of implants, determination of egg viability, playback vocalizations, artificial eggs, and manipulation of plumage are discussed with detail in the text.

VIII. Major Manipulations -- Techniques of avian anesthesia and surgery are developing rapidly, and new texts on the subject appear annually. Because the field is not static, OC's Guidelines do not attempt to catalogue acceptable techniques, but rather establish a philosophy that will help all involved determine whether a given approach is acceptable.

Specific discussions on restraint, anesthesia, surgery, laparotomy and other sexing techniques, and euthanasia are provided with OC's Guidelines.
SUMMARY OF THE 21 AUGUST 1999 MEETING OF THE COLORADO FIELD ORNITHOLOGISTS’ BOARD OF DIRECTORS

Earlier this year, the Colorado Field Ornithologists’ Board of Directors decided that it was unnecessary to print the entire minutes of each Board meeting in the Journal of the Colorado Field Ornithologists. However, to keep members apprised of the Board’s activities and decisions, the Secretary will summarize the minutes of each Board meeting and highlight major decisions.

21 August 1999

President’s Report -- A request was received from Bob Righter requesting a donation to Colorado Bird Observatory’s “Stone House.” No action taken.

Duane Nelson sends his appreciation of CFO’s financial ($1,500.00) and moral support for the Least Tern/Piping Plover project on which he has been working. Leon Bright will write to the Colorado Division of Wildlife reiterating CFO’s support of/funding of such non-game projects.

Treasurer’s Report -- BB Hahn reported that the 1999 convention showed a profit. CFO’s net assets as of 21 August 1999 were $19,755.46.

Special Report -- Linda Vidal would like CFO to promote the campaign, Cats Indoors! Raymond Davis volunteered to investigate the program and make recommendations.

Colorado Bird Records Committee -- Bill Lisowsky reported that Mark Janos has summarized the 1997 submissions. Three birds were added to the Colorado Checklist, bringing the total to 463. One hundred seven reports were received in 1997 and 163 in 1998. There are eight possible new records in the 1998 submissions. Tony Leukering agreed to extend his term on the Records Committee. Joey Kellner will not serve another term; Karleen Schofield will be asked to serve. Brandon Percival has completed data entry of the Rare Bird Reports.

Field Trip Coordinators Report -- Pearle Sandstrom-Smith is working on upcoming trips and will send the information to the Journal Editor and to the CFO Website Manager.

Membership Report -- Raymond Davis reported the current number of paid memberships was 334.

Nominating Committee -- Warren Finch reported that we have a vacancy for an additional director. Warren would like to step down as Chair, but would continue to serve on the Committee. Karleen Schofield would like to resign, which would leave no committee members.

Project Fund Committee -- The Board approved the Committee’s recommended requirements for grant applications. The Board will allocate funds each
August for the grant(s). The amount allocated for FY 2000 is $1,900. (see page for new Project Fund Guidelines).

By-laws changes -- Minor changes were made to the by-laws to reflect altered duties of the Secretary, Treasurer, Journal Editor, and Membership Chair.

Journal Report -- Cynthia Melcher reiterated the need to find a new Journal Editor who will assume her position in January 2000.

Code of Ethics -- The Board adopted the Guidelines for Use of Wild Birds in Research, [A.S. Gaunt and L.W. Oring (eds), 1997], as accepted by The Ornithological Council of the North American Ornithological Societies in 1997, as part of its new code of ethics. Authors submitting articles and papers for the Journal, and anyone conducting research funded by CFO, must abide by these codes, as well as those of the American Birding Association. Both this resolution and the ABA Code of Birding Ethics will be published in a future issue of the Journal.

Journal Index -- Warren Finch submitted a written report on his progress with the comprehensive Journal index that he is developing. He seeks input from Board members as to the categorization of several types of articles.

CBO Annotated Checklist -- The Colorado Bird Observatory has proposed publication of an annotated checklist of the birds of Barr Lake in a supplement of the Journal. They seek support--financial and otherwise--from CFO. Additional information was requested prior to a decision being made.

Respectfully Submitted,
Sherry Chapman

Photographs Needed for the Journal !!

Did you notice a predominance of photos by one photographer in this issue of the Journal? (Luckily, the Editor is married to a wonderful photographer who was kind enough to let her pilfer his photo files so that there would be a few photos in this issue!) If you would like to see more photographs--and artwork--in the Journal, then please dig out those photos and sketches of birds you have hidden away and send them to the Journal Editor. Photos should be sharp, with a high-contrast background. Color, B&W, prints and slides are accepted. Your photos and artwork will be returned to you after they’re published.
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