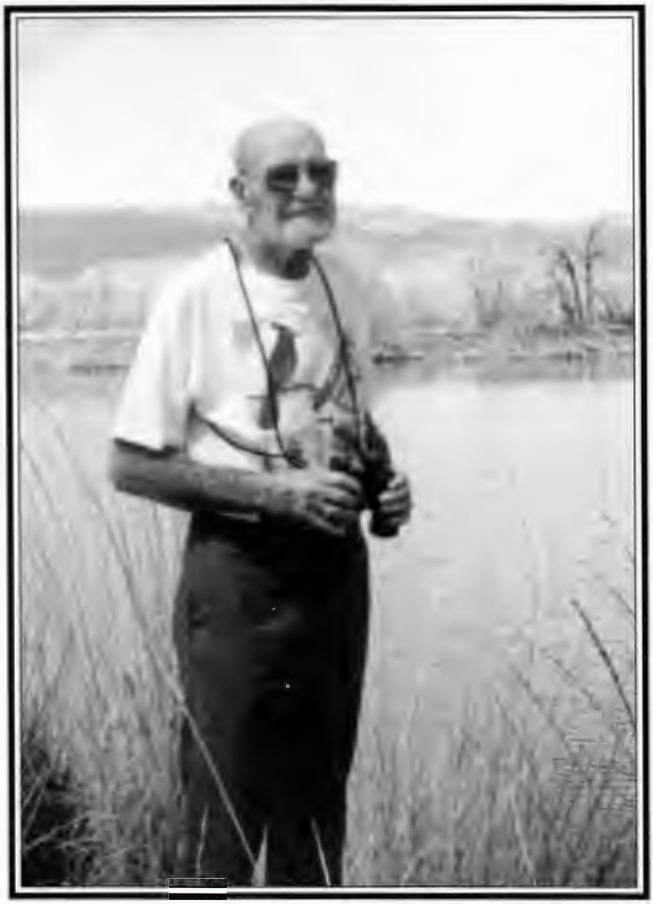
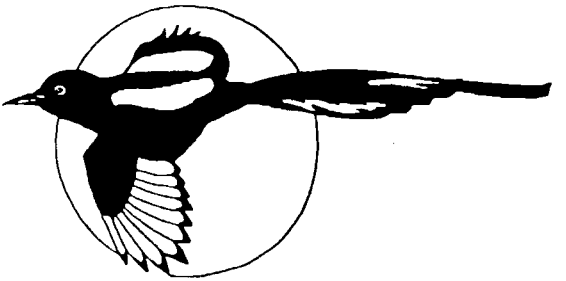
Journal of the

Colorado Field Ornithologists

The Colorado Field Ornithologists' Quarterly





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ANNUAL MEMBERSHIP DUES (renewable quarterly): Regular $16; Family $20; Institution $20; Contributing $25; Supporting $40; Sustaining $100. Effective January 1, 1999, dues and membership categories will change to: General $20; Student $16.00; Institution $30. The annual membership dues also pays for a one-year subscription to the *Journal of the Colorado Field Ornithologists*. Contributions are tax deductible to the extent allowed by law. Send membership inquiries, renewals, and changes of address to Colorado Field Ornithologists, c/o Raymond Davis P.O. Box 481, Lyons, CO 80540.

TABLE OF CONTENTS

DESCRIPTIONS OF PHOTOGRAPHS AND ARTWORK

HAROLD HOLT: LaVona (Vona) Holt, Harold Holt's wife of 28 years, took this photograph of Harold birding at Walden Ponds, Boulder County Parks and Open Space.
LaVona Holt ..... Front Cover

TUNDRA SWAN: In October 1997, Leon Bright photographed this Tundra Swan lingering at a pond near Vineland, Colorado.
Leon Bright 121

CLARK'S NUTCRACKER: Brendan O'Rourke photographed this obliging Clark's Nutcracker at Rocky Mountain National Park, Colorado.
Brendan O'Rourke 129

HARODLD R. HOLT: Ronald A. Ryder presents the Ronald A. Ryder Award to Harold R. Holt for his contributions to Colorado Field Ornithology. The award was presented at the Colorado Field Ornithologists' Convention on 10 May 1998.
Jim Karo 138

GREAT HORNED OWL: Yuka Otsuki, a research associate at the Natural Resource Ecology Laboratory, Colorado State University, sketched this pencil drawing of a juvenile Great Horned Owl as a surprise gift to her friends, Kuni and Harumi Suzuki.
Yuka Otsuki 143

GREAT HORNED OWLS: Kuni and Harumi Suzuki created the pencil sketches of Great Horned Owls on pages 145-154 to illustrate owl behaviors during their 6-year study of the owls inhabiting Colorado State University's campus. Kuni was a graduate student in ecology at Colorado State University.
Kuni and Harumi Suzuki 145-154

GREAT HORNED OWL: This juvenile Great Horned Owl was raised in an artificial nest in a blue spruce at Colorado State University. Dale Reed, a wildlife researcher with the Colorado Division of Wildlife, captured this shot from the 3rd floor of the Administration Building on 18 May 1993.
Dale Reed 157

CATHERINE AND JOSPEH ORTEGA: Catherine & Joseph Ortega in the field.
Anonymous 158

MARSH WREN: Joseph Rigli used pen and ink to sketch this Marsh Wren lurking in typical wren habitat.
Joseph Rigli 165

BLUE-GRAY GNATCATCHER: Alexander Cruz, Jr., sketched this pen and ink drawing of a Blue-gray Gantcatcher in November 1997.
Alexander Cruz, Jr. 166

Found at the 1998 CFO Convention in Lamar:
a small Colorado pin
Please contact Mona Hill, 3410 Heidelberg Dr., Boulder, CO 80303; 303/494-8135 or madmon7@aol.com.

COLORADO FIELD ORNITHOLOGISTS' MISSION STATEMENT

The Colorado Field Ornithologists exists to:
- promote the field study, conservation, and enjoyment of Colorado Birds;
- review sightings of rare birds through the Colorado Bird Records Committee and maintain the authoritative list of Colorado birds;
- publish the *Journal of the Colorado Field Ornithologists*; and
- conduct field trips and workshops, and hold annual conventions.

Errata in Vol. 32, No. 2: On pages 61-63, change "Brown's Park" to "Browns Park." On page 85 in the section under "Codes Used in the CBC Tables," change "Pike's Peak" to "Pikes Peak."

Upcoming CFO Field Trips

11July 1998 -- The Elusive Three-toed Woodpecker. Bill Fink will lead this trip to find Three-toed Woodpeckers and other mountain birds in the Peaceful Valley area. Call Bill at 303/776-7395 for details.

1 August 1998 -- West Slope Hummers. Join Steve Bouricius at his home near Grand Junction for a chance to see four hummingbird species, including Calliope Hummingbird. Steve also plans to peruse the area for other local specialties as time permits. Call Steve at 970/434-5918 for details.

13 September 1998 -- Ptundra Ghosts. Ken Giesen and Cynthia Melcher will lead a trip in Rocky Mountain National Park to search for flocks of White-tailed Ptarmigan in their fall plumage. Ken will catch and band any unbanded ptarmigan he finds: a rare opportunity for close encounters with Colorado's ghost birds. Other alpine and upper montane bird species will be sought out as time permits. Please call Ken and Cynthia at 970/484-8373 for trip details.

26 September 1998 -- Scoping for Landbird and Shorebird Migrants in Southeastern Colorado. Meet Brandon Percival to scope out southeastern Colorado's migrant traps and shorelines for landbirds and shorebirds pausing on their southward migrations. Meet at 7:00 a.m. at the Red Caboose in the K-Mart parking lot just off of I-25 in Pueblo. Please call Brandon at 719/547-3722 for trip details.

3 October 1998 -- Sprague's Pipits: Guerillas in the Grass. Join Norm Erthal to search for the rare and cryptic Sprague's Pipit during fall migration. Please call Norm at 303/424-6747 for trip details.

Notice To Field Trip Participants

Please contact the field trip leader(s) at least one week in advance if you intend to participate on a CFO field trip. In many cases, CFO field trips visit areas where we must either limit the number of participants or give notice of the number of participants we will have. In all cases, knowing the number of participants in advance helps the leader(s) to plan the best possible trip and ensures that you know where/when to join the trip and any other important information.

A Note of Thanks from the Editor

Since the beginning of my tenure as editor of the *Journal of the Colorado Field Ornithologists* six issues ago, I have tried to accomplish several things for the *Journal*. One thing that was clearly important to the Board of Directors and members of the Colorado Field Ornithologists (CFO) was that they get their journals on schedule. Although this has not been easy, I think we've done it! I say "we" because I could **not** have done it alone. In fact, I wish to thank Mona Hill, Beth Dillon, and Dave Ely in particular. Mona and Beth have helped me copy-edit huge amounts of text--always at the 11th hour, and Dave has "burned the midnight oil" to write his excellent seasonal reports in time to meet the deadlines. Thank you!

A number of other regular and feature contributors to the *Journal* have worked hard to get their materials to me by the deadlines. In particular, I wish to thank Mark Janos, Mona Hill, Alan Versaw, and Pearle Sandstrom-Smith for their ongoing support and help in this respect. I also wish to thank the numerous reviewers, who have not only agreed to review papers, but they have done so on short notice. The people of The Village Printer, Raymond Davis, Mona Hill, Suzi Plooster, and a committee of other volunteers often have set aside their own priorities to get the journals printed and ready to mail out fast. Thank you to all of you! We've done it!

Gratefully,
Cynthia Melcher

Tundra Swan
Near Vineland, Colorado, October 1997
by Leon Bright

LETTER FROM THE PAST PRESIDENT

Linda Vidal
1305 Snowbunny Lane
Aspen, Colorado 81611

This will be the last letter from me as president of Colorado Field Ornithologists (CFO). I must admit that when I agreed to take on the job of CFO President, I was somewhat reluctant and only agreed after talking to the current Board members about their level of commitment. It has turned out to be a great two years. All the Board members have taken on responsibility and carried through with their committed tasks, and it made these two years such a pleasure.

Special thanks should go to Cynthia Melcher for her energy and expertise in getting the *Journal* out in a timely manner. Her artistic eye in general layout and her ability to encourage new writers, artists, and photographers to submit material has raised the level of the *Journal* to new highs. I know it takes hours and hours to produce each issue, but even with her busy life and career, she has somehow managed to accomplish this task with extremely good humor. Thank you.

Over the years, Mona Hill has served CFO in many different time-consuming ways. Through my term, she served as secretary and managed to hold the Board together with such organization and grit. I just couldn't have done it without her. She's a friend with such an incredible dry wit that all my conversations with her over the last two years have always ended with chuckles. Thank you.

To Pearle, who took on planning the convention -- one of the most "thankless jobs" in our organization (I know because I've done it), a simple "THANK YOU" will never be sufficient. Talk about good humor... I think she has put together the best two conventions that CFO has ever had, and she deserves much more credit than she will ever receive. Thank you. And thanks to all the Board who helped make these two years the very best for CFO.

I just finished reading an article on the history of CFO, published in the Summer 1980 issue of the *Journal*. As I read the article, I was struck by the number of founding Board members who were from the teaching and scientific communities of Colorado's universities and colleges. I don't see these people represented in today's membership list, however. Members from other state ornithological organizations have commented to me that their state organizations have a large representation, support, and commitment from the their academic communities, and it doesn't appear that is the case in Colorado. We have always counted on and had support and participation from Dr. Ron Ryder and Dr. Alex Cruz, but I would like to urge other scientists, including those from academia, public

agencies, and non-governmental organizations, to join and support CFO. We need support and participation from these segments of the Colorado ornithological community as well. The *Journal* could also be a venue for graduate students to publish their research on Colorado birds, but the academic community must make their students aware of, and urge them to contribute research papers to, the *Journal.* Of course, we urge everyone in the birding and ornithological community to support CFO.

Last but not least, I'd like to comment on the apparent lack of overlap among the membership lists of CFO and other research or conservation organizations. In other words, few CFO members also belong to their local Audubon Chapters, Colorado's chapter of the Nature Conservancy, or the Colorado Bird Observatory. These are the organizations that work on a day to day basis for bird conservation, both locally and statewide. Why don't we share the same membership? Why aren't more Colorado birders supporting bird conservation organizations?

In a 1997 issue of the Kansas Ornithological Society's (KOS) newsletter, I read an editorial written by Chuck Otte that I would like to share with you. It expresses so well some of the same feelings that I have, and does so far better than I could. The author has kindly given permission to reprint that article here so that I could share it with CFO members. I have inserted a few minor changes in brackets to make the article applicable to CFO.

"How many times have you heard the expression that if you want to get something done ask a busy person to do it because then you know it will get done? It is unfortunately true! Time and time again I see or am involved with a group where it seems that 10% of the membership is doing 90% of the work. If that 10% burns out and leaves, then the group can quickly degenerate into a wallowing mass of unled followers. At this point, either new leaders step in or the group dissolves and ceases to be. This is not a lead-in to get a bunch of you on committees or the Board or anything like that, although I do tend to see a lot of the same faces and hear the same names over and over again. This is a comment about life in general.

"There are many opportunities around each of us every day, regardless of our interests and abilities. We don't have to be editors or hotline compilers or Board members of [CFO]. We can do simple little things, like show up at a spring or fall meeting. Participate in a Christmas Bird Count or a North American Migration Count or help finish up an atlas block. Or maybe it's time to take another step and start getting involved in the community to help others learn a little bit more about your hobby. Volunteer at a nursing home to help put up a bird feeder where the residents can watch it, and then arrange for it to be filled on a regular basis. Take a school group for a nature walk. Never

led a walk before? The best way to learn something is to teach it, and even though you think your bird/nature knowledge is limited, I'll guarantee you have plenty of knowledge to share with that class. Take on a challenge and set up a nature walk/trip with a class or group of sight- or hearing-impaired students or adults. I'm still working to take a vision-impaired group birding. You may learn as much about using some of your other senses from these groups as they learn about birds from you!

"Environmental issues continue to be of vital interest not only to our feathered friends but also to each of us in every day life. The birds as well as wildlife and the ecosystems are the barometer or the early warning system to human health and quality of life. Try as many humans do, we can not separate ourselves from [the environment]. The miners of yore took the canary into the mine because they knew that if the canary wasn't doing well, they needed to get out of the mine for their own safety! How many canaries have already died [without our notice]? Get involved with environmental issues not only at the federal and state level, but at the local level also. Attend meetings of your local planning commission and board of zoning appeals. Let them know that someone is out there watching out and speaking up for the environment and that it isn't a batch of east- or west-coast activists, it's their neighbors. I know that most of you have opinions about these issues because you share them with me. Now share those opinions with decision-makers from your county seat to Washington, D.C.

"My bottom line message is 'get involved.' It becomes all too easy to take and take and take. The television, the newspapers, the magazines are all willing to give, give, give as long as you are willing to take it up. There comes a point though, when you have to start giving back, and giving back something with a lot more substance than what is usually coming off the television, the movie screen, and the other popular media. That also usually involves a little sweat equity from you and maybe a little less time to do what YOU want to do, but you will probably find that the old adage, 'you get back more than what you put in,' is quite true. It's also okay to ask for help, to say no when you feel that it is somebody else's turn, or to even fail sometimes. If you fail, it means that you are at least trying, and that is more than the other 90% can say.

"Think what a difference it would make if the [300+ members of CFO] all tackled one new project in 1998 for [CFO] or their community or church or school or whatever... [300+] projects that may not have gotten done without YOU. If we could each help one or three or five students or law makers or neighbors understand the natural world around them (and us) a little better, think what a multiplier effect this could have and what a better world we could live in. Think what a difference it would make. Just because you took a little bit of your time and energy to get involved!"

LETTER FROM THE NEW PRESIDENT

Leon Bright
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When Nominations Chair Warren Finch contacted me about the CFO presidency, I was hesitant about accepting because of my short tenure on the Board. As the nominations process unfolded however, I became enthusiastic because of the support I could envision from the Board, from both the continuing members and the newly elected members. Linda Vidal has made the transition for incoming officers and Board members unusually easy. By codifying Board operations and conduct in a manual distributed to each officer and Board member, everyone can become oriented quickly and be "on the same page." Linda deserves accolades for this very well-conceived and executed guide.

Most of you probably don't know much or anything about me, so I will share a bit of personal information. Three years ago I retired (took the buy-out!) after teaching Spanish at the University of Southern Colorado for thirty-two years. My wife and I have lived all that time in Pueblo, where we raised two daughters. We also spend considerable time at our mountain home near Westcliffe. I consider myself an intermediate birder, still working on the skill/art of field identification. I'm not much of a "lister," although I do try to keep extensive records of my sightings. Leadership positions I have held with Audubon at the local and state levels gave me considerable experience for assuming the presidency of CFO.

As I assume the duties of CFO President, I bring no specific agenda with me. Since my goal is to direct the CFO in a way that meets the membership's needs, I invite your counsel. I hope we can build on the excellent foundation established by previous officers and Board members. The treasury is healthy, giving rise to opportunities for possible funding of new projects. Keep reading the *Journal* to remain informed about the Board's decisions and actions. The names and addresses of those responsible for directing the organization also appear inside the front cover of every issue of the *Journal.* You can reach me by telephone, U.S. mail, FAX, and e-mail. I look forward to hearing from you.

MINUTES OF MEETING OF BOARD OF DIRECTORS

Colorado Field Ornithologists
April 1998

The Board of Directors of the Colorado Field Ornithologists met by mail during April 1998. The following questions were considered:

Proposed Budget for the next year (see copy of budget on page 128): Approved

Proposed Slate of Officers Presented by Nominating Committee: Approved

Change in membership dues, effective 1 January 1 1999: General $20; Student $12; Institution $30. To simplify the system and ensure that everyone is paying their fair share, there would no longer be such categories as supporting members, etc. Approved

Insurance: The policy obtained cost $568, which is $68 more than Linda Vidal was authorized to spend at the 7 February 1998 meeting. Authorization to spend the extra $68: Approved

Bird Atlas Partnership: The Board received a letter from Hugh Kingery asking for a proposal from CFO to form a partnership with the Bird Atlas Project to store and maintain the Atlas data. Because there was a tie vote, the matter was tabled for discussion until the May 1998 Board meeting (see minutes of the 10 10 May 1998 meeting below).

Approval to spend up to $200 to order more CFO T-shirts: Approved

MINUTES OF MEETING OF BOARD OF DIRECTORS

Colorado Field Ornithologists
10 May 1998

The Board of Directors of the Colorado Field Ornithologists met on 10 May 10 1998 from 12:30 to 1:30 p.m. in the lobby of the Cow Palace Motel in Lamar, Colorado. Present were Toni Brevillier, Steve Bouricius, Leon Bright, Treva Bright, Jameson Chace, Raymond Davis, Bill Fink, B.B. Hahn, Mona Hill, Mark Janos, Suzi Plooster, Pearle Sandstrom-Smith, Bob Spencer, Linda Vidal, and Mark Yeager.

The new members nominated to the Board were introduced to the current members. Linda welcomed the new members and thanked the Board for its work over the past year. Mark Janos thanked Linda on behalf of the Board.

Leon introduced a letter he had received from Hugh Kingery requesting that CFO oversee an escrow account of start-up funds for the 2007 Breeding Bird

Atlas Project and be responsible for initiating the follow-up project. Discussion was postponed until the next Board meeting.

Because the Request for Proposal to store/maintain the records of the Breeding Bird Atlas with the CFO had received a tie vote when the Board voted on it in April, the issue was discussed. The consensus was that there might be more appropriate places to maintain these records. The board may reconsider the topic at a future time.

Jack Reddall has informed the Board that he will not continue filing the records from the Records Committee after the 1996 records are done. However, the computerized system should be completed before the 1997 records are ready for filing.

Mark Janos requested that Chris Wood be appointed to the Records Committee to replace Peter Gent, whose term is expiring at the end of the year. Leon Bright will contact Chris Wood. Vic Zerbi will continue on the Records Committee for another year.

It was moved, seconded and approved that the 1999 Annual Convention be held in Fort Collins on Memorial Day Weekend.

The next meeting of the Board of Directors will be held 22 August 1998 at the People's Clinic, 3305 N. Broadway, Boulder, Colorado, from 10:00 a.m. to 2:00 p.m.

Minutes of the Colorado Field Ornithologists' Annual Meeting

Colorado Field Ornithologists
10 May 1998
Lamar, Colorado

At the members' meeting at the annual convention, members of the Colorado Field Ornithologists moved, seconded, and approved the election of the following officers:

Name	Office	Term Expiring
Leon Bright	President	1999
Bill Fink	Vice President	1999
Toni Brevillier	Secretary	1999
BB Hahn	Treasurer	1999

The following board members elected were : Suzi Plooster, Mark Yeager, Rich Levad, Jameson Chace, and Bob Spencer. The board members are eligible for

reelection when their terms expire in 2001, except for Suzi Plooster, who is serving her second term.

Karleen Scofield introduced Harold Holt, the recipient of the 1998 Ron Ryder Award. Ron Ryder presented the award. In his remarks, Harold thanked his wife, LaVona, and said his greatest pleasure was in showing birds to others.

Respectfully submitted,
Mona Hill, Secretary

Colorado Field Ornithologists' Budget

A request that I heard from many members after I sent out the membership questionaire early in my tenure was to publish the financial condition of the Colorado Field Ornithologists on an ongoing basis. To address those inquiries, I have outlined the budget for 1997 and the proposed budget for 1998. It is my hope that the budget will be published in the *Journal* annually. If you have any questions please call me.

Sincerely,
Linda Vidal

Income and Expense Statement for 1997

1997 Actuals for Year ended 12/31/97

INCOME	
Membership	$5,622.00
Sales	$ 462.00
Convention Income	$1,937.00
Interest	$354.00
TOTAL INCOME	$8366.00
EXPENSES	
Editorial Expense	$600.00
Printing	$3,500.00
Postage	$450.00
Administrative Miscellaneous	$500.00
Convention	$965.00
Records Committee Expenses	$130.00
Refunds	$310.00
TOTAL EXPENSES	$6455.00
EXCESS RECEIPTS OVER DISBURSEMENT	$1911.00
Operating Checking Account Balance 12/31/97	$6,055.88
Money Market Account Balance 12/31/97	$10,737.09

1998 Proposed Budget

INCOME	
General Membership 250 @$20.00	$5,000.00
Student 5 at $12.00	$60.00
Institution 25 at $30.00	$750.00
Interest	$450.00
Convention	$2,000.00
Sales: T-shirts, decals, Journals	$500.00
TOTAL INCOME	$8760.00
EXPENSES	
Editorial Expenses	$600.00
Printing	$3,600.00
Postage	$450.00
Administrative Miscellaneous	$600.00
Insurance	$570.00
Convention	$2,000.00
Records Committee	$150.00
Merchandise: T-shirts, decals	$500.00
Contingency	$200.00
TOTAL EXPENSES	$8670.00
EXCESS OF RECEIPTS OVER DISBURSEMENT	$90.00

Clark's Nutcracker
Rocky Mountain National Park
Colorado
by Brendan O'Rourke

COLORADO FIELD ORNITHOLOGISTS' CONVENTION 1998 SUMMARY OF EVENTS

Pearle Sandstrom-Smith
2823 5th Avenue
Pueblo, Colorado 81003

Through rain, hail, lightning, and dark of night, members of the Colorado Field Ornithologists (CFO) flocked to Lamar, Colorado, for the 36th annual CFO Convention. By Saturday, however, only a morning of fog was left to evaporate the "unsportsmanlike" weather to let the birding begin.

With few exceptions, each morning field trip began behind the Lamar Community College at Willow Creek. Up to 20 species of migrating spring warblers entertained participants, and everyone seemed to be thrilled with the Mississippi Kites (MIKI) soaring overhead. One group even observed a pair of MIKI carrying nesting material and performing other courtship behaviors. The area is THE Willow Creek that many birders worked to save from being dredged and "prettied up" for flood control by sending letters to politicians. Now more people know how important this so-called "swamp" really is.

After birding Willow Creek, attendees spread out over southeastern Colorado. On Saturday morning, the field trip to Cottonwood Canyon had to be changed due to muddy roads, but Mark Janos saved the day with the "Janos Juggle." He exchanged Cottonwood Canyon for Hasty and Fort Lyon. No one complained much after finding a number of exciting birds at Hasty: Worm-eating Warbler, Ovenbird, and nesting Eastern Bluebirds, to name a few. Trips to Great Plains Reservoirs became Great Plains Muddy Pasture trips, although they were successful, thanks to excellent scouting by Duane Nelson. Without his dedication for finding species, it would have been tough shorebirding with no shores!! Fort Lyon was excellent, as usual. Two Buttes also was excellent. The La Junta area was a tad muddy, but alternatives were as exciting for those attending, so I heard no complaints (weather complaints have to be filed with a "higher power"). I want to thank each field trip leader for doing an outstanding job: Brandon Percival (coordinator), Mark Janos, Duane Nelson, Tony Leukering, Chris Wood, Joey Kellner, Bob Dickson, Clif Smith, and I guess I can also thank myself. I am especially happy that three or more Black Rails "spoke" to our group at Bent's Old Fort on Saturday. Most of all, I thank southeastern Colorado for the wonderful treasures of avian life (see the convention field trip report on page 132).

I also want to thank the presenters at the papers session of the convention: Jennie Slater, Duane Nelson, Jon Dunn, Thomas Shane, Ronald Ryder, Richard

Harness, and Mark Janos (see page 135 for paper titles and abstracts presented at the CFO Convention). Everyone commented on the excellent quality of this year's papers session, thanks to Peter Gent! Each presenter did a wonderful job of teaching us more about the life cycles of and conservation troubles facing the birds we so love to watch.

A big thank you goes to Jim Karo, who coordinated showing slides taken by members Richard Harness, Doby Green, Susan Craig, Tony Leukering, Larry Norris, Ronald Ryder, Duane Nelson, and Bill Maynard. Afterwards, Jim entertained us with his own slides and tales of birds.

I cannot forget to thank Radeaux, the artist who designed the beautiful T-shirt and cover for the convention brochure. Every bird on the T-shirt was observed during the field trips: Nashville and Tennessee warblers, Mississippi Kite, Piping Plover, and someone saw Least Terns (at Lake Henry ?). Radeaux also helped proof read convention materials and he was a great sounding board for ideas.

As an added bonus at this year's convention, we had the American Birding Association (ABA), and a special thank you goes to them. They provided sales of books and videos, featuring those by Jon Dunn and Harold Holt. Stephen Long, Sharon DeCray, and Carol Rempel of the ABA devotedly set up the "book store" for everyone's convenience. Joe LaFleur's demonstrations of his new CD-ROM, "Better Birdwatching in Colorado," were a hit as well.

Congratulations go to Harold Holt for receiving the Ronald A. Ryder Award for his distinguished contributions to Colorado Field Ornithology. The award was presented to Harold by Dr. Ron Ryder at the banquet Sunday night. Karleen Schofield admirably emceed the presentation of the award and a history of Harold's many accomplishments. She compared Harold's passion for birds to her husband's passion for life, making it sound as though we all need such excellent passions. When Dr. Ryder presented the award, Harold accepted it most humbly and happily. He thanked several people, including Dr. Ryder, Jim Lane, and his supportive wife, LaVona.

Jon Dunn, of Beaver Creek, Ohio, is one of the leading field ornithologists in the country, and he provided the excellent post-banquet program on North American warblers. His slides were fantastic, yet, he gave credit to other photographers for the good slides and said, "My slides are the bad ones." We all wish we could take such "bad" photographs!!!! (There were NO bad slides!) CFO sends a huge thank you to Jon for finding the time to speak, both at the banquet and the papers session. He will be a tough act to follow at next year's convention in Fort Collins (date to be announced). We hope to see you all there, including the 15 new members who joined CFO during this year's convention!!

COLORADO FIELD ORNITHOLOGISTS' CONVENTION 1998 FIELD TRIPS: SUMMARY AND BIRD LIST

Brandon K. Percival
835 Harmony Drive
Pueblo West, Colorado 81007-2632
719/547-3722

The bird list for the four days of the Colorado Field Ornithologists' Convention included 228 species. Participants found many exciting birds. The best were Black Rails at Fort Lyon and Bent's Old Fort marshes, a Ruddy Turnstone at Adobe Creek Reservoir (Blue Lake), Eurasian Collared-Doves at Rocky Ford and Holly (a new site for this species), a White-winged Dove in Rocky Ford, Scissor-tailed Flycatchers at both Holly and Las Animas, a Sedge Wren at Two Buttes Reservoir, Gray-cheeked Thrushes at Hasty Campground and Lamar, a male Golden-winged Warbler at Lake Henry, a female Cape May Warbler at Two Buttes Reservoir, Worm-eating Warblers at Lamar and Hasty Campground, and Scarlet Tanagers at Fort Lyon (female) and Lamar (male and female). All of these birds are capitalized in the bird list below because the Colorado Bird Records Committee requires that documentation be submitted for these species (see documentation form on the inside of the mailer for this issue). Other interesting bird sightings over the four days were the amazing number of Blackpoll Warblers, the Lesser Prairie-Chickens at Holly -- a surprise for the people who went on that trip, and, at Fort Lyon, a Rufous-crowned Sparrow, which was not expected at that location.

I would like to thank all of the convention field trip leaders: Bob Dickson, Mark Janos, Joey Kellner, Tony Leukering, Duane Nelson, Brandon Percival, Pearle Sandstrom-Smith, Clif Smith, Bryant Will, and Chris Wood. They all did a great job.

On the two pages that follow is the complete list of birds found in southeastern Colorado (Crowley, Otero, Bent, Prowers, Kiowa, Baca, and eastern Las Animas counties) from 8-11 May during the 1998 Convention of the Colorado Field Ornithologists in Lamar. If you did see any of the bird species listed in **boldface type**, please send documentation for those sightings to the Colorado Bird Records Committee.

Common Loon
Pied-billed Grebe
Horned Grebe
Eared Grebe
Western Grebe
Clark's Grebe
American White Pelican
Double-crested Cormorant
American Bittern
Great Blue Heron
Great Egret
Snowy Egret
Cattle Egret
Green Heron
Black-crowned Night-Heron
White-faced Ibis
Snow Goose
Canada Goose
Wood Duck
Green-winged Teal
Mallard
Northern Pintail
Blue-winged Teal
Cinnamon Teal
Northern Shoveler
Gadwall
American Wigeon
Redhead
Ring-necked Duck
Lesser Scaup
Common Goldeneye
Bufflehead
Ruddy Duck
Turkey Vulture
Osprey
Mississippi Kite
Northern Harrier
Sharp-shinned Hawk
Cooper's Hawk
Broad-winged Hawk
Swainson's Hawk
Red-tailed Hawk
Ferruginous Hawk
Golden Eagle
American Kestrel
Prairie Falcon
Peregrine Falcon
Ring-necked Pheasant
Lesser Prairie-Chicken
Wild Turkey
Northern Bobwhite
Scaled Quail
Black Rail (heard at Ft. Lyon & Bent's Old Fort)
Virginia Rail
Sora
American Coot
Black-bellied Plover
Snowy Plover
Piping Plover
Killdeer
Mountain Plover
Black-necked Stilt
American Avocet
Greater Yellowlegs
Lesser Yellowlegs
Solitary Sandpiper
Willet
Spotted Sandpiper
Upland Sandpiper
Whimbrel
Long-billed Curlew
Marbled Godwit
Ruddy Turnstone
Sanderling
Semipalmated Sandpiper
Western Sandpiper
Least Sandpiper
White-rumped Sandpiper
Baird's Sandpiper
Stilt Sandpiper
Long-billed Dowitcher
Common Snipe
Wilson's Phalarope
Franklin's Gull
Bonaparte's Gull
Ring-billed Gull
California Gull
Herring Gull
Common Tern
Forster's Tern
Least Tern
Black Tern
Rock Dove
Eurasian Collared-Dove (at Holly & Rocky Ford)
White-winged Dove (at Rocky Ford)
Mourning Dove
Yellow-billed Cuckoo
Greater Roadrunner
Barn Owl
Great Horned Owl
Burrowing Owl
Northern Saw-whet Owl
Common Poorwill
Chimney Swift
Broad-tailed Hummingbird
Belted Kingfisher
Lewis's Woodpecker
Red-headed Woodpecker
Red-bellied Woodpecker
Downy Woodpecker
Hairy Woodpecker
Northern Flicker
Olive-sided Flycatcher
Western Wood-Pewee
Least Flycatcher
Dusky Flycatcher
Gray Flycatcher
Cordilleran Flycatcher
Eastern Phoebe

Say's Phoebe
Great Crested Flycatcher
Cassin's Kingbird
Western Kingbird
Eastern Kingbird
Scissor-tailed Flycatcher
Horned Lark
Northern Rough-winged Swallow
Bank Swallow
Cliff Swallow
Barn Swallow
Blue Jay
Black-billed Magpie
American Crow
Chihuahuan Raven
Common Raven
Black-capped Chickadee
Red-breasted Nuthatch
Rock Wren
Canyon Wren
Bewick's Wren
House Wren
Sedge Wren
Marsh Wren
Ruby-crowned Kinglet
Blue-gray Gnatcatcher
Eastern Bluebird
Townsend's Solitaire
Veery
Gray-cheeked Thrush
Swainson's Thrush
Hermit Thrush
American Robin
Gray Catbird
Northern Mockingbird
Brown Thrasher
Curve-billed Thrasher
Cedar Waxwing
Loggerhead Shrike
European Starling
Plumbeous Vireo
Warbling Vireo
Red-eyed Vireo
Golden-winged Warbler
Tennessee Warbler
Orange-crowned Warbler
Nashville Warbler
Virginia's Warbler
Northern Parula
Yellow Warbler
Cape May Warbler
Yellow-rumped Warbler
Black-throated Gray Warbler
Townsend's Warbler
Black-throated Green Warbler
Blackpoll Warbler
Black-and-white Warbler
American Redstart
Worm-eating Warbler
Ovenbird
Northern Waterthrush
MacGillivray's Warbler
Common Yellowthroat
Wilson's Warbler
Yellow-breasted Chat
Summer Tanager
Scarlet Tanager
Western Tanager
Northern Cardinal
Rose-breasted Grosbeak
Black-headed Grosbeak
Blue Grosbeak
Lazuli Bunting
Indigo Bunting
Dickcissel
Green-tailed Towhee
Spotted Towhee
Canyon Towhee
Cassin's Sparrow
Rufous-crowned Sparrow
Chipping Sparrow
Clay-colored Sparrow
Brewer's Sparrow
Field Sparrow
Vesper Sparrow
Lark Sparrow
Lark Bunting
Savannah Sparrow
Grasshopper Sparrow
Song Sparrow
Lincoln's Sparrow
White-throated Sparrow
White-crowned Sparrow
Dark-eyed Junco
Red-winged Blackbird
Western Meadowlark
Yellow-headed Blackbird
Brewer's Blackbird
Great-tailed Grackle
Common Grackle
Brown-headed Cowbird
Orchard Oriole
Baltimore Oriole
Bullock's Oriole
House Finch
Pine Siskin
Lesser Goldfinch
American Goldfinch
House Sparrow

COLORADO FIELD ORNITHOLOGISTS' CONVENTION 1998
PAPERS SESSION ABSTRACTS

20 Years of Colorado Division of Wildlife Bird Projects in Southeastern Colorado

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The great variety of bird species in southeastern Colorado has lead to numerous avian research and management projects, some of which have been conducted and/or funded by the Colorado Division of Wildlife. During the late 1970s - early 1980s, the lower Arkansas River area was included in a Central Flyway waterfowl banding project coordinated by the U.S. Fish & Wildlife Service. Mallards and the Canada Geese (Lesser race) were banded to determine their breeding/wintering areas on the basis of band returns. Other projects have included: waterfowl monitoring; game bird surveys; monitoring Least Tern/ Piping Plover nests; habitat maintenance, protection, development; banding neotropical migratory songbirds; searches for breeding and brood-rearing areas used by Mountain Plovers; natural history/habitat research and surveys of Lesser Prairie-Chickens; monitoring Golden Eagle nests; mid-winter bald eagle counts; Watchable Wildlife opportunties/information; birdwatching classes; partnership in a Long-billed Curlew study; monitoring nesting colonies of Great Blue Herons/other waterbirds; reintroductions of Wild Turkey along the Arkansas River; crane counts; Wood Duck nest box project; updates for the Colorado Bird Latilong; Breeding Bird Surveys; and the Colorado Breeding Bird Atlas project.

Gyrfalcons in Colorado and Adjacent States

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Birders generally consider the Gyrfalcon (*Falco rusticolus*) a rare winter visitor in Colorado, but falconers consider it a regular winter resident, especially on the northeastern plains. The Colorado Bird Records Committee has accepted six records of Gyrfalcons (1981-1995). In addition, there were nine pre-CFO sight records (1956-1969), and at least three more are pending. There are only two Colorado specimens in the Denver Museum of Natural History's

collection. The first specimen is an immature, dark gray-brown color-phase female that was caught by a falconer, John L. Linthicum, on 11 December 1969 at Horse Creek Reservoir in Adams County. It died in captivity 4 April 1970. The second specimen is also an immature gray-phase female. It was hit by a vehicle in the San Luis Valley near Center in Rio Grande County in December 1997, and it died in a rehabilitation center in January 1998.

Through the years, several (10+?) Gyrfalcons have been trapped in northeastern Colorado by licensed falconers. Currently, 11 Gyrfalcons and 14 hybrid falcons (produced through artificial insemination with captive Gyrfalcons) are held legally in Colorado.

One wild, immature female was observed by more than 130 observers at and near the Rawhide Energy Station in northern Larimer County between 18 January and 22 March 1998. Another possible sighting in 1998 was east of Briggsdale in Weld County. More than 50 sightings are listed for northern Wyoming (1969-1987), about 30 for Nebraska, six have been confirmed in Kansas, one hypothetical in New Mexico, 5+ in Utah, and one bird in Oklahoma City that was well-photographed and subsequently captured. Gyrfalcons are probably much more regular and abundant winter visitors in Rocky Mountain and Great Plains states than formerly believed.

Raptor Electrocutions in the Western United States

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Raptor mortality records spanning the years 1986 through 1996 were gathered from 58 electric utilities located in the western United States. These 1,450 records were reviewed to determine the types of utility structures causing outages and placing raptors at risk.

The most commonly reported species electrocuted were eagles, with Golden Eagles (*Aquila chrysaetos*) reported 2.3 times more frequently than Bald Eagles (*Haliaeetus leucocephalus*). Juvenile eagles were reported more frequently than adult birds. Eagle mortality was detected at an elevated rate during the late winter. Red-tailed Hawks (*Buteo jamaicensis*) and Great Horned Owls (*Bubo virginianus*) were the most commonly reported hawk and owl species. Hawk and owl electrocutions resulting in electric outages were elevated in the late summer. Colorado mortality (n = 8) was low compared to the neighboring states of Wyoming (n = 280), Nebraska (n = 76), New Mexico

(n = 26), and Utah (n = 332). Low numbers are likely the result of poor reporting and not reduced electrocution rates.

Six hundred and forty-six raptor deaths were tied to specific utility construction units. These data suggest that although transformers are relatively rare on rural overhead distribution systems, they are associated with most rural electric raptor electrocutions. Three-phase transformer banks were associated with a disproportionate number of detected electrocutions. These units are particularly lethal to raptors because of minimal phase-to-phase and phase-to-ground separation between bare energized jumper wires connecting transformers, protective cutouts and surge arresters. Three-phase transformer banks may also be dangerous because they often serve irrigation pumps located in remote areas likely to support numerous raptors.

The North American Migration Count: Some Lark Bunting Results

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On the second Saturday of May in 1994, 1995, and 1996, Lark Buntings (*Calamospiza melanocorys*) were censused by car from the Mexican to the Canadian borders. The major concentration of buntings was found along the 102nd meridian from Midland County, Texas to Perkins County, South Dakota. The highest concentrations were found in Baca County, Colorado, where observers counted 14.52 buntings per mile, and in Sherman County, Kansas, where observers counted 16.67 buntings per mile.

Nesting Piping Plovers and Least Terns in Southeastern Colorado

Duane Nelson
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Bailey, Colorado 80421
(Abstract not available)

Identification or Rare Longspurs and Sparrows in Eastern Colorado

Jon Dunn
Beaver Creek, Ohio
(Abstract not available)

Submissions to the CFO Records Committee in the Last Six Years

Mark Janos
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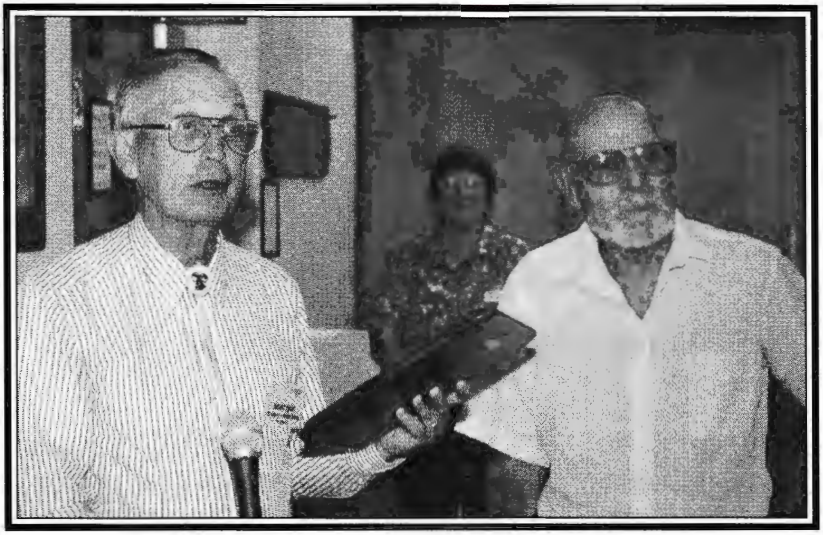
Pueblo, Colorado 81001
(Abstract not available)

Dr. Ronald A. Ryder Presents the Ronald A. Ryder Award to Harold Holt
Convention of the Colorado Field Ornithologists, Lamar, Colorado, 10 May 1998
by Jim Karo



HAROLD R. HOLT RECEIVES RONALD A. RYDER AWARD: A Biography and Interview

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Harold R. Holt's extensive contributions to Colorado field ornithology and sharing his knowledge of Colorado birds with the people of Colorado brought him the 1998 Ronald A. Ryder Award. The award was presented to Harold at the Colorado Field Ornithologists' (CFO) convention in Lamar on 10 May 1998. In anticipation of presenting the award to him, we interviewed Harold and his wife LaVona (Vona) on 21 March 1998, and what follows is the outcome of our visit with them.

Although Harold began his dedicated study of Colorado ornithology in 1959, his lifelong interest in birds took root in his home state of Ohio about 35 years earlier. He was born on 11 March 1915, in Sylvania, eleven miles outside of Toledo. Beginning at a very young age, he spent much of his time outdoors

exploring the nearby fields and woods with his brothers. Family members encouraged his interest by giving him books about birds. Harold was a very good student, but when he graduated from high school in 1933, the 1930s depression was in full swing and hard times prevented him from continuing his education. His birding became a greater passion at that time.

For 43 years, Harold was a popular bus driver, first with Greyhound--based in Toledo--and later for the City of Denver and chartered trips. During his 10 years with Greyhound, he drove charter buses coast to coast for passengers interested in birds and other wildlife, explaining to his passengers what they saw along the way.

After Harold had moved to Denver in August 1959, he quickly became involved with the local Colorado Bird Club. Because there was not a Colorado field checklist at the time, he compiled available information and his own observations to produce a distributional checklist of about 325 Colorado birds. The list was published in Colorado Field Notes in 1960. Harold subsequently wrote a series of reports on migration arrival/departure dates, which were published first in Colorado Field Notes and later in The Lark Bunting and the Lane guides. He continued compiling these records for 28 years. Photography also became one of his passions soon after he moved to Denver, and it was a perfect complement to his field studies.

In 1962, Harold became President of the Colorado Bird Club (the name of which changed to Denver Field Ornithologists in 1964), and he served as newsletter editor from 1967-1972. As President, he appointed Lois Webster to chair a committee whose job it was to organize a state convention, the first of which took place in 1963. At the second Annual Convention, organizers established the Colorado Field Ornithologists, which became official in May 1965 (Cummings, The History of C.F.O., C.F.O. Journal, v. 14, no. 3). Harold was a charter member of the CFO and has been an active and staunch supporter ever since.

A great change in Harold's lifestyle came when Harold married Vona on 14 February 1970. Together, they have spent several months each year traveling and conducting the research necessary for updating and revising the birding guides for Colorado, the Texas Coast, southeastern Arizona, southern California, and Florida that Dr. James A. Lane, their dear friend, had authored originally. Harold worked with Lane until Lane's death in 1987. In 1990, the American Birding Association acquired copyrights for the Lane guide series and assumed publication of, and sales responsibilities for, the books.

The Pawnee National Grassland continues to be Harold's favorite Colorado birding/photography site, and the American Kestrel is his favorite bird. "It's

easy to photograph," Harold admitted. He also enjoys shorebirds for the same reason. When asked what it was about birding that gave him the greatest pleasure, he answered, "Showing another birder a life bird. I was glad to be there to help." Harold also warned that, in the future, birding will become more of a challenge if migratory bird populations continue to decline at the rate he has witnessed over the past 35 years.

Some of the memories that Harold shared with us during our visit included showing Roger Tory Peterson his first Virginia's Warbler at Red Rocks Park; sharing "parenthood" again with Vona to raise a pair of nestling Flammulated owlets that had been orphaned when a bear ate their mother (and having to gather 200 grasshoppers each day to hand feed those hungry owlets before they fledged successfully!); climbing a tree to photograph a hummingbird nest; sitting on a cactus at Red Rocks Park; watching spring migrants "fall out of the sky" at High Island, Texas; trying to keep hummingbirds out of their RED van; receiving the Ptarmigan Award from the Denver Field Ornithologists in 1989; and receiving a Certificate of Appreciation from the Boulder Bird Club for his work in Colorado Ornithology.

At age 83, with Vona and their two black cocker spaniels for enthusiastic companions, Harold continues to pursue his lifelong interest in birding. Although his writing days have ended because they were "too time consuming," he keeps active and "in touch" by attending birding festivals, conventions, and meetings throughout the United States to promote his books and open new markets for his books back east. He participates faithfully in the annual CFO conventions. On field trips, he continues to add to his life list, which now includes 713 for North America. Of these species, he has captured 686 on film! Harold estimates that his slide collection numbers nearly 10,000, most of which he has organized into trays for talks about specific areas. He has always used a long camera lens to photograph birds so as not to get too close to the birds. Many of his photo opportunities were made possible through Vona's "bird dog" instincts and by using their van as a blind.

With a sense of great personal pride and satisfaction, Harold feels that birders have recognized and appreciated his dedication to helping birders find birds and to keeping his guides and personal records as accurate and current as possible. "People worldwide know me through my books, and even though new authors have now assumed responsibility for the guides, the prefaces in these new books acknowledge me for my role as a former author." Along the way, untold numbers of birders and non-birders alike have benefited not only from Harold's books, but from his data collection, leadership, and participation in local, state, and national birding organizations, field trips, and community slide programs.

We thanked Harold and Vona for graciously allowing us the opportunity to visit with them for this interview and wished them continued pleasure in their endeavors. Some of the information for this article was taken from an earlier, more detailed article, "Harold R. Holt: A Birder's Guide" by Patty Echelmeyer, David Pantle, and Lynn Willcockson, which was published in the C.F.O. Journal in 1994 (v. 28, no. 2). Myron and Suzi Plooster formally nominated Harold Holt to receive the 1998 Ronald A. Ryder Award. The Award Committee--Warren Finch (Chair), Karleen Schofield, and Joe Himmel--presented the nomination to the CFO Board of Directors, and, on 7 February 1998, the Board adopted a resolution to present Harold with the Award.

Selection Criteria and Guidelines for The Ronald A. Ryder Award for Distinguished Service to Colorado Field Ornithology

Selection Criteria

1. For distinguished service to the Colorado Field Ornithologists' organization 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 the state of Colorado.

Nomination & Selection Process

1. The Award will be given every other year, at most.
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 during the year a recipient is chosen.
5. The Award will be a plaque designed to match the original plaque given to Dr. Ryder.
6. Nominations should be submitted in writing to the Award Committee Chairperson on or before February 1 of even-numbered years to be considered by the Field Ornithologists' Board of Directors.

****

Submit nominations to Award Committee Chairperson:
Warren Finch, 455 Dover Street, Lakewood, Colorado 80226-1147
E-mail: purpfinch@aol.com

ECOLOGY AND NATURAL HISTORY OF GREAT HORNED OWLS IN AN URBAN HABITAT, COLORADO STATE UNIVERSITY CAMPUS, FORT COLLINS, COLORADO

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Abstract

We conducted this study to learn more about the ecology and natural history of Great Horned Owls (*Bubo virginianus*) in an urban habitat. From April 1992 through February 1998, we observed the owls that inhabit Colorado State University's campus in Fort Collins. The birds used natural resources, such as vegetation and prey, and manmade resources, such as buildings, poles, and artificial nests. The birds nested and roosted in blue spruce (*Picea pungens*) and American elm (*Ulmus americana*) trees, and Rock Doves (*Columbia livia*) were their main prey. The adult birds fed their fledglings from the roof of a flat-topped building close to the nesting area, although the birds often used parts of other buildings as perches and hunting platforms. One year, the adult male owl died, which probably contributed to the eventual death of his mate and both of their offspring. Another pair abandoned their clutch in mid February after 36 days of incubation, and then they renested in early March; upon examination, we found that the first clutch had been damaged and the embryos were dead. In another year, the same pair adopted an orphaned chick that we placed in the nest after the pair had lost one of their own chicks. The owl territory at Colorado State University was occupied almost continuously throughout our study period, and each successful pair always produced two young. We concluded that creating and managing urban habitat resources for Great Horned Owls should allow them to coexist successfully with humans in urban areas.

Key Words: Great Horned Owl, *Bubo virginianus*, urban habitat, nesting ecology, management, artificial nests, adoption

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Introduction

Throughout North America, Great Horned Owls (*Bubo virginianus*) will use a wide range of habitats from forests and open deserts to cities (National

Juvenile Great Horned Owl
Pencil Sketch Drawn in May 1998
by Yuka Otsuki

Geographic Society 1987), demonstrating that humans and some wildlife species can coexist. There is almost no information, however, about the requirements or ecology of Great Horned Owls in urban settings. Voukuster (1992) investigated the diets of Great Horned Owls by examining regurgitated pellets, Eckert (1974) described the owls' roosting behaviors, Stokes (1983) reported on the owls' nesting habits, and, in a popularized account of the survival of a hand-reared Great Horned Owl, Terman (1997) described owl behavior in an agricultural setting. None of these accounts describe owl behaviors in urban settings. To encourage or perpetuate the occurrence of Great Horned Owls in urban environments, wildlife managers and city planners must know the owls' requirements in those habitats. Herein, we describe their behaviors, the resources they used, their nesting ecology, the results of a chick adoption experiment, their use of artificial nests, and territory occupation on a university campus in an urban setting.

Study Area and Methods

We selected the Colorado State University (CSU) campus in Fort Collins for our study because it was known to include a Great Horned Owl territory and we lived nearby, which made it convenient to watch the birds closely. The CSU campus is 1.9 square kilometers in size and located almost at the center of Fort Collins, Colorado. The site includes nearly 100 buildings, paved grounds, building-construction areas, trees (1850 mature trees of at least 64 species), shrubs, lawns, irrigation ditches, and an artificial pond. Several species of urban wildlife, such as Rock Doves (*Columbia livia*), eastern cottontails (*Sylvilagus floridanus*), and fox squirrels (*Sciurus niger*), are common on campus. The site is surrounded by busy streets, the Fort Collins business district, densely settled residential areas, some patchy stands of plains cottonwood (*Populus deltoides*), and a variety of other trees.

We studied the Great Horned Owls at CSU from April 1992 through February 1998, about when we moved back to Japan. We viewed the birds from the ground and from the upper floors of nearby buildings. Occasionally, we employed the aid of 7-power binoculars and a 20-power spotting scope. Typically, we watched the owls from 30 minutes before sunset to dusk, when the birds were most active and visible, and at various times of day. We recorded their behaviors and the time we observed them. Other observers also reported the owls' activities to us.

Results and Discussion

Territory Occupancy and Home Range -- From 1992-1998, the Great Horned Owl territory at CSU was occupied almost continuously, though not by the same pair. In 1994, the pair that had occupied the territory since we began the study and their two young-of-the-year died (details on page 152). The territory was

still vacant during the 1994-1995 breeding season, but a new pair occupied the territory shortly thereafter and remained throughout the rest of our study. Both pairs stayed together as long as both birds were alive.

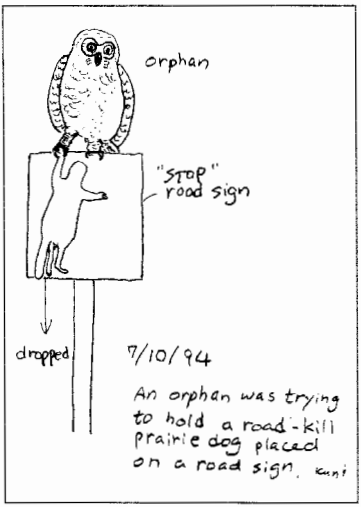
The birds concentrated their activities on the eastern half of the CSU campus, which is about one square kilometer in size. They often flew beyond the northern and eastern boundaries of the campus, however, crossing over busy streets along the way. Although we were unable to track the birds when they flew off campus, we noted the surrounding habitats, which included stands of plains cottonwoods and individuals of other tree species. We often found owl feces, or "wash," under street lamps as far as 1.5 kilometers from the CSU nesting and roosting sites. Typically, the large, white, irregularly shaped wash stains left on the ground under a street lamp formed a circle of 1.2 meters. On the basis of their appearance, we suspected that a pair we saw using the tops of buildings about 1.5 kilometers to the west of the CSU roosting trees was the CSU pair. Other observers reported a pair of owls occupying a territory approximately 3.2 kilometers to the northwest of the CSU nesting site, and another pair occupied a territory about 3 kilometers to the south of the CSU nesting site. On the basis of these reports and our observations, the radius of the CSU owl territory was at least 1.5 kilometers and included some stands of plains cottonwoods outside of our study area.

Food, Foraging, and Food-Caching -- The owls consumed a variety of prey ranging from birds to small mammals. Of the prey items that we could recognize, Rock Doves appeared to be consumed most frequently, indicated by the fact that we found Rock Dove wings, legs, and feathers scattered across much of the CSU campus. Colonies of Rock Doves roosted and nested on several campus buildings, and they were widespread and common elsewhere in Fort Collins, especially around human habitats. Therefore, Rock Doves probably were one of the more reliable food sources in the urban area. The adult owls regularly delivered Rock Doves, as well as eastern cottontails, fox squirrels, rats, and mice, to their chicks, both at the nest and at places used for feeding after the chicks had fledged. The adults owls also consumed these common prey items. We found the head portion of a Mallard (*Anas platyrhynchos*), a decapitated House Sparrow (*Passer domesticus*), and the carcasses of other birds on the CSU campus, indicating that the owls may have preyed on other bird species as well, and we witnessed an immature owl catch a bat in flight! Terman (1997) recorded similar behavior.

Wildlife managers and city planners need to consider that Great Horned Owls may kill or injure small pets, including dogs and cats. In some cases,

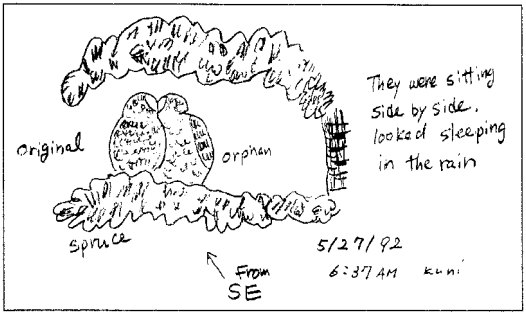
pets may be killed as prey items, and in other cases an owl may attack a pet as a defensive measure. Ripley (1993) reported that a Great Horned Owl killed a dog in Fairbanks, Alaska, and a friend of ours in Burlington, Colorado, lost her poodle several years ago when a Great Horned Owl killed it in her back yard. Terman (1997) reported that his hand-reared owl attacked pets, but it did not harm them. Although we did not see any fatal attacks on pets at CSU, both the adult and immature birds of one owl family occasionally dived at dogs and cats. Although they never struck the animals, we saw one cat barely escape from an attack. We did not see any members of the other owl family dive at dogs on campus, although the birds always appeared to watch the dogs until they were gone. The level of aggression may vary from one owl family to another.

In 1994, both adult owls died, leaving their 4-month old fledglings to survive on their own. The fledglings often visited water-sprinkled lawns, and in the evenings they preyed on small, unidentified animals on the ground. David Leatherman, an entomologist with the Colorado State Forest Service, examined two pellets regurgitated by one of the fledglings and found the integument of European earwig (*Forficula auricularia*). When Terman's owl was a juvenile, it also ate insects (Terman 1997). To supplement the diet of the orphaned fledglings, we left food for them. A road-killed squirrel was placed on a perch used frequently by one of the fledglings, which fed on the carcass and cached the remains under a shrubby juniper (*Juniperous scopulorum*). The fledgling retrieved its cache every evening until it was completely consumed. It also cached food on flat, sunken rooftops. Typically, a cache of food the size of a fox squirrel lasted for about three days. Food-caching behavior has also been reported by Terman (1997). When observers provided a road-killed prairie dog (*Cynomys ludovicianus*), the fledgling appeared to have trouble with it; the prairie dog was too heavy and difficult to tear apart.



The adult owls cached food in many locations, especially in blue spruce trees (*Picea pungens*) and on flat, sunken rooftops. Both places probably provided cool, shady spots where food would remain hidden and relatively fresh. Rooftops used by owls could become quite messy with prey remains and waste, which urban resource managers may need to consider when managing for owls.

Roosting Sites, Shelters, and Perches -- During the day, the owls roosted in either blue spruce, honeylocust (*Gleditsia triacanthos*; a thornless variety), or American elm (*Ulmus americana*) trees. We did not observe them roosting in other vegetation or on manmade structures. The adult male and female owls usually roosted in separate trees, each bird often using the same tree repeatedly. The adult females generally roosted with their chicks until summer, at which point the chicks usually continued to roost together in their preferred deciduous trees, generally American elms or honeylocusts. During winter and stormy weather, the owls used blue spruce trees almost exclusively. In fact, they roosted in blue spruce trees during all sorts of weather, perhaps because the trees' armor-like branches and needles not only provided the best shelter from storms, they also provided better protection from heat exhaustion during hot weather, and they seemed to offer the owls some refuge from mobbing American Crows (*Corvus brachyrhyncos*) and Black-billed Magpies (*Pica pica*).



After sunset, when the owls became active, they often perched in blue spruce, American elm, American basswood (*Tilia americana*), ponderosa pine (*Pinus ponderosa*), red oak (*Quercus* sp.), plains cottonwood, and honeylocust trees; they rarely perched in trees of any other species. The birds seemed to prefer large limbs, tree tops, and dead branches from which most of the bark had sloughed away. American elms were used most frequently, possibly because they provided the best perches; they used the well-developed, lateral branches with substantial open space around the branches to allow for landings and take-offs. The owls also perched on manmade objects, including roof corners, building ledges, flagpoles, bike racks, TV antennae, satellite dishes, the beams of buildings under construction, crane tops, street lamps, greenhouse roofs, car tops, and other projections.

The owls used their perches as platforms for hunting, feeding, and copulating. They scanned for prey from the branches of American elms, roof corners, and building ledges. They also used these perches for feeding. The adult birds copulated at the tops of blue spruces, American elms, plains cottonwoods, buildings, TV antennae, and satellite dishes. Although two pairs of owls (five different adults) occupied the CSU territory at different times during our study, all used some of the same perches. In other words, certain perches seemed to be more attractive to the owls.

Courtship, Mating, and Nesting -- Each year between September and October, the owl pairs started courtship, indicated by intensive hooting. Typically, intervals between bouts of hooting were 30-50 seconds, and hooting could go on for some time. Male owls also visited potential nest sites, including existing nests and building ledges. Occasionally, a male would appear to examine a nest, sit in it, and then hoot, as if he were demonstrating the nest's suitability to his mate. The female often followed her mate and watched what he did. These behaviors continued for a week or more, until finally the female owl would sit in the nest for a while. This seemed to indicate that she had accepted the nest. Once a nest had been selected, the pair would visit it every evening and hoot from it.

Copulation took place in December and January. The owl pairs copulated multiple times at dusk, and they seemed to use the same limbs and objects repeatedly for copulation. During copulation, the female would remain on her perch while the male would land on her back and cross his tail under the female's tail. All the while, the male would flap his wings and utter "kirr, kirr, kirr" sounds. Typically, copulation lasted 2-3 seconds. Then, the pair would separate and fly off campus. Copulation continued until about two days after the female had become sedentary in her nest for the first time, which probably meant that she had laid her first eggs.

Incubation took place between January and March, and only female owls incubated the eggs. They sat deeply in their nests--often only their ear tufts were visible. Occasionally, the incubating birds stood up and rotated their eggs. Birds do this to keep the embryos centered inside the shells (Dr. Ronald Ryder, professor emeritus with CSU's Wildlife and Fisheries Biology Department, personal communication). During our observations, the females only left their nests for 3- to 10-minute outings in the evenings. At dusk, the male would usually perch close to the nest and hoot, as if to encourage his mate to leave the nest. Immediately after his mate left the nest, he would often land on the edge of the nest and appear to hoot at the eggs (embryos can hear sounds outside the shells). Meanwhile, the female would fly to a nearby tree limb to stretch her wings and legs, and often she would feed on prey left by the male before returning to her nest. The length of time the females stayed off their nests appeared to be influenced by the ambient air temperature; when it was cold, (e.g., 5° C or below), the female would return quickly or not leave the nest at all. After the eggs had hatched, the females gradually sat higher in their nests, indicating that their chicks were growing. When their chicks were small, the females brooded them under their wings. When the chicks were about one and a half months old, they started moving around, usually with the females in attendance.

In every year except 1995, when the owl territory was vacant, two chicks hatched between February and April and became visible from the ground for the first time between March and May. The chicks fledged between April and May and dispersed any time from September through December. Both pairs followed almost the same schedule each year. The one exception took place in 1996, when the eggs failed to hatch. On 18 February 1996, the female owl abandoned her nest after approximately 36 days of incubation. Eggshell fragments were scattered on the ground below, and, after examining the nest, Dr. Ryder and Dr. Alan Franklin, (CSU Department of Wildlife and Fisheries Biology) determined that the remaining egg was rotten. It lacked buoyancy in water (a test of viability), and, when opened, they found a dead embryo about 30 millimeters in length. The embryo's size and stage of development indicated that it was about two weeks old when it died. On 23 February the pair initiated copulation again, and, on 6 March the female bird settled on a second clutch. By 1 May, we could see from the ground that there were two chicks in the nest, both of which fledged successfully in late May.

The first pair of owls used existing nests, but they used a different one each year. According to Dr. Ryder, the natural nests on the study site were probably constructed by American Crows. In late February 1992, when we began our study, the owls occupied one of the natural nests (20 meters above the ground). It was dish-shaped, composed of small twigs, and located in an American elm. In February 1993, we constructed an artificial nest, and Dr. Franklin, an experienced rock climber, climbed a blue spruce tree next to a flat-topped, four-story building (CSU's Administration Building, which is 18 meters tall) and secured the nest in the tree with steel wires at a height of 13 meters above the ground. He also furnished the nest with some mud and owl pellets to make it appear previously used and comfortable. This dish-shaped nest, which measured one meter in diameter and 0.3 meter in depth, consisted of a chicken wire net and a bowl of twigs. The pair moved to this nest in 1993, but in 1994 they chose another natural nest located in a blue spruce next to a busy street.

Between fall 1993 and spring 1994, we made two more artificial nests, placing one (11 meters above the ground) in a ponderosa pine and another (10 meters above the ground) in an American elm. Although the first pair of owls visited these other nest trees, they did not use the artificial nests. The second pair, however, used an artificial nest for two years. They occupied the same artificial

nest--one in a blue spruce tree--that the first pair had used in 1993, and they used it in both 1996 and 1997. All of these nests were located in the northeast quadrant of the campus.

We were not sure what prompted the owls to choose one nest over another, although nests farther up from the ground probably discouraged dogs, racoons, and people from detecting or damaging the nests, denser cover probably provided better protection from weather and harassment from American Crows and Black-billed Magpies, and access -- as well as surrounding objects for perching -- may have affected the ease of using the nest and feeding nestlings. It was not clear why the first pair of owls used a different nest each year. Dr. Ryder speculated that some owls may be genetically programmed to use different nests every year to avoid accumulations of parasites and bacteria. Terman (1997) reported that his hand-reared owl exhibited nest fidelity, and, in Mississippi, Watts (1989) recorded a pair of Great Horned Owls nesting in the same tree cavity for several years. We noted that the pair of Great Horned Owls occupying the territory 3.2 kilometers to the northwest of CSU used the same nest for at least three years. Additional research would help to answer this question.

Fledging and Fledgling Feeding Sites -- By the time the chicks were one and a half months old, they were very active, often flapping their wings and walking around their nests in the evenings. During the day, however, the chicks remained in their nests. As they grew bigger, they expanded their explorations to include all portions of their nesting trees above the nests. Eventually, the chicks remained outside their nests all day, walking and jumping from one branch to another with strong wing flaps. The chicks finally fledged (defined as the first flight beyond the nesting tree) between April and May, about a month after they were first observed from the ground and nearly two months after they had hatched. Fledging occurred in the evenings when weather was moderate. The timing of growth and fledging were similar for Terman's (1997) hand-reared owl.

Before fledging, chicks raised in the artificial nest in a blue spruce next to the CSU Administration Building often traveled to the tips of branches closest to the building. The adults perched on ledges, roofs, or trees close to the chicks,and the males hooted to the chicks several times. We saw this parental behavior only when fledging occurred, and we noted two different pairs doing this on three occasions in different years. Finally, the chicks flew one by one to the roof. At first, the fledglings flew back and forth between the tree and the building. On subsequent days, the chicks started exploring adjacent trees and the roofs of other buildings. In the evenings, the females regularly fed the fledglings on flat-topped buildings adjacent to the nest, and the males often

left food for the chicks in these places and in other places that the chicks used regularly. Flat building tops appeared to provide secure places for unskilled flyers to land and feed without risk of falling or dropping the food. Rooftops were also high enough to provide safety from predators.

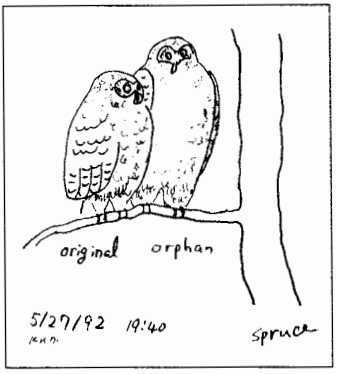
Within the first week of fledging, some chicks had difficulty with flight. Occasionally, they flew straight into the walls of buildings, and early attempts to land on tree limbs often failed or resulted in the fledglings swinging over too far and hanging upside down like bats. Usually the females were nearby, but they only watched the fledglings. Some chicks appeared to be more conservative in their explorations. At first they tended to stay in the trees surrounding their nesting tree, expanding their ranges gradually as they grew. By June, the chicks had developed good flight skills and often they followed the females as they flew from place to place. It appeared that the females were actually leading the chicks around to show them preferred perches and feeding locations. These places included the tree tops near the nesting site and tree limbs where the adult birds often perched or cached food.

Dispersal -- The fledglings remained somewhat dependent on the adults until dispersal, and they begged for food often. As dispersal time drew near, however, the adult birds tended to fly away with food when the young approached them. The fledglings tried to catch prey by themselves, although often they were unsuccessful. While scanning for prey from their hunting platforms, they typically made juvenile "jie, jie" sounds that spooked prey away. Producing these sounds may have been "involuntary" begging behaviors that had not yet diminished entirely. The fledglings plunged from their perches towards prey on the ground, but typically they landed on the ground while the prey escaped. To chase and capture prey on the ground, some fledglings even tried walking or running like chickens, which was always unsuccessful. When the adult owls started courtship in the fall, they ignored the fledglings altogether and always moved away from them if they approached. Between September and early November, the young birds eventually disappeared from the CSU territory and dispersed. We never discovered where they went and did not receive any information about them from other observers. As it is for many juvenile birds, the mortality rate among young owls is believed to be high (Terman 1997).

Chick Adoption Experiment -- During a storm in the 1992 nesting season, a nestling owl was blown out of the nest (one of the natural nests in an American elm) to the concrete-paved ground below, where it died. Dr. Ryder knew of an

orphaned Great Horned Owl chick whose parents had just abandoned it as a result of road construction near their nest in Sterling, Colorado, and he thought it was possible that the owl pair at CSU would accept another young chick. On 28 April Dr. Ryder climbed via ladder into a blue spruce tree located about 10 meters away from the nest where the surviving chick remained, and he placed the orphaned chick in the artificial nest (five meters above the ground). Temporary fences were erected around the area to keep people away from either nest tree.

Dr. Ryder and Brett Petersen, an alumnus of CSU's Wildlife and Fisheries Biology Department, occasionally left some mice for the orphaned chick in its new nest, and soon it started climbing up and down the spruce tree. On 3 May, the adult female visited the orphan, and then she appeared to accept the chick by delivering Rock Doves for it to feed on. The newly adopted chick moved from tree to tree until finally, on 12 May, it reached the foster parents' nest, where it was treated as a part of the owl family. Terman (1997) described similar "adoption" behavior in the epilog of his book.



Because the adopted chick was significantly larger than the other chick, it fledged first. It managed its first flights far better than the other chick, which often failed at landing and eventually ended up on the ground. We believe that the larger chick may have induced the smaller chick to fledge before it was ready, undoubtedly making the smaller chick vulnerable to numerous hazards--including self-inflicted injury, moving cars, and attacks from predators--but it did survive.

Demise of an Owl Family -- During the 1994 nesting season, the adult male of the first owl pair died. On 9 March, an observer found him dead on the campus grounds. Dr. Steve Kerr of CSU's Veterinary Teaching Hospital (VTH) examined the dead bird and discovered avian tuberculosis nodules in its digestive tract, which likely led to starvation and the bird's death. The bird weighed only 1,160 grams, and, according to Johnsgard (1988), an average male Great Horned Owl weighs 1,318 grams.

The male's death left the adult female with two chicks that were approximately three weeks old. She remained in the nest -- a natural nest in a blue spruce tree -- with the chicks most of the day. Apparently, however, they did not have enough food. Dr. Ryder and Brett Petersen moved the chicks to an artificial nest in another blue spruce, and supplied the birds with some mice, but on

May 25, 1994, about two weeks after the chicks had fledged, the adult female was found dead on the metal-framed roof of CSU's Natural Resources building (17 meters high), where the owl had perched frequently. Gail Kratz, Medical Coordinator of CSU's Rocky Mountain Raptor Program (RMRP), reported that the bird had not contracted avian tuberculosis, but her stomach was empty, indicating that she had probably starved.

The orphaned fledglings started feeding on the ground, apparently hunting for earthworms and other insects that surfaced on the lawns when the lawn sprinklers came on in the evenings. One of the chicks appeared less adept at hunting than the other one. While we watched them hunt, one captured four prey items in 20 minutes while the other captured none. In his book, Terman (1997) emphasized such individual differences among juveniles. On 2 June 1994, an observer found the less-skilled chick sitting on the ground; it was very weak. The bird was taken to the VTH, but eventually it died.

After that, we began supplementing the surviving chick's diet with road-killed animals, such as fox squirrels. Between 3 June 1994 and 17 July 17 1994, we left food about two times per week. To preclude the chick from imprinting on humans, we placed the food on a perch that the chick used frequently before the chick became active in the evenings. Then, on 19 July, an observer found the fledgling on the ground. According to Gail Kratz, it had electrical burns on five primary feathers on its right wing. It may have tried to land on some sort of electric utility structure and touched two wires at once (this is a common problem for raptors and other birds, and typically the bird is killed when this happens). Terman (1997) and Harness (1997) also reported Great Horned Owl mortality due to electrocution. At the RMRP, the damaged feathers were removed to stimulate new feather growth, and the young owl was kept in captivity until October, when it was released at CSU.

On 15 November 1994, the young owl was discovered again with another injury. This time, it was on a highway about six kilometers east of the CSU campus. It had a detached retina in its left eye and it showed signs of dehydration. The owl weighed 980 grams, and it was still missing the five primary feathers. The staff at RMRP kept the bird again until 3 March 1995, when it had increased its weight to 1,150 grams, and released it outside the VTH, two kilometers to the south of its original nest site. They chose not to release the bird closer to the CSU owl territory because the territory already appeared to be occupied by another owl. The RMRP staff had attached a radio transmitter to the young bird's left leg, but unfortunately the transmitter signal discontinued four days after the owl was released, at which point we lost track of it. Before the transmitter failed, the bird was seen sitting in a blue spruce on private property about one kilometer north of the release site. In the

summer of 1995, the owl was found one more time and again it was taken to the VTH. It had been sitting in someone's backyard south of the VTH in a very weakened condition. Although it had survived to more than one year of age, it finally died while at the hospital. An examination showed that the young owl had a number of diseases.

The Owls Today -- The second pair of owls we studied at CSU successfully raised and fledged two chicks in the 1996-1997 breeding season. During the courtship season in 1997, however, shortly after the chicks had dispersed, another death occurred. This time it was the female owl. She was found dead on the ground near the pair's roosting trees in November. The owl's body was sent to the VTH, where the cause of her death is under investigation. The male owl continued to hoot at dusk, and it was not long before a new female owl appeared on campus. Apparently female owls move about looking for lone males on territory (Terman 1997). On 13 January, 1998, the new female exchanged hooting bouts with the male owl, who sat in the artificial nest when the female was present. They may have started copulation as early as 15 January, 1998, but either they had a first clutch that failed or they did not start nesting until one month later. On 16 February , we observed the female in the nest, and we speculated that she was laying her first egg. On 17 February, we saw the pair copulate in an American elm near the nest. Owls usually lay their second egg two days after the first one, therefore the female may have laid her second egg on 18 February. Eventually, two chicks did hatch in the artificial nest in a blue spruce tree adjacent to CSU's Administration Building. On 28 April 1998, Dr. Ryder reported that the nest contained two large and active young, and the female owl was sitting on a nearby branch. Dr. Ryder had just banded the young birds.

Summary and Conclusion

From 1992 through April 1998, when our studied ended, the Great Horned Owl territory at CSU was occupied almost consistently, though not by the same pair. The owls' home range apparently exceeded the area we were able to observe, but the radius of their territory was at least 1.5 kilometers around their roosting and nesting sites. In 1994, the pair and their two young-of-the-

year died. A new pair had not occupied the territory by the 1994-1995 breeding season, but a new pair did appear shortly thereafter. Then the female of that pair died in 1997, and another female took her place within the same breeding season. The pairs stayed together as long as both birds were alive. In every year except 1995, two chicks hatched between February and April, becoming visible from the ground for the first time between March and May and fledging between April and May. They dispersed any time from September through December.

Each year, the pairs started courtship, indicated by intensive hooting, between September and October. Copulation took place in December and January, and the female incubated the eggs between January and March. Each pair followed almost the same schedule, except in 1996, when the clutch failed to hatch. The failure of the first clutch stimulated copulation again, and the female laid a second clutch in early March. Two chicks from the second clutch fledged successfully in late May.

For the period of our study, the Great Horned Owls used a variety of natural and manmade resources available on the CSU campus. The natural resources included trees, shrubs, and small prey animals, such as other birds (especially Rock Doves), rodents, and insects. The owls showed a definite preference for blue spruce and American elm trees for nesting, roosting, perching, and copulating. Other vegetation, including a variety of tree species and juniper shrubs, also served as roosting places, shelters, perches, feeding places, or places to cache food. Rock Doves were common in the area and seemed to be a reliable food source for the owls. Other common prey included fox squirrels, eastern cottontails, rats, and mice. The manmade resources used most by the owls included artificial nests, the roof of a flat-topped building for feeding fledglings, buildings with sunken roof-tops for caching food, and a variety of objects that served as perches, such as roof corners, building ledges, and street lamps.

The owls selected existing, dish-shaped nests, both natural and artificial, located in blue spruces or American elms. It's not clear what factors made any one nest more suitable to the birds, but the artificial nest in the blue spruce next to a flat-topped building was chosen most often. That nest, and its location with respect to other features, appeared to be ideal for raising young owls.

The chick adoption experiment demonstrated that a pair of Great Horned Owls can and will adopt an orphan chick placed close to their nest. The chicks, however, should be of similar age and size. Larger or older chicks could induce smaller or younger chicks to fledge before they are ready, thus diminishing their chances for survival.

There was a tragic end to an entire family of owls at CSU, but fatal accidents do occur in the wild -- urban or otherwise. CSU's urban resources continue to attract Great Horned Owls and provide an apparently suitable habitat for breeding and raising young. Preserving the habitats used by the owls, as well as habitats used by their prey, is undoubtedly important for encouraging the owls to remain in the area. Wildlife managers and city planners must be aware, however, that Great Horned Owls also may prey on pets, such as dogs and cats, and they may want to educate local residents about how to keep their pets safe from owl attacks. Further studies of factors that make a nest preferable to the birds, the owls' effects on prey populations, the effects of urban forestry programs on the owls' ecology, and the use of radio transmitters (Terman 1997) that allow observers to study the owls' activities at night would help us understand how to better manage for Great Horned Owls in urban settings.

Acknowledgments

We wish to thank Dr. Ronald A. Ryder, who offered much information about the owls and other birds. He always listened to our reports, gave us valuable comments on our manuscript, and encouraged us through the project. We also thank Kevin Cook, a local naturalist and writer, whose newspaper column, "Pathfinder" (*The Coloradoan*, March 1992), led us to the CSU owls and inspired this project. David A. Leatherman of the Colorado State Forest Service examined some owl pellets for us and often shared with us his observations of the owls. Dr. Dale F. Reed of the Colorado Division of Wildlife provided photographs and also shared his observations of the owls. Dr. Alan B. Franklin climbed trees to install artificial nests and provided valuable information about the owls. Brett Petersen, an alumnus of CSU's Department of Wildlife and Fisheries Biology, shared his findings during the chick adoption experiment. Gail Kratz of the RMRP provided information about the owls treated at the VTH. Cynthia Melcher helped us edit and revise our manuscript, and Dr. Max Terman kindly reviewed our manuscript for us.

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Juvenile Great Horned Owl
Colorado State University, Fort Collins, Colorado, 18 May 1993
by Dale Reed

Catherine and Joseph Ortega

ORNITHOLOGICAL RESEARCH IN COLORADO, PART I: FOCUS ON THE ORTEGAS

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This is the first in a series of papers that will bring to the attention of the Colorado Field Ornithologists the many fine research projects that are being conducted in Colorado. The idea for this series was conceived after Michael Carter, Executive Director of the Colorado Bird Observatory, made a plea for the academic community to become more involved with the *Journal of the Colorado Field Ornithologists*. In prior decades, the academic community was somewhat more involved than it has been in our present decade. Faced with both time constraints and questions of data ownership once reports have been published (many scientific journals will not consider a paper for publication if the data set has been published elsewhere), many researchers in more recent times have given little to no thought about disseminating information through the *Journal of the Colorado Field Ornithologists*. This is unfortunate for both the members of the Colorado Field Ornithologists and for the researchers themselves, as both would benefit from the association. However, through this series of papers, it is my goal to inform the readers of the *Journal of the Colorado Field Ornithologists* about the various research projects being conducted in Colorado, where to obtain more details on the

research, and a bit about the researchers themselves. Each paper will focus on a different researcher or team of researchers. I am beginning the series with focus on myself and my research partner, Dr. Joseph Ortega, not because I necessarily want to call attention to us, but because it will give you a better idea of who is writing this series.

I began my Colorado research in 1984, slogging my way through the cattail (*Typha latifolia* and *T. angustifolia*) marshes and flooded willow (*Salix* spp.) stands of Boulder County in pursuit of understanding the breeding ecology of Red-winged Blackbirds (*Agelaius phoeniceus*) and Yellow-headed Blackbirds (*Xanthocephalus xanthocephalus*). In particular, I was interested in how Red-winged Blackbirds are affected by Brown-headed Cowbird (*Molothrus ater*) parasitism, the mechanisms of their acceptance of parasitic eggs, and why Yellow-headed Blackbirds appear not to be parasitized by Brown-headed Cowbirds. In order to rule out the possibility that Yellow-headed Blackbirds only appear to be unparasitized because they eject cowbird eggs from their nests, and to rule out the possibility that they are somehow incapable of raising and fledging cowbirds, I cross-fostered cowbird eggs into their nests. I was able to determine that Yellow-headed Blackbirds, indeed, accept cowbird eggs along with their own and that they are unequivocally capable of rearing cowbirds, even though cowbirds fledge at roughly 60% the weight of Yellow-headed Blackbirds. I concluded that the dense colonial nesting of Yellow-headed Blackbirds (with many attentive adults in the colony at any given time), together with their large size, may be intimidating to cowbirds, particularly when there are many other more suitable hosts available. This study lasted three years and provided the primary focus of my doctoral dissertation.

During the course of this study, I became fascinated with the behavior and evolution of brood parasites, in general, and with the many ecological and, in particular, the ethical issues associated with cowbirds. My husband, who would soon become my partner in research as well, also got "hooked" on cowbirds. We headed for Santa Barbara, California, where he conducted his post-doctoral research on cowbird vocalizations with Dr. Steve Rothstein, a well-known name among those familiar with cowbird literature. We moved back to Colorado in 1990 and spent a year in Boulder, where I finished my doctoral program at the University of Colorado with Dr. Alexander Cruz, and where my husband did some more post-doctoral research on cowbird vocalizations and home range size with Dr. Cruz.

Concurrent with his research, my husband further explored my previous findings that cowbirds do not lay eggs in nests containing artificial cowbird eggs or in nests containing real cross-fostered cowbird eggs. Out of more than a hundred nests in which we added artificial cowbird eggs during the egg-laying period,

the rate of subsequent parasitism was significantly lower than nests in which we did not add artificial cowbird eggs. These findings are consistent with the natural distribution of cowbird eggs in this area; multiply parasitized nests (nests with more than one cowbird egg) are the exception rather than the rule in Colorado. Multiply parasitized nests are more common in other areas of the Brown-headed Cowbird's range, such as Missouri and Illinois. This finding is also interesting from a management perspective because it implies that some cowbird eggs that are removed from the nests of endangered or threatened species might be replaced by another cowbird. If an artificial cowbird egg does not interfere with incubation or hatching success of the host, natural cowbird eggs could be replaced with artificial eggs to prevent further parasitism.

In 1991, we moved to Durango where my husband accepted a teaching position at Fort Lewis College. The following summer, we started a cowbird banding program at the San Juan Basin Research Center, owned and operated by Colorado State University, and located approximately five miles south of Hesperus or 18 miles southwest of Durango. In addition to collecting valuable demographic data through this banding program, we have discovered some previously unknown facts about cowbirds. After banding more than a hundred juveniles, we were able to determine that previous methods of aging male cowbirds were not reliable; approximately 30% of our known second-year males would have been incorrectly aged as after-second-year individuals by former methods suggested by the Bird Banding Laboratory. After a few years of qualifying plumage characteristics of known second-year and known after-second-year males, we were able to develop more reliable aging methods. We were also surprised that both males and females return to their natal area in subsequent years, which is not only unusual among birds (often only birds of one gender return), but is also mysterious from the standpoint of brood parasitism. Because brood parasites are rarely raised with their siblings, if both sexes return to the same area to breed, recognition of close relatives and prevention of inbreeding may be problematic. I have not uncovered this mystery yet, but it is on my wish list of biological puzzles that need to be solved.

We have monitored over 500 nests of migratory songbirds at the San Juan Basin Research Center since 1992, and we have gathered some useful information regarding nesting ecology of various songbird species. Of particular interest and concern are the extremely high rates of parasitism (close to 100%) we observe on both Plumbeous Vireos (*Vireo plumbeus*) and Warbling Vireos (*Vireo gilvus*) in this area. Among parasitized nests of both vireo species, host success is very low because the vireo incubation period is typically four days longer than the cowbird incubation period of approximately 10 days. Therefore, the cowbird is usually three to five days old and fairly well developed when the vireos hatch; the vireos are unable to compete with the older, larger cowbird,

and the cowbird usually becomes the sole occupant of the nest. We have found several hosts, however, that appear to have more success in parasitized nests than vireos. For example, both Yellow Warblers (*Dendroica petechia*) and Chipping Sparrows (*Spizella passerina*) can raise their own along with cowbirds. We often have observed Yellow Warblers fledge two or three of their own along with a cowbird, even though they are considerably smaller than cowbirds. The relatively short incubation period of both these hosts undoubtedly boosts the chances of survival for the host nestlings as they hatch out more or less simultaneously with the parasites.

During the last several years, we also have performed various experiments using Japanese Quail (*Coturnix coturnix*) eggs in natural American Robin (*Turdus migratorius*) nests and in artificial nests to determine the predictability of predation patterns. Thus far, we have found little evidence for predictable patterns of predation in southwestern Colorado. We also have found that predation on quail eggs in artificial nests placed in trees at the same heights as natural American Robin nests does not reflect natural rates of predation among American Robins. These findings are important because management recommendations have been made based upon results from experimental predation studies that may or may not reflect the natural rates or patterns of predation. Because predation rates and patterns differ among areas, even on a local scale, investigators should validate the use of artificial nests for the particular area of study by comparing the predation rates and patterns with those of natural nests in the same area.

Patterns of cowbird parasitism may be more predictable than patterns of predation in terms of grazing patterns. During a preliminary study, we found that the rate of parasitism was significantly lower among nests in Gambel oak (*Quercus gambelli*) pastures that were ungrazed during the breeding season (7.7%) than equivalently structured oak pastures that were grazed at a low utilization (24%) and riparian pastures that were grazed at a moderate to moderately high utilization (27.9%). The oak pastures differed from the riparian pastures in several ways that may have affected cowbird activity. The density of nesting birds was lower in oak pastures than in riparian pastures. Nests also were considerably more difficult to find among oaks than in narrow-leaf cottonwoods (*Populus angustifolia*) and riverbirches (*Betula fontinalis*) that were common to the riparian zone. Oak leaves often were clumped together in such a way that a nest could be hidden from every vantage point; typically, this was not the case with nests in narrow-leaf cottonwoods and riverbirches. The low host density, together with well-concealed nests, in oak pastures may have been unattractive to cowbirds when pastures yielding higher rewards were readily available. However, cowbirds may have spent more time in the oak pastures grazed at a low utilization than in oak pastures that were ungrazed

during the breeding season, and they may have been able to locate host nests while foraging among cattle. It is important to conduct these studies because managers of public and private lands are actively seeking information that can lead to management recommendations to reduce intensity of cowbird parasitism.

This summer (1998), we will continue examining the effects of different grazing regimes on the nesting success of songbirds in Gambel oak pastures and riparian pastures. However, we will add three more pasture types. In all, the grazing regimes that we will be evaluating include oak and riparian pastures that are ungrazed during the breeding season, oak and riparian pastures grazed at a low utilization, and oak and riparian pastures grazed at a moderate to moderately high utilization. This upcoming research is being funded by the National Geographic Society and the National Fish and Wildlife Foundation.

During every year of our research here in La Plata County, we have been able to provide research opportunities for various individuals, mostly students at Fort Lewis College. Some of these students have gone on to other ornithological research positions, some have gone on to graduate school, and others have gone on to other professions but have remained enthusiastic birdwatchers. Many ornithological studies, particularly those that focus on avian nesting success at the landscape level, require a team of workers, and we could not be successful without our assistants. We are grateful for help from Susan Allerton, John Arnett, Stacia Backensto, Tom Kreykes, Florence Kittleman, Becky Merris, Jonathan Nardeli, Don Palmer, Cristin Rapp, Dawn Sekeyumptewa, Shawchi Vorisek, and Jessica Young.

In addition to my research in Colorado, I became so engaged with cowbirds in general that I decided to write a book on the topic. The book, *Cowbirds and Other Brood Parasites*, will be released this fall (1998) by the University of Arizona Press. For more information, please see www.uapress.arizona.edu.

Catherine Ortega is an Assistant Professor of Biology, and Joseph Ortega is an Associate Professor of Biology at Fort Lewis College. For further information on research conducted by Catherine and/or Joseph Ortega in Colorado, please refer to the following sources (reprints available upon request):

Ortega, C.P., J.C. Ortega, C.A. Rapp, S.A. Backensto. 1998. Validating the use of artificial nests in predation experiments. Journal of Wildlife Management 62:925-932.

Ortega, C.P. 1997. Social outcasts: Brown-headed Cowbirds are ingenious pests and a natural part of our ecosystem in Colorado. Colorado Outdoors 46(4):22-25.

Ortega, C.P., J.C. Ortega, C.A. Rapp, S. Deng, S.A. Backensto, and D. W. Palmer. 1997. Effect of research activity on the success of American robin nests. Journal of Wildlife Management 61:948-952.

Ortega, C.P., J.C. Ortega, S.A. Backensto, and C.A. Rapp. 1996. Improved methods for aging second-year and after-second-year male Brown-headed Cowbirds (*Molothrus ater*). Journal of Field Ornithology 67:542-548.

Ortega, C.P., J.C. Ortega, and A. Cruz. 1994. Potential use of artificial cowbird eggs as a management tool in deterring parasitism. Journal of Wildlife Management 58:488-492.

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Recent Ornithological Literature Pertaining to Colorado, No. 1

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This is the first of a new, regular feature in the *Journal of the Colorado Field Ornithologists*. The purpose of this feature is to cite recent ornithological literature that pertains to Colorado birds and/or which entails research conducted by Colorado ornithologists. A brief summary of the paper will accompany each citation. Initially, the citation format will be typical of most natural resource fields, although the authors' first names will be spelled out, journal names will be spelled out fully (as they are in the *Journal of the Colorado Field Ornithologists*), and paper titles will appear in bold-face type. If a CFO member publishes a paper on birds in other than the national ornithological journals, or if anyone knows of a paper regarding ornithology in Colorado that was published elsewhere, I would appreciate a reprint or a citation for the paper so that I may include it in this feature.

Bock, Carl E. 1997. **The role of ornithology in conservation of the American West.** Condor 99:1-6. Historically, birds have been an important part of conservation efforts due to their charisma, familiarity, and sensitivity to environmental conditions.

Chace, Jameson F., Alexander Cruz, and Alexander Cruz, Jr. 1997. **Nesting success of the Western Wood-Pewee in Colorado.** Western Birds 28:110-112. Nest-site and nesting success is reported for birds inhabiting a ponderosa pine habitat in Boulder County.

Knopf, Fritz L. 1997. **A closer look: Mountain Plover.** Birding 29:38-44. This is a brief update on the species' life history. Updates of conservation and management plans, as well as excellent photos of the plovers and their habitats, are included by the author.

Mabee, Todd J. 1997. **Using eggshell evidence to determine nest fate of shorebirds.** Wilson Bulletin 109:307-313. The status of eggshell fragments at the nests of three plover species (Snowy, Piping, and Killdeer) in southeastern Colorado revealed the fates of nests at least 90% of the time.

Plumpton, David L., and David E. Anderson. 1997. **Habitat use and time budgeting by wintering Ferruginous Hawks.** Condor 99:888-893. From 3 to 50 perches were used per day, and perching represented 84% of the birds' time-budgets during daylight-hours. Home ranges averaged 3.53

square kilometers. Extant prairie dog colonies characterized their winter habitats, and prairie dogs were their most important prey species. Studies were conducted in Adams and Weld counties.

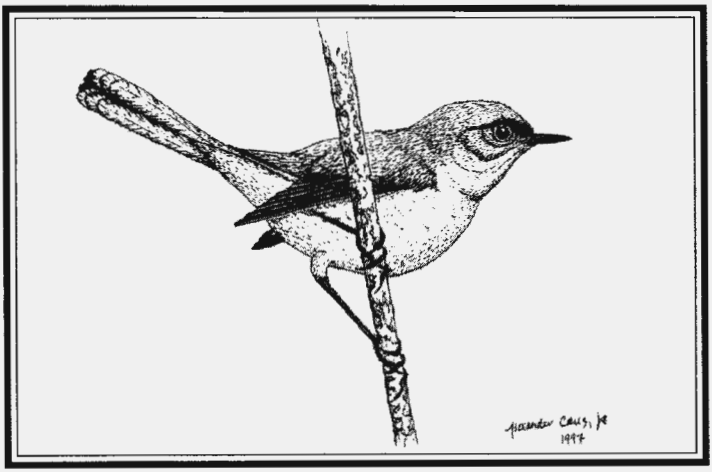
Sedgwick, James A. 1997. **Sequential cavity use in a cottonwood bottomland.** Condor 99:880-887. From 38.5 to 56% of nest cavities in cottonwood bottomlands along the South Platte River in Logan County were reused.

Vierling, Kerri T. 1997. **Habitat selection of Lewis's Woodpeckers in southeastern Colorado.** Wilson Bulletin 109:121-130. Riparian habitats are important, especially those with large, mature cottonwoods. Studies were conducted near Beulah and Rocky Ford.

Walsh, John J., and Carl E. Bock. 1997. **Likely occurrence of overlapping broods in the Rock Wren.** Western Birds 28:223-224. Evidence of overlapping broods for one pair of Rock Wrens in Boulder County was presented.

Marsh Wren -- Pen and Ink Sketch
by Joseph Rigli

Blue-gray Gnatcatcher -- Pen & Ink Sketch
November 1997
by Alexander Cruz, Jr.



Breeding Range Expansion of the Blue-Gray Gnatcatcher Along the Northern Colorado Front Range

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Introduction

The northern extent of the breeding range of the Blue-gray Gnatcatcher (*Polioptila caerula*) extends from northern California to southern Maine, but portions of the central and southern Great Plains, New Mexico, Wyoming, and northeastern and northcentral Colorado are excluded from the species' range (Ellison 1992). According to Andrews and Righter (1992), the Blue-gray Gnatcatcher is a "fairly common to common summer resident in foothills and mesas from Moffat County southward, and rare east to southwestern Grand County, and from Douglas County southward." Andrews and Righter also reported the Blue-gray Gnatcatcher as "rare to fairly common locally in the northeastern foothills from Jefferson County north to Larimer County (breeding confirmed or suspected at four sites), but did not provide any specific information. In this paper, we present further evidence indicating that the gnatcatcher is expanding its breeding range northward along the Front Range of Colorado.

Study Areas and Methods

Documentation of the distribution of Blue-gray Gnatcatchers is based on extensive review of the literature, communications with individuals knowledgeable of the avifauna, Colorado Breeding Bird Atlas Partnership data (1998), and field sampling.

Breeding Biology — As part of an on-going study of Brown-headed Cowbird (*Molothrus ater*)-host interactions in the Front Range in and near Boulder, Colorado (e.g., Chace and Cruz 1996, Chace et al. 1998), we examined the reproductive success of nesting passerines, including gnatcatchers. Study sites ranged from 1800 to 2400 meters in elevation and had a park-like appearance of open-canopy ponderosa pine (*Pinus ponderosa*). Sites contained scattered Douglas fir (*Pseudotsuga menziesii*) and an understory dominated by chokecherry (*Prunus virginiana*), wax currant (*Ribes cereum*), skunkbrush (*Rhus aromatica*), and various grasses.

Gnatcatcher nests were found during different stages of the nesting cycle and subsequently visited every three days. Care was taken to minimize disturbance and attraction of nest predators to the nest site (Ralph et al. 1995). The outcome of each nest was determined (e.g., predation, parasitism, and fledging). Nest appearance and other evidence (e.g., eggs missing/smashed, etc.) were used to determine whether nests were disturbed by predators.

Population densities — In May and June of 1996 and 1997, as part of a larger study on breeding birds (Berry 1997), we censused Blue-gray Gnatcatchers in foothills shrubland in Boulder County and the northern half of Jefferson County. We conducted 50-meter (radius), fixed-distance point counts of 10-minute duration (Ralph et al. 1995) at 84 points. Each year, three counts were conducted at each point between sunrise and 4.5 h after sunrise. Important shrub species included skunkbrush, mountain mahogany (*Cercocarpus montanus*), chokecherry, wild plum (*Prunus americana*), and hawthorn (*Crataegus* sp.). Grassland, shrub, and coniferous forest were the predominant landscape cover types surrounding the study plots.

Results

Historical Breeding Records for Colorado — We reviewed the breeding history of the Blue-gray Gnatcatcher in Colorado, and there is evidence that the species has expanded northward and has become increasingly abundant in the last 100 years. Cooke (1897) described the Blue-gray Gnatcatcher as a rare summer resident, breeding regularly only in southern Colorado and unknown as a breeding species north or west of El Paso County. Alexander (1937) noted that it is fairly common in the Pueblo region and that occasionally it occurs farther north. Niedrach and Rockwell (1939) described it as a rare straggler north to the Denver area. Sclater (1912) described the species as "... a rare

summer resident in the plains at low elevations up to 7000 feet." Sclater noted that the only definite breeding record was based on a nest found in Pueblo on 22 June 1897; the nest contained two young and a cowbird egg (also see Cooke 1897, Bailey and Neidrach 1965). Bailey and Niedrach (1965) noted that gnatcatchers breed from Canyon City (Fremont Co.) southward, "... being particularly numerous in the dry arroyos and brushy slopes in Montezuma and western Montrose Counties." They also noted that several nests had been located by Niedrach (e.g., May and June 1942) in the vicinity of Canyon City."

Point counts — Out of 59 species identified on our study plots during the two-year study in foothills shrubland in Boulder and Jefferson counties, the Blue-gray Gnatcatcher was the 8th most common species; we detected gnatcatchers on 45% of the plots (38 of 84) and on 21% of the counts (108 of 504). Blue-gray Gnatcatchers showed no significant habitat associations, as we found them in a variety of shrub habitats and landscape settings (shrub patches within a shrub mosaic, grassland, and coniferous habitats). Gnatcatchers were identified at the following locations on more than three point counts in May and June: Indian Lookout Mountain, Redhill Gulch, Marshall Lake, and Dowdy Draw (all Boulder County); and in the vicinity of Cherry Gulch, Jefferson County.

Breeding records — In 1993, 1996, 1997, and 1998 we found six nests and two groups of fledglings. The first nest was located in Lyons, Boulder County, on 21 June 1993 in a ponderosa pine within a shrubland community. On 31 May 1996, we found a nest containing eggs in foothills shrubland located on Trevarton Open Space, Boulder County. The nest contained chicks on 13 June, and it was empty on 30 June. In 1997, we found three gnatcatcher nests in ponderosa pine branches on Shanahan Ridge, 8 km south of Boulder. The first nest was found on 27 May 1997, approximately 1.1 meters from the trunk and 2.7 meters high; at that time the nest contents were unknown. On 5 June, the nest contained four eggs, however it was preyed upon on 12 June. We found the second nest on 12 June 1997 on a limb, about 1.5 meters from the trunk and 2.1 meters high. The second nest was being built a short distance from the nest we found on 27 May, probably by the same pair that attended the first nest. On 15 July, an empty nest was found 3.6 meters from the trunk and 4.5 meters high. Four eggs eventually hatched in this nest, but it was preyed upon early in the nestling stage. On 20 June 1997 along the Marshall Mesa and on 22 June 1997 along the Big Bluestem Trail, gnatcatcher fledglings were observed. On 17 May 1998, we observed a pair of gnatcatchers constructing a nest in a ponderosa pine located in a stand of pines west of Blue Bell Canyon. The gnatcatchers were highly agitated by the presence of a pair of Brown-headed Cowbirds in the vicinity. The gnatcatcher is a well-known host of the parasitic cowbird (Chace and Cruz 1996, Goguen and Matthews 1996).

In addition to our records of Blue-gray Gnatcatchers from the Front Range, there are three new records in Boulder County and two records in Douglas County. William Kaempfer (personal communication) found "distinctive pairs separated by a few hundred yards" in ponderosa pine mixed with mountain mahogany habitat in Rabbit Mountain, northeastern Boulder County. In 1997, Joe LaFleur (personal communication) found an active gnatcatcher nest one meter high in a small (1.2-meter) hawthorn, and Scott Severs (personal communication) observed another gnatcatcher pair that exhibited "breeding behavior," but the nest was not located; both nests were found along Coal Creek, southern Boulder County.

We received two accounts for Douglas County, one that described nesting of gnatcatchers every three of four years. The birds generally arrived the first week of May and stayed until late September or early October. The nests were in Gambel oak (*Quercus gambelii*) mixed with grassland habitat in northcentral Douglas County, and they were between 0.6 and 2.1 meters high (Ron Olson, personal communication). Ann Bonnell (personal communication) found a nest, 3.6 meters high, in a Gambel oak, and indicated that gnatcatchers nested annually at Roxborough State Park. We also received a 1986 account from Waterton Canyon, western Arapaho County, of a nest 1.5 meters high in Gambel oak, and a nest at Ken Caryl Ranch, Jefferson County, in 1985 (Ann Bonnell, personal communication).

Discussion

Current breeding status — The 1987-1995 data for the Colorado Breeding Bird Atlas (Colorado Bird Atlas Partnership 1998), along with our information overlaid upon the most recent range map for Blue-gray Gnatcatchers (Andrews and Righter 1992) further confirms that the Blue-gray Gnatcatcher is expanding its breeding-range distribution along the Colorado Front Range (Figure 1), nesting in ponderosa pine and foothills shrubland. It appears unlikely that the Blue-Gray Gnatcatcher was overlooked as a breeding species in the past, as the avifauna of Colorado's Front Range has been studied extensively.

The Blue-gray Gnatcatcher has also been expanding in other areas of Colorado. Colorado Breeding Bird Atlas data (Colorado Bird Atlas Partnership 1998) contain new breeding records of gnatcatchers (probable and confirmed), particularly from western and southeastern Colorado (Las Animas, Otero, and Bent counties) (Figure 1). Prior to the Colorado Breeding Bird Atlas project, the breeding distribution of some bird species--including the Blue-gray Gnatcatcher--in western and southeastern Colorado were poorly known, and, while records for some of those locales may represent actual expansion in the range, the possibility that the gnatcatcher was overlooked in the past cannot be ruled out.

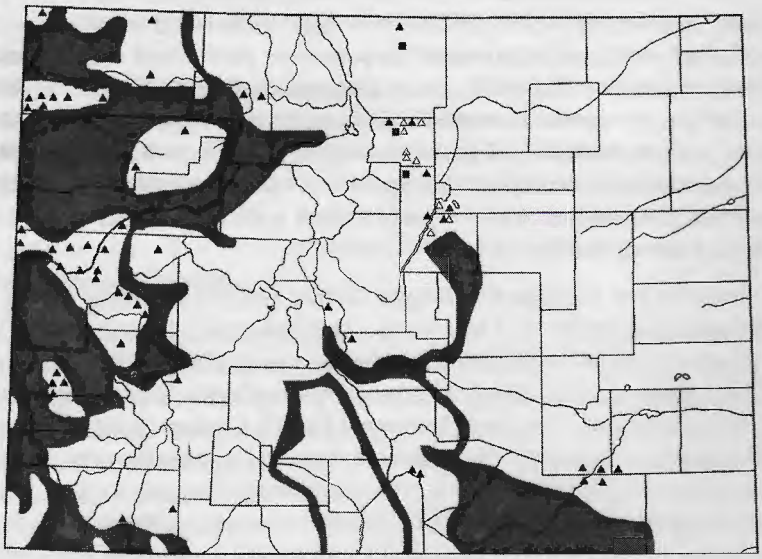

Figure 1. The current breeding distribution of the Blue-gray Gnatcatcher in Colorado. The dark shading and black squares represent the breeding distribution described in Andrews and Righter (1992), and the black triangles represent probable and confirmed breeding records from the Colorado Breeding Bird Atlas data, 1987 - 1995 (Colorado Bird Atlas Partnership 1998). Open triangles represent breeding records based on our field work and personal communications.

The Blue-gray Gnatcatcher has also been expanding its breeding range northward in other areas, particularly during the last 40 years (Ellison 1992). The gnatcatcher has expanded its range into Idaho, southwestern Wyoming, southeastern South Dakota, southeastern Minnesota, central Wisconsin, northern lower peninsula Michigan, central and eastern Pennsylvania, northern New Jersey, New York, much of New England to southwestern Maine, southcentral Ontario, southwestern Quebec, and Manitoba (Findholt 1983; Ellison 1991, 1992, 1993; Skadsen 1992). The range extension in the east coincided with warmer-than-average winter temperatures in the southeastern United States (Ellison 1991).

Northward expansion of the Blue-Gray Gnatcatcher along the Front Range may be related to an increase in foothills shrubland habitat and ponderosa pine as a result of fire suppression (Veblen and Lorenz 1991). Veblen and Lorenz

note that, prior to about 1920, fire was of widespread importance in the Front Range. They note that most of the montane zone had been burned (either intentionally or accidentally) during the 1800s. Fires were particularly frequent and extensive in the montane zone of Boulder County, where today we find primarily young, post-fire stands of ponderosa pine and Douglas fir. The expansion and increase in density of ponderosa pine has been "particularly dramatic" in the lower foothills (Veblen and Lorenz 1986).

Acknowledgments

We thank Hugh E. Kingery and the many volunteers for generously providing Blue-gray Gnatcatcher records from the Colorado Breeding Bird Atlas project. Additional records were provided by Ann Bonnell, William Kaempfer, Joe LaFleur, Ric Olson, Scott Severs, and Alan Versaw. Cathy Bechtoldt assisted with field work. The project received financial support from the City of Boulder Open Space and Mountain Parks, Boulder County Nature Association, and the Graduate School of the University of Colorado. Clint Miller, Mark Gersham, and Cary Richardson (City of Boulder Open Space), Michael Sanders (Boulder County Parks and Open Space), Ann Armstrong and Steve Armstead (City of Boulder Mountain Parks), and Frank Kunze (Jefferson County Open Space) all provided advice and assistance. We thank Cynthia Melcher for her editorial comments.

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REPORT OF THE COLORADO BIRD RECORDS COMMITTEE: 1996 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 1996. There were 114 records of 78 species submitted by 63 observers that were evaluated by the RC. Six of the reports were accompanied by photographs, one with a videotape and 12 with sketches or field drawings. Of the 114 records, 111 received definitive votes by the RC through initial circulation and re-circulation and are presented here. Three records, 25-96-39 Common Ground-Dove, 51-96-65 White-eyed Vireo, and 19-86-40 Short-billed Dowitcher (see Bunn 1988) received non-definitive votes. As per RC by-laws, these records will be discussed and resolved at a meeting of the Committee, and results will be published in a subsequent RC report. Eighty-nine of the 111 definitive records were accepted, for an acceptance rate of 80%. The majority of records are from birds observed in 1996. Per RC bylaws, all "accepted" records received 7-0 (all seven RC members voted to accept) or 6-1 votes to accept either on the initial circulation or 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 re-circulation.

Two species, Eurasian Collared-Dove and Buff-breasted Flycatcher, are added to the Colorado state list as a result of the 1996 circulation and are described in this report. Other potential first state records (Mute Swan, Wilson's Plover, Heermann's Gull, Great Gray Owl, Black-tailed Gnatcatcher, Black-capped Vireo, and Hoary Redpoll) were not accepted and are described in this report as well. The Colorado state list stands at 460 species following these actions and with the additions of Blue-headed Vireo (*Vireo solitarius*) and Cassin's Vireo (*Vireo cassinii*) due to the split of Solitary Vireo (previously *Vireo solitarius*), described in the 41st Supplement to the American Ornithologists' Union *Check-list of North American Birds* (Janos 1997b). Highlights of this report include one Brown Pelican, four Glossy Ibises, one Long-billed Murrelet, one Hermit Warbler, one Louisiana Waterthrush, one Connecticut Warbler, and one Pyrrhuloxia.

Committee News

The Committee is in the process of computerizing the log of records submitted to the RC. This log will be made available to anyone wishing to access the

historical RC data. A new field checklist of the birds of Colorado is being published with the assistance of the American Birding Association. A minor procedural change was made to the RC by-laws in the accessioning of records and will be described in the next report.

Records of interest currently under review by the RC for 1997 include Brown Pelican, Glossy Ibis, Tufted Duck (2; potential first and second state records), Crested Caracara (potential first state record), Royal Tern (potential first state record), Arctic Tern (2), Eurasian Collared-Dove (new location), Chuck-Will's Widow (potential first state record), Dusky-capped Flycatcher (2), Tropical Kingbird (potential first state record), and Cerulean Warbler.

The committee's membership at the close of the 1997 was: Peter Gent, Mark Janos (chairman), Joey Kellner, Bill Lisowsky, Bob Righter, Dick Schottler, and Vic Zerbi. With the endorsement of the RC, Joe Mammoser of Fort Collins and John Rawinski of Monte Vista were appointed by the Board of the Colorado Field Ornithologists at the end of 1997 to fill Peter Gent's and Dick Schottler's expired terms on the RC. John and Joe will serve from 1998-2000. Bob Righter agreed to extend his service for one additional year and his term will expire at the end of 1998.

Committee Functions

All records reviewed by the RC are archived at the Denver Museum of Natural History, 2001 Colorado Boulevard, Denver, Colorado 80205-5798. All written documentation, photographs, videotapes, and sound recordings are housed at the Museum and are available for public review. The committee solicits documentation for all rare birds, including species on its review list (Janos 1998), unusual occurrences by date or location, and species previously unrecorded in Colorado. Please send documentation of rare birds to either: Mark Janos, CFO RC Chair, 10 Sedum Ct., Pueblo, CO 81001; or to the Colorado Field Ornithologists Records Committee, c/o Zoological Collection, Denver Museum of Natural History, 2001 Colorado Boulevard, Denver, Colorado 80205-5798.

Report Format

This report is divided into three parts. Part 1 consists of records that were accepted, and Parts 2 and 3 consist of records that were not accepted. Species are listed in current A.O.U. taxonomic order. Within a given species account, records are listed chronologically by the first date of occurrence. Included with each accepted record is the bird's location (including county), date(s) of occurrence, the initials of observers who submitted reports, and the record's accession number. The initials of the reporting observer who discovered the bird are underlined if we had that information. The date or span of dates during which the bird(s) was seen follow the submitted record date(s). Records

are sight records unless otherwise noted. An asterisk (*) prior to a species' name indicates that it is not currently on the RC's review list. For species with 15 or fewer records in Colorado, the number in parentheses following the species' name is the number of records accepted by the RC through this reporting period.

Abbreviations used in the report

Co. and Cos. (County and Counties); CP (City Park); L. (Lake); Colorado Field Ornithologists (CFO); DFO (Denver Field Ornithologists); NP (National Park); NWR (National Wildlife Refuge); R. (River); Res. (Reservoir); SP (State Park); SWA (State Wildlife Area).

PART 1: RECORDS ACCEPTED

RED-THROATED LOON (*Gavia stellata*). A juvenile bird was at L. Holbrook (Otero Co.) 24 Nov 1996 (MJ; 1-96-1).

***PACIFIC LOON** (*Gavia pacifica*). A basic-plumaged adult was at Green Mountain Res. (Summit Co.) on 23 Oct 1996 (KP; 1-96-2). This species is not on the CFO review list but this bird was found at 7947 feet in altitude, which is high for the species.

YELLOW-BILLED LOON (*Gavia adamsii*) (11). A juvenile bird was at Rawhide Res. (Larimer Co.) on 3 Jan 1991 (MRo; 1-96-3).

RED-NECKED GREBE (*Podiceps grisegena*). An adult in breeding plumage was described from L. Cheraw (Otero Co.) on 26 May 1996 (MJ; 2-96-4).

BROWN PELICAN (*Pelecanus occidentalis*) (9). An immature bird was observed at Prewitt Res. (Washington Co.) on 21 August 1996 (JK; 3-96-5).

YELLOW-CROWNED NIGHT-HERON (*Nyctanassa violacea*). A sub-adult bird was observed by many observers during a DFO field trip at Bonny Res. (Yuma Co.) on 19 May 1996 (BR; 5-96-6).

GLOSSY IBIS (*Plegadis falcinellus*) (11). There were four accepted records in 1996, following three accepted records in 1995. In Colorado, there have been 11 accepted records for this species, seven of which occurred in the 1995-1996 period. A single, breeding-plumaged bird was at Barr L. (Adams Co.) on May 3-4, 1996 (JT; 7-96-8). Another breeding-plumaged adult was near Boone (Pueblo Co.) on 4 May 1996 (MJ; 7-96-9). Janos found another adult on 20 May 1996 at Nee Noshe Res. in Kiowa Co. (MJ; 7-96-10). The last 1996 record was a breeding-plumaged adult near Sterling (Logan Co.) on 27 May 1996 (DL, JM; sketch; 7-96-7).

BRANT (*Branta bernicla; nigricans* group) (12). One "Black" Brant adult was at Barr L. (Adams Co.) on 28 Oct 1996 (JRe; sketches; 8-96-13).

***SURF SCOTER** (*Melanitta perspicillata*). An adult female Surf Scoter was near Vineland (Pueblo Co.) on 5 Jun 1988 (VT; 8-96-14). This species is no longer on the Colorado state review list but the unusual date prompted circulation of this record.

***PIPING PLOVER** (*Charadrius melodus*). A breeding-plumaged male was at Franz L. (Chaffee Co.) on 17 May 1986 (RA; 18-86-45) (see Bunn 1988).

RED PHALAROPE (*Phalaropus fulicaria*). Two winter-plumaged adults were discovered at Duck L. (Larimer Co.)on 22-25 Oct 1996 (BL, PLi, JM; 21-96-17).

POMARINE JAEGER (*Stercorarius pomarinus*) (15). This well-studied juvenile was present at Cherry Creek Res. (Arapahoe Co.) in mid-November. Only one report (19 Nov 1996) was received and it was accompanied by an excellent videotape. Although variously reported as a Parasitic or Pomarine Jaeger at the time of observation, the videotape supported the identification of Pomarine and allowed the RC members to vote to accept (JV; videotape; 22-96-18).

LONG-TAILED JAEGER (*Stercorarius longicaudus*) (6). This adult, accessioned as record number 22-96-20, was observed by RO at Milton Res. (Weld Co.) on 4 and 6 Sep 1995. There was an adult at Barr L. (Adams Co.) on 10-14 Sep 1995 that was previously accepted as record number 22-95-35 (Janos 1997a). Most committee members felt that these two records pertained to the same individual, thus this report will be added to the previously mentioned report, and together they will be accessioned as 22-95-35. There are still 6 accepted records for Colorado.

LITTLE GULL (*Larus minutus*) (13). There were two accepted records in the 1996 batch. The first was from 6 Oct 1988 at Union Res. (Weld Co.). The bird was a winter-plumaged adult (DL; 23-96-23). The second record was submitted by Paul Lehman and Shawneen Finnegan; the bird was in worn, first-summer plumage and occurred at Walden Res. (Jackson Co.) on 14 Jun 1996 (SF, PL; photos; field sketches; 23-96-22).

MEW GULL (*Larus canus*) (13). A winter-plumaged adult was at Cherry Creek Res. (Arapahoe Co.) on 2 Nov 1996 (JRe; 23-96-25).

***GLAUCOUS GULL** (*Larus hyperboreus*). A faded, first- or second-winter bird was present at Highline L. (Mesa Co.) on 4 Nov 1996 (RL; 23-96-26). There may be only one previously documented record from the West Slope.

GREAT BLACK-BACKED GULL (*Larus marinus*) (13). The only record submitted was for the Pueblo Res. (Pueblo Co.) bird, which appeared for the fifth consecutive winter from 21-31 Dec 1996 (and beyond) (MJ; 23-96-27).

BLACK-LEGGED KITTIWAKE (*Rissa tridactyla*). There were four accepted records for 1996: an immature bird at Douglas Res. (Larimer Co.) on 23 and 27 Nov 1996 (BL; 23-96-29); an immature at Long Pond (Larimer Co.) on 24 Nov 1996 (TL; 23-96-30); an immature at Union Res. (Weld Co.) on 28 Nov 1996 (TL; 23-96-31); and an immature seen during a DFO field trip on 14 Dec 1996 at Pueblo Res. in Pueblo Co. (MJ; 23-96-32).

LONG-BILLED MURRELET (*Brachyramphus perdix*) (2). A brief visit by this individual was one of the highlights of Colorado birding in 1996. Like the Ancient Murrelet that appeared in Colorado in 1995, this bird was a "one-day wonder;" also like the 1995 bird, this one was discovered at Chatfield Res. by Joey Kellner. The single report described a winter-plumaged adult at Chatfield Res. (Jefferson Co.) on 2 Nov 1996 (JK; field sketches; 24-96-33). The detailed description included: a lack of white lores, white sides to the breast, a pale patch at the rear on each side of the head, and a straight border between the black face and white neck. Thus, like other inland, North American records, this record pertains to Long-billed Murrelet (*B. perdix*), not Marbled Murrelet (*B. marmoratus*) (see Janos 1997b).

EURASIAN COLLARED-DOVE (*Streptopelia decaocto*) (1). This report adds Eurasian Collared-Dove to the Colorado state list. A colony of at least 11 birds is living and breeding near Rocky Ford (Otero Co.). Reported dates were from 11 July - 7 Dec 1996 (PG, MJ; photo; 25-96-34), although apparently local residents have been aware of this colony since 1995. These records definitely pertain to Eurasian Collared-Dove and not Ringed Turtle-Dove. The birds are wary, unbanded, and free-flying. Inquiries have not revealed anyone breeding or keeping Eurasian Collared-Doves in the local area. In contrast to the Ringed Turtle-Dove, this species is rarely kept in captivity and apparently there has been no legal importation of collared-doves into the United States for more than 30 years. Eurasian Collared-Dove has undergone an explosive expansion of its range in this century. It colonized Europe and Great Britain in the last 65 years, and it reached Iceland in 1971. Although it is not known for sure how it reached the Bahama Islands, it was present there in 1975. It had colonized Florida, apparently through natural means, by the mid-1980s, and it has appeared sporadically in locations north and west of its known range in Florida during the last 12 years. The species' natural direction of expansion has been westward and northward. Besides Colorado, it has recently occurred in Tennessee, Louisiana, Texas, Oklahoma, and Iowa. The species' typical pattern of expansion has been to "hop-scotch" westward quite suddenly over several hundred miles and then "back-fill" the area in between for several years before hop-scotching westward again. (For more information on this species' expansion and identification see Blackshaw 1988, Smith 1987, and White 1986). The recent appearance in Colorado fits with the hop-scotching

pattern. Although wild origin is very difficult to "prove," this species' occurrence is very likely due to natural expansion rather than as a result of caged birds escaping into the wild. As of this writing (June 1998), the colony near Rocky Ford is persisting. The RC has heard rumors about another Eurasian Collared-Dove in the Walsh area (Baca Co.) that pre-dates this 1996 report, and of a bird seen in the Greeley area (Weld Co.) on 30 Dec 1995 (Himmel 1996). In addition, two birds were reportedly photographed by a commercial birding-tour group in Campo (Baca Co.) in March 1997 and seen again there in May 1998, and a bird(s) was reported in Lamar (Prowers Co.) the first week of May 1997 (V. Zerbi, personal communication). Finally, a bird was reported from Holly (Prowers Co.) in May 1998. Unfortunately, the RC has not yet received any written reports of these occurrences. A single report from the Colorado Front Range in 1997 is currently in circulation for RC review.

WHITE-WINGED DOVE (*Zenaida asiatica*). There was a flurry of accepted records of this species in 1996: a single bird at a Pueblo West (Pueblo Co.) backyard on 17 May 1996 (MJ; 25-96-36); another singleton at a feeder in Monte Vista (Rio Grande Co.) on 26 May 1996 (LC; 25-96-37); and one bird "in the wild" at Chatfield Res. (Jefferson Co.) on 23 Oct 1996 (JK; 25-96-38).

BLUE-THROATED HUMMINGBIRD (*Lampornis clemenciae*) (11). This report was of a single male that was seen briefly at a feeder in Colorado Springs (El Paso Co.) on 16 Jun 1996 (MH; 31-96-42).

ALDER FLYCATCHER (*Empidonax alnorum*) (10). A single bird was seen and heard singing in a brushy area near Waterton (Jefferson Co.) on 25 June, 1996 (DS; 34-96-44).

***LEAST FLYCATCHER** (*Empidonax minimus*). A single bird -- singing incessantly -- was described from Brush Creek valley, about five miles southeast of Eagle (Eagle Co.) on 19 Jun 1996 (JMe; 34-96-45). Although this species is not on the RC's current review list, this species' occurrence in the mountains was unusual.

BUFF-BREASTED FLYCATCHER (*Empidonax fulvifrons*) (1). This record adds Buff-breasted Flycatcher to the Colorado state list. Three observers saw a single bird singing and calling during migration (Prather 1992). The bird was at Hannah Ranch SWA (El Paso Co.) on 19 May 1991 (JC, BPr, JP; 34-91-47) (see Nelson 1993). The committee solicited reviews and received brief comments by Will Russell and Dave Stejskal of Arizona. Identification of Empids outside of their range in migration is always risky. Buff-breasted Flycatcher is fairly distinctive however, and the observers clearly described the small size, short tail, and very bright buff underparts. The bird sang a three-note "chicky-whew" song. Prior to 1920, this species bred more commonly in southern and even central Arizona (Monson and Phillips 1960).

Although there is no clear pattern of vagrancy, the bird was seen during a period of strong southerly winds.

BLACK PHOEBE (*Sayornis nigricans*) (15). An adult feeding a fledgling was discovered along the San Miguel R. (Montrose Co.) on 18 Jul 1996 (TL; 34-96-46). A single bird was suspected of breeding along the Rio Grande R. in Conjeos and Costilla Cos. (HK, UK; 34-96-47).

***EASTERN PHOEBE** (*Sayornis phoebe*). This record was of a single adult near Colbran (Mesa Co.) on 20 Oct 1996 (RL, KP; sketches; 34-96-48). The unusual date and location of this record prompted review.

SCISSOR-TAILED FLYCATCHER (*Tyrannus forficatus*) (5). A single adult was near Colorado City (Pueblo Co.) on 13 May 1996 (DSi; sketch; 34-96-49). An adult male was observed during an October "big day" attempt near Las Animas (Bent Co.) on 5 Oct 1996 (AV; 34-96-50).

***PURPLE MARTIN** (*Progne subis*). A female was in an unusual location at Jumbo Res. (Sedgwick Co.) on 27 May 1996 (DL; 36-96-51).

CAROLINA WREN (*Thryothorus ludovicianus*). A singing adult found in a Denver backyard (Denver Co.) on 14 and 16 Apr 1996 yields yet another urban Denver record (HK, UK, WW; 42-96-52).

***WINTER WREN** (*Troglodytes troglodytes*). A single bird was found on the unusual date of 21 Aug 1996 near Sanford in Conejos Co. (PSS; 42-96-53).

SEDGE WREN (*Cistothorus platensis*) (14). A single, migrant bird was in the wet, weedy edge of John Martin Res. marsh (Bent Co.) on 2 Nov 1996 (MJ; 42-96-54). Another bird was seen along the edge of a cattail marsh at Valco Ponds (Pueblo Co.) on 12 Dec 1996 (KS; 42-96-55).

GRAY-CHEEKED THRUSH (*Catharus minimus*). There were four accepted records of this species for 1996. The first was a single bird on 27 Apr 1996 at L. Henry in Crowley Co. (MJ; 44-96-56). Another single bird was at Lamar CP (Prowers Co.) on 28 Apr 1996 (MJ; 44-96-57). A third bird was behind Lamar Community College along Willow Creek (Prowers Co.) on 12 May 1996 (MJ; 44-96-59). The final record was a single bird near Highway 71 in Lincoln Co. on 27 May 1996 (CW; 44-96-60). RC members did not feel that these birds could have been Bicknell's Thrushes (*C. bicknelli*) (see McLaren 1995).

VARIED THRUSH (*Ixoreus naevius*). An adult was in a suburban backyard in Pueblo (Pueblo Co.) on the very early date of 11 Oct 1996 (MJ; 44-96-107).

***CURVE-BILLED THRASHER** (*Toxostoma curvirostre*). A single bird was in an unusual location -- Bonny Res. (Yuma Co.) -- on 12 Aug 1996 (AV; 43-96-62).

WHITE-EYED VIREO (*Vireo griseus*). An adult was at Fountain Creek Regional Park (El Paso Co.) on 10-13 May 1996 (SB, BM; sketch; 51-96-64).

YELLOW-THROATED VIREO (*Vireo flavifrons*). An adult was found during migration at Wagon Wheel Campground, Bonny Res. (Yuma Co.), on 17 May 1996 (BL; 51-96-67). A singing male was at Fountain Creek Regional Park (El Paso Co.) on 23-25 May 1996 (BM; 51-96-68).

PHILADELPHIA VIREO (*Vireo philadelphicus*). A singing bird was found along the Poudre R. in Fort Collins (Larimer Co.) on 2 Jun 1996 (BL, DL; 51-96-69). A fall bird was seen at Valco Ponds (Pueblo Co.) on 14 Sep 1996 (MJ; 51-96-70).

BLUE-WINGED WARBLER (*Vermivora pinus*). An adult was in Cottonwood Canyon along the Baca/Las Animas county line west of Campo on 4 May 1996 (JR; 52-96-71). An adult male was at Bonny Res. (Yuma Co.) on 10 May 1996 (JT; 52-96-72).

HERMIT WARBLER (*Dendroica occidentalis*) (9). Two lucky observers found a first-year male in a grove at Fort Lyon Wildlife Easement (Bent Co.) on 17 May 1996 (BP; 52-96-73).

BLACKBURNIAN WARBLER (*Dendroica fusca*). An adult female was in Grandview Cemetery (Larimer Co.) on 28-29 Oct 1988 (DL; 52-96-74). A singing male was in the grove at L. Henry (Crowley Co.) on 4-5 May 1996 (MJ; 52-96-75).

***PALM WARBLER** (*Dendroica palmarum*). An adult found two miles south of Monte Vista (Rio Grande Co.) on 10-11 May 1996 was in an unusual location (JR; 52-96-76).

PROTHONOTARY WARBLER (*Protonotaria citrea*). A male was at Valco Ponds (Pueblo Co.) on 6-7 May 1996 (BP; 52-96-77). Another male was at Monte Vista NWR (Rio Grande Co.) on 25 May 1996 (TL; 52-96-78). A third male was in Greenwood Village (Arapahoe Co.) From 29 Sep - 16 Oct 1996 (DQ; 52-96-79).

WORM-EATING WARBLER (*Helmitheros vermivorus*). One was at Cottonwood Creek west of Campo on the Baca/Las Animas county line on 4 May 1996 (LR; 52-96-80). A single bird was along Willow Creek behind the Lamar Community College in Lamar (Prowers Co.) on 5 May 1996 (MJ; 52-96-81). An adult bird was at the Last Chance rest stop (Washington Co.) on 17 May 1996 (BL; 52-96-82). Yet another bird was found at Wagon Wheel campground at Bonny Res. (Yuma Co.) on 17 May 1996 (BL; 52-96-108).

***OVENBIRD** (*Seiurus aurocapillus*). A single bird was in Kremmling (Grand Co.) on 29 Oct and 4 Nov 1995 -- an unusual location on an unusual date (NB; photos; 52-96-83).

LOUISIANA WATERTHRUSH (*Seiurus motacilla*) (4). A well-described bird was in a woodland north of Prewitt Res. (Washington Co.) on 17 May 1996 (DL; sketch; 52-96-84).

KENTUCKY WARBLER (*Oporornis formosus*). An adult male was found in a wood lot at Flagler Res. (Kit Carson Co.) on 7 May 1996 (BS; 52-96-85). An adult male was in Rocky Mountain NP (Larimer Co.) on 11-12 Jun 1996 (CM; 52-96-86).

CONNECTICUT WARBLER (*Oporornis agilis*) (6). A well-described bird was at Tamarack Ranch SWA (Logan Co.) on 27 May 1996 (DL, JM; 52-96-87).

MOURNING WARBLER (*Oporornis philadelphia*) (13). A female was on private land northwest of Kit Carson (Cheyenne Co.) on 1 Jun 1990 (BR; 52-96-88). A male was at the Last Chance rest stop (Washington Co.) on 16-19 May 1996 (BP; 52-96-89), and a female also appeared at the Last Chance rest stop (Washington Co.) on 27 May 1996 (CW; 52-96-90).

***MACGILLIVRAY'S WARBLER** (*Oporornis tolmiei*). A very rare winter occurrence of this species was documented when a female appeared below the dam at Pueblo Res. (Pueblo Co.) on 13-27 Dec 1996 (BP; 52-96-91).

***HOODED WARBLER** (*Wilsonia citrina*). Apparently a first record for the West Slope, a female occurred at Tabeguache Basin northeast of Nucla (Montrose Co.) on 8 Sep 1996,(RL; 52-96-92).

***YELLOW-BREASTED CHAT** (*Icteria virens*). A male was seen in "mid to late" Nov 1995 in Fort Collins (Larimer Co.) (JH; photos; 52-96-95). The record was reviewed because of the late date.

SCARLET TANAGER (*Piranga olivacea*). An immature male showed up at a feeder in Highlands Ranch (Douglas Co.) on 30 Oct 1996 (LB; 55-96-96).

PYRRHULOXIA (*Cardinalis sinuatus*) (2). The second record of this species for Colorado was a well-seen male in a backyard near Grant (Park Co.) on 12-16 Aug 1996 (PG, DS; photo; 56-96-97). This bird was first noted in July 1996 and was present for much of the summer and fall, although the records submitted only included the August dates. The bird was seen by many observers over its lengthy stay (Kingery 1997). The bird occurred in a rural area at 9300 feet elevation in the spruce/fir zone!

PAINTED BUNTING (*Passerina ciris*). A bird in female plumage was seen briefly at the Fort Lyon Wildlife Easement (Bent Co.) on 12 May 1996 (MJ; 56-96-98).

***GRASSHOPPER SPARROW** (*Ammodramus savannarum*). Two birds were observed in Eagle (Eagle Co.), an unusual location for this species, on 23-24 Oct 1996 (JMe; sketch; 56-96-100).

GOLDEN-CROWNED SPARROW (*Zonotrichia atricapilla*). One was in the Hallam L. Nature Preserve at the Aspen Center for Environmental Studies (Pitkin Co.) on 22 Dec 1996 - 1 Mar 1997 (DA; 56-96-101).

***BOBOLINK** (*Dolichonyx oryzivorus*). A male in breeding plumage was near Jaroso (Costilla Co.), an unusual location for the species, on 15 May 1996 (LR; 54-96-102).

***SCOTT'S ORIOLE** (*Icterus parisorum*). A male in breeding plumage was in the Piñon Canyon maneuver site (Las Animas Co.) on 22 May 1996 (BM; 54-96-103). This site is far from the species' known breeding sites on the West Slope, although the habitat is juniper woodland, which is typical for the known breeding sites.

PURPLE FINCH (*Carpodacus purpureus*). A female was at a feeder in Rocky Ford (Otero Co.) on 15 Dec 1996 (MJ; 54-96-104).

***LESSER GOLDFINCH** (*Carduelis psaltria*). Two female-plumaged birds were found in Colorado Springs (El Paso Co.) on 21 Dec 1996, which is very late in the year (AV; 56-96-106).

PART 2: RECORDS NOT ACCEPTED - IDENTIFICATION QUESTIONABLE

TRUMPETER SWAN (*Cygnus buccinator*). This record of three adults near DeBeque (Mesa Co.) on 30 Jan 1996 (sketch; 8-96-11) was not accepted by a 2-5 vote. This species continues to be problematic for committee members to consider because so many of the field marks are subjective, observation distances are often long range, and observations are frequently of lone birds or single-species flocks without Tundra Swans for comparison.

GYRFALCON (*Falco rusticolus*). RC members felt that the description of this single, immature gray-morph bird near Nunn (Weld Co.) on 11 Nov 1996 was too brief; it was not accepted by a 1-6 vote (9-96-15).

WILSON'S PLOVER (*Charadrius wilsonia*). A single observer submitted a record of a male in breeding plumage at Thomas Res. near Mead (Weld Co.) on 11 May 1996. The description was very brief and was not accepted by a 1-6 vote. This was a potential first record for Colorado (18-96-16).

PARASITIC JAEGER (*Stercorarius parasiticus*). RC members felt that this individual was the same juvenile bird accepted as a Pomarine Jaeger (see record 22-96-18 above) . The bird was variously described as a Parasitic or Pomarine Jaeger while at Cherry Creek (Arapahoe Co.) for several days. Jaegers are difficult for land-locked birders to identify, frequently because the birds are juveniles. This individual was present on 20 and 25 Nov 1996. It was not accepted by a 1-6 vote (22-96-19).

LITTLE GULL (*Larus minutus*). This first-winter bird, observed at Cherry Creek Res. (Arapahoe Co.) on 29 Apr 1996, was not accepted by a 2-5 vote (23-96-21). RC members felt that the documentation was too brief.

HEERMANN'S GULL (*Larus heermanni*). A single bird was reported at Weber Res. (Mancos Co.) on 2 Jul 1989. All RC members felt that this single-observer report was too brief (23-96-24).

BLACK-LEGGED KITTIWAKE (*Rissa tridactyla*). This record of a first-winter bird occurred at Hamilton Res. (Larimer Co.) on 27 Nov 1988 was submitted as a drawing rather than a written report. The RC invites additional documentation or photos of this individual (sketch; 23-96-28). This record received a 3-4 vote and was not accepted.

WHITE-WINGED DOVE (*Zenaida asiatica*). A single bird reported on 11 Sep 1987 (exact location not specified) was not accepted due to the brevity of the report. The vote was 1-6 (25-96-35).

GREAT GRAY OWL (*Strix nebulosa*). RC members felt that this brief, single-observer report of a single bird in spruce/fir habitat on the east slope of Jones Peak at 10,500 feet elevation, approximately 20 miles southwest of Buena Vista (Chaffee Co.) on 27 Aug 1988, was too brief (28-96-40). It received a 1-6 vote and was not accepted.

LESSER NIGHTHAWK (*Chordeiles acutipennis*). This record consisted of a bird seen on 12 Jul 1987 (the report was submitted in 1996) by a single observer. The bird was below Black Rocks along the Colorado R., one mile from the Utah state line (Mesa Co.). This location may be one of the more likely areas to find this species in Colorado, and the description suggested a Lesser Nighthawk. The report was too brief, however, and the RC voted 1-6 not to accept this record (29-96-41).

ACORN WOODPECKER (*Melanerpes formicivorus*). This report was of four birds in the Durango area (Plata Co.) from 1994 - 1996 (31-96-43). Recent reports of this species in western Colorado have consisted of behavioral details and dates of occurrence, but unfortunately no field marks have been described. Thus the RC has not been able to accept these records. The RC urges observers

of Acorn Woodpeckers to submit records describing field marks and plumage details.

DUSKY-CAPPED FLYCATCHER (*Myiarchus tuberculifer*). This difficult, well-traveled record had been considered previously by the RC, but it remained unresolved as of 1995 (Bunn 1988). It was circulated again with this batch of records, this time with additional comments from a previous RC member and copies of the original drawings. The report described a non-singing adult bird on 28 Jun 1986 at Temple Canyon Park (Fremont Co.). Because Ash-throated Flycatcher had not been eliminated (particularly at that time of year and in piñon/juniper habitat), the RC voted 0-7 not to accept this record (34-86-37).

BLACK-TAILED GNATCATCHER (*Polioptila melanura*). This very difficult record has been circulated through the RC for several rounds (see Nelson 1993). It was a multiple-observer report of several birds seen in a semi-arid canyon with sagebrush and juniper habitat near Cameo (Mesa Co.) from 7-13 July 1991 (Dexter 1991). There was possible breeding. Although photographs accompanied the report, they were felt to be inconclusive or were thought to show a Blue-gray Gnatcatcher (*P. caerulea*). On the cover of the fall 1991 *C.F.O. Journal*, there was a photograph of a purported Black-tailed Gnatcatcher at the same site. The photo, however, seems to show the black forehead, lores, limited superciliary line, and eye ring of a Blue-gray Gnatcatcher. Expert opinions expressed by Will Russell and David Stejskal of Arizona were very helpful to the RC. In the end, most committee members felt that Blue-gray Gnatcatchers in active tail-molt, as these birds were, could not be ruled out (see Dunn and Garrett 1987; Pyle 1997). There was no re-nesting or subsequent confirmation of Black-tailed Gnatcatchers at the site, and Blue-gray Gnatcatchers were nesting in the area during the next year. As a final note, wandering among Black-tailed Gnatcatchers is very limited. The RC vote was 2-5 to not accept the record (photos; 45-91-53).

GRAY-CHEEKED THRUSH (*Catharus minimus*). The submitted description of a bird at Bonny Res. (Yuma Co.) on 10 May 1996 was felt to be too brief, and this record received a 1-6 vote to not accept (44-96-58).

VARIED THRUSH (*Ixoreus naevius*). A single adult reported east of Montrose (Gunnison Co.) on 20 July 1988 was described only briefly, and it was not accepted by a 3-4 vote (44-96-61).

SPRAGUE'S PIPIT (*Anthus spragueii*). A single bird was described with American Pipits (*Anthus rubescens*) at Lagerman Res. (Boulder Co.) on 4 May 1996 (46-96-63). The vote was 0-7. Observers are cautioned that the treatment of Sprague's Pipit in the Golden field guide (*A Guide to Field*

Identification: Birds of North America) is notoriously poor (Stallcup 1985); the illustration of this species looks like a Savannah Sparrow (*Passerculus sandwichensis*) and not at all like a Sprague's Pipit.

BLACK-CAPPED VIREO (*Vireo atricapillus*). This was an exciting, potential first record for Colorado. An adult male was reported by a single observer from behind the Lamar Community College along Willow Creek in Lamar (Prowers Co.) on 28 May 1996 (sketches; 51-96-66). Most committee members felt that the observation period and description were too brief for such an extreme rarity. Although unlikely, this species is a potential vagrant in Colorado.

CANADA WARBLER (*Wilsonia canadensis*). A male was reported at Bonny Res. (Yuma Co.) on 10 May 1996 (52-96-93). Both the view and the description were brief, and the RC voted 2-5 not to accept the record.

PAINTED REDSTART (*Myioborus pictus*). A single bird reported on 14 Sep 1996 near Tarryall Res. (Park Co.) was observed in flight only (52-96-94). The vote was 0-7 not to accept the record.

BAIRD'S SPARROW (*Ammodramus bairdii*). Six to 12 individuals were reported from the south shore of Upper Queens Res. (Kiowa Co.) on 20 Apr 1996 (56-96-99). This was a single-observer report and the observer described a variety of plumages, including a "basic" plumage. The vote was 0-7 to not accept the record.

HOARY REDPOLL (*Carduelis hornemanni*). A female at a feeder near Lyons (Boulder Co.) on 1-18 Jan 1996 was not well differentiated from Common Redpoll (*C. flammea*) (56-96-105).

PART 3: RECORDS NOT ACCEPTED - NATURAL OCCURRENCE QUESTIONABLE

MUTE SWAN (*Cygnus olor*). Two birds were reported: an adult on 8 Dec 1996 at Connected Lakes (Mesa Co.) and an immature on 9 Dec 1996 at Ridgway SP in Ouray Co. (8-96-12). These two individuals were treated as a single record, and the record was not accepted by a 0-7 vote. While it could not be proven that the birds were of unwild origin, there were no historical or geographical patterns of occurrence to connect these records with known occurrences. Thus, RC members were precluded from voting to accept the record and adding Mute Swan to the Colorado list. Even though this record is not accepted at this time, it is important to note that such records become archived whether they are "accepted" or not. If similar records are submitted in the future, they all become part of the historical pattern of occurrence that could lead to future acceptance of the species in Colorado. Recent examples of other "Not accepted --natural occurrence questionable" records in Colorado

include Red-backed Hawk, Baikal Teal, and Mandarin Duck. The question of natural origin often results in spirited debates within records committees, and final disposition is not always unanimous -- or popular.

Key to Contributors

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Corrections

The following corrections are made to "The Report of the Colorado Bird Records Committee (CBRC) for 1994," which appeared in vol. 31 (January 1997), pages 23-32 of the *Journal of the Colorado Field Ornithologists*:

a) on page 26: Short-billed Dowitcher (*Limnodromus griseus*). The correct date for record 19-94-28 is 14 Sep 1994, not 26 Sep 1994.

b) on page 27: Black-legged Kittiwake (*Rissa tridactyla*). Record 23-94-35 was the 17th (not 16th) accepted record at that time.

c) on page 28: Varied Thrush (*Ixoreus naevius*). Record 44-94-51 was the 26th (not >40th) accepted record at that time. Correct dates for that record were 21-24 Nov 1994, not 22-24 Nov 1994.

d) on page 29: Cape May Warbler (*Dendroica tigrina*). Record 52-94-63 was the 22nd (not the 23rd) accepted record at that time. Correct dates for that record were 12 Nov 1993 - 10 Apr 1994, not 12 May 1993.

e) on page 30: Prothonotary Warbler (*Protonotaria citrea*). There were two accepted records. Record 52-94-73 pertains to an adult male seen in a Colorado Springs back yard 1-8 Jun 1993. Record number 52-94-74 pertains to an adult male seen in the same Colorado Springs back yard on 21 May 1994 and 18 Sep 1994. It is likely that both records, and all three visits, pertain to the same individual.

Acknowledgments

The Records Committee wishes to thank all the observers who submitted reports for evaluation in 1996. I thank Peter Gent and Brandon Percival for helpful comments that greatly improved the manuscript.

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NEWS FROM THE FIELD: THE WINTER 1997-1998 REPORT
(December 1997 - February 1998)

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Overall, it seemed as though the number of winter finches was down dramatically this year compared with the past few. Cassin's Finches, Pine Siskins, and the rosy-finches were especially hard to find. Mountain Chickadees and Red-breasted Nuthatches stayed at home in the mountains after a few recent years of exploration along the Front Range and on the eastern plains. In the northern part of the state, Merlins seemed to be a little easier to find this year, and Northern Shrikes were a little more difficult to come across. In the east, Long-eared Owls and Northern Pygmy-Owls showed up in good numbers, and even a few Snowy Owls were reported. The best of the rarities were Yellow-billed Loon, three American Black Ducks, Eurasian Wigeon, Red-shouldered Hawk, two Gyrfalcons, Glaucous-winged Gull, Anna's Hummingbird, and Pine Warbler. Thanks to everyone who submitted their observations for this report.

Note: The Colorado Field Ornithologist's Bird Records Committee would like to see documentation provided for those species that I have underlined in this report. I will note documentation that I am aware of by putting an asterisk (*) next to the documenting observers initials. If I am not aware of documentation, then I will denote this by putting <**ND**> (meaning no documentation) after the observer's initials.

Abbreviations used: CBC=Christmas Bird Count, CFO=Colorado Field Ornithologists, Co.=County, CVCG=Crow Valley Campground, imm.=immature, LCCW=Lamar Community College Woods, PNG=Pawnee National Grasslands, Res.=reservoir, RFSWA=Rocky Ford State Wildlife Area, RMNP=Rocky Mountain National Park, SP=State Park, SWA=State Wildlife Area, VPSWA=Valco Ponds State Wildlife Area

Pacific Loon: Up to two were seen at Chatfield Res. from 12/1-20 (JK, BB, mob). One or two were observed at Pueblo Res. from 1/11-19 (BKP, TL, JK, CLW).

Common Loon: Up to three wintered at Hamilton Res. and were seen from 12/1-2/15 (SJD, RAR, DCE, mob). Up to six wintered at Pueblo Res. from 12/1-2/18 (BKP, mob). One was seen in Dotsero on 12/3 (JMe) and an imm. was seen at Nee Grande Res. on 12/4 (DAL).

Yellow-billed Loon: One imm. was seen from 12/1-22 at Chatfield Res. It was first reported during the autumn period (JBH, MPl, SPl, FDx, mob). <**ND**>.

Red-necked Grebe: One persisted from the autumn period until 12/1 at Chatfield Res. (mob) <**ND**>.

Clark's Grebe: Although rarely encountered during the winter season, one was seen at Pueblo Res. from 12/1-2/8 (BKP, mob). Three were observed at Chatfield Res. on 12/3 (TL), one at Lake Cheraw from 12/17-22 (VAT, mob), one at Hamilton Res. on 12/28 (RAR), and two at Union Res. on 1/1 (TL).

American White Pelican: One cunctative bird was observed at Pueblo Res. through 12/11 (BKP, mob), while another procrastinated at Windsor Lake from 12/2-9 (SJD). The latest was one seen southeast of Greeley from 12/26-30 (RE, RM). Four birds seen at Lake Holbrook on 2/22 (SO) were ultra-punctual spring migrants.

Double-crested Cormorant: As usual, a few spent the winter where open water persisted along the Front Range. Up to seven were recorded throughout the period at Valmont Res. (mob). In the west, four to five were seen on the Grand Junction CBC (CD, mob). Nine seen at John Martin Res. on 2/24 (SJD) may have been early migrants.

Great Egret: A very late bird was located on the Grand Junction CBC on 12/21 (CD, mob).

Black-crowned Night-Heron: An uncommon winter resident at best, one spent the majority of the winter at Fountain Creek Regional Park (AV, RB, mob). Two were seen in the Grand Junction CBC circle on 12/20 (CD). An imm. was seen at Lake Cheraw on 12/22 and 2/1 (MJ, RB, SO). An imm. was also seen at Barr Lake on 12/27 (BK). Another bird was seen on the Golden-Westminster CBC on 1/4 (DH, MH). Two adults were seen in Longmont on 1/13 (VDi).

Tundra Swan: An adult accompanied a Trumpeter Swan at Little Gaynor Lake and Dodd Res. south of Longmont throughout the period (BK, SSv, mob). An adult was seen at Valco Ponds in Cañon City from 12/14-18 (SM, DP). Another adult was seen at Cattail Pond in Loveland from 1/17-2/12 (DCE, DAL, NK, mob).

Trumpeter Swan: One was observed at Little Gaynor Lake and Dodd Res. south of Longmont throughout the period (BK, SSv, mob) <**ND**>. Three adults were seen throughout the period near Carbondale (KPo) <**ND**>.

Greater White-fronted Goose: There was the usual smattering of reports from the northeastern plains and Front Range spanning the dates from 12/7-

2/1. The highest count was of 10 from Florence and Cañon City (RWt, mob), where a group has wintered for several years.

Ross's Goose: There are usually a few in the Denver metro area each winter with the bigger goose flocks. This year, one was seen through 12/15 at Sloan's Lake, another was at Mayhorn Lake on 1/4 (DH, MH), and one was at the Wheatridge Greenbelt on 1/26 (JKa, NKa). One was seen on Prospect Res. at Memorial Park in Colorado Springs from 12/1- 2/8 (RB, AV). One was seen at Greeley on 12/20 (RM), one on the Grand Junction CBC on 12/21 (BGu), one on the Boulder CBC on 12/21 (PG), and one was at Long Pond in Fort Collins from 1/5-9 (RK). Nine were seen at Highline Res. in Mesa Co. on 2/1 (RL, CD), a great count for that locale.

American Black Duck: There were three reports of this casual species, making it a great season. A female was located at Bittersweet Park in Greeley on 1/22 and was present throughout the period (NK*, SJD*, mob). A male was seen at Nee Noshe Res. on 1/25 (TL) <**ND**> and another female was located at Woods Lake east of Severance from 1/30-31 (SJD*, RK). Also of interest was a hybird American Black Duck x Mallard observed on 2/26 at Woods Lake. (DAL).

Cinnamon Teal: A male found in Delta on 2/7 (RL) was the earliest reported in the state this year. The first found on the east side of the "hills" were two males at Fort Carson (RB).

Eurasian Wigeon: Once again, a male wintered in Fort Collins throughout the period (WPL, DAL, mob) <**ND**>. This persisting phenomenon belies the species' true rarity in the state.

Canvasback: Higher-than-normal numbers were reported, with the Rawhide CBC (Hamilton Res.) having a record count of 68 on 12/28 (RAR).

Greater Scaup: A male was observed at the perennial hotspot of Prospect Lake in the Wheatridge Greenbelt from 12/8-1/8 (DSh, mob). A female was seen at Valco Ponds in Cañon City on 12/21 (TL, SBo, mob), three birds were at Lake Cheraw on 12/22 (MJ, RB), two females were in Vineland from 12/ 28-2/27 (LL, mob), a singleton was at the Mount Olivet Cemetery on 1/4 (TL), six were at Lake Holbrook on 1/24 (MJ, BKP), six more were at Woods Lake in Weld Co. from 1/30-31 (SJD), while two different birds were at Woods Lake on 2/4 (SJD), a male was at Big Johnson Res. from 2/8-11 (RB), and one or two females were observed at Long Pond in Fort Collins from 2/12-13 (SJD, RK).

Oldsquaw: A female was seen in Dotsero on 12/3 (JMe), and a female was seen at VPSWA from 12/5-2/6 (BKP, JY, mob). A male was last seen at Big Johnson Res. on 12/12 (RB). One was at Cherry Creek Res. through 12/17,

after first being seen in the previous period on 11/22 (TL). A female was seen at Pueblo Res. on 12/20 (TL, MJ, BD). Two males were seen at Runyon Lake in Pueblo on 1/1 (DJ), and one was seen at Cherry Creek Res. the same day (BB). Three males were seen at a reliable location, the South Platte River in the vicinity of the 88th Avenue Bridge, from 2/2-15. A female showed up on Big Johnson Res. on 2/11 and remained through the period (RB). A female was seen at the Rocky Ford Sewage Ponds on 2/22 (SO). Two imm. males and an imm. female were seen at John Martin Res. on 2/24 (SJD).

Black Scoter: Two females were seen from 11/8 until 12/12 at Big Johnson Res. (BG, RB, mob) <**ND**>.

Surf Scoter: A female was last seen at Big Johnson Res. on 12/1 (BG, RB, mob) after first being seen on 10/27.

White-winged Scoter: Two females continued until at least 12/7 from the previous period (TL, mob) at Cherry Creek Res. Three others first seen in November at Big Johnson Res. (MJ) lasted until 12/16 (RB). A female was seen at Hamilton Res. on 12/9 (SJD) and a male was seen at Lake Henry on 2/28 (PSS, CS).

Barrow's Goldeneye: A imm. female was seen at Chatfield Res. from 12/1-3 (TL). Two females were seen occasionally throughout the entire winter period on Big Johnson Res. (RB). Up to three females were at VPSWA from 12/1-2/6 (BKP, mob). A male was seen at VPSWA from 12/5-7 (BKP, mob). Other males were seen along the Poudre River in Fort Collins on 12/9 (JM) and at Marston Res. near Denver from 12/12-18 (TJ). A few males were seen along the South Platte River between the 74th and 88th Avenue Bridges at the Thorton Water Treatment Plant pond from 12/13-2/6 (mob). A lone male was seen at Long Pond in Fort Collins on 12/15 (RK). Six birds were seen at the sewage ponds in Silverthorne on 12/14 (TL, SBo), while four males and four females were at Lake Granby on 12/15 (TJ). An adult female was seen at the Mount Olivet Cemetery in Jefferson Co. on 1/1 (TL). Two females were observed at Mayham Lake in Westminster on 1/4, an imm. (TL, NK, SY) and an adult (DH, MH). A pair was seen on Lake Estes from 2/10-14 (SW, SRa). On the Western Slope, a high count of 80 birds was present in Rio Blanco Co. (KPo) throughout the period.

Northern Goshawk: One of these rare residents was seen north of the Kingfisher Bridge at Chatfield SP from 12/3-20 (TL, mob). Others were spotted at the RFSWA on 1/1, near Franktown in Douglas Co. on 1/2 (HK, UK), in Fort Collins on 2/5 (NK), and at Guanella Pass on 2/28 (RK).

Red-shouldered Hawk: A real find was an imm. eastern race bird at VPSWA on 1/15 (BKP, RK, THb, LBr) <**ND**>.

Peregrine Falcon: One was seen in Golden on 12/10 (Sn). Lone birds were recorded on the Grand Junction CBC on 12/21 (BGu), the Westcliffe CBC on 12/27 (LBr, mob), and the Rawhide (Hamilton Res.) CBC on 12/28 (SCh).

Gyrfalcon: There were two reports of this accidental visitor this winter. A gray morph imm. was seen near Center in Saguache Co. on 12/13 (JJR), constituting possibly the first western Colorado record. A gray morph imm. first found by Ron Ryder* at Hamilton Res. north of Fort Collins on 1/18 was frequently seen knocking Canada geese from the sky through 2/10 (mob).

Virginia Rail: Richard Bunn kept tabs on up to 35 individuals at five different sites in the Fountain Creek Drainage throughout the winter period. This seems like a very good winter count.

Sora: One was discovered on the Grand Junction CBC on 12/21 (KPo).

Greater Yellowlegs: Considered casual in the winter, one was observed on the Pueblo Res. CBC on 12/20 (PSS) and two were seen on the Grand Junction CBC on 12/21 (CD).

Spotted Sandpiper: Although casual in the west in winter, one was seen on 12/21 during the Grand Junction CBC (CD). Of accidental occurrence was one seen from 2/1-8 at Runyon Lake in Pueblo (MY, mob).

American Woodcock: An individual of this casual species in Colorado was flushed once and never refound at VPSWA on 12/15 (BKP) <**ND**>.

Bonaparte's Gull: Up to 36 were seen at Pueblo Res. from 12/1-23 (BKP, mob). Four were observed at Nee Grande Res. on 12/4 (DAL). One was seen on the unexpected date of 1/24 at VPSWA (BM).

Mew Gull: One appeared on the ice at Big Johnson Res. on 2/14 (RB) <**ND**>. This is a 1st El Paso county record.

Thayer's Gull: Twenty-five reports were received for the winter period, all from the Front Range and eastern plains. The high count was of four first-winter birds at VPSWA and Pueblo Res. (BKP, mob).

Lesser Black-backed Gull: Reports of this species continue to proliferate. A first-winter bird was seen at Jumbo Res. on 12/18 (CLW) <**ND**>, and an adult was observed at Valmont Res. on 12/20 (PG) <**ND**>. A winter adult was seen at VPSWA and Pueblo Res. from 1/17-25 (BKP, MJ, VAT, mob) <**ND**>.

Glaucous-winged Gull: A first-winter bird was observed at VPSWA on 1/24 (JRd*).

Glaucous Gull: One continued until 12/19 at Union Res. after first being seen on 11/26 (SRa, mob). A second-winter bird was seen at Windsor Res. from 12/25-29 (TL). A second-winter bird was seen at Lake Loveland in Loveland from 1/20-2/28 (SJD, DCE, DAL, mob).

Great Black-backed Gull: The annual Pueblo Res. individual was seen through 2/8 (BKP, mob) <**ND**>. It also drifted eastward to VPSWA from time-to-time. A first-winter bird was seen at Arvada Res. from 1/4-5 (TL, NK, mob) <**ND**>. Another first-winter bird was seen at Pueblo Res. from 1/7-18 (BKP, mob) <**ND**>. An adult was seen at Big Johnson Res. on 2/15 (JDi) <**ND**>. This is a 1st El Paso county record.

Eurasian Collared-Dove: Up to eight were seen in Rocky Ford from 12/14-2/28 (BKP, MJ, mob*).

Barn Owl: One was seen near Grand Junction on 12/7 (TL, RL), where a few occasionally winter. Another was observed at a more unlikely location north of Lamar on 1/25 (BW). One was found dead in Lamar on 2/26 (DAL).

Snowy Owl: A few irrupted southward into Colorado this winter. One was seen in Boulder Co. on 12/26 (GEm*). A cooperative adult male was found in Prowers Co. near Wiley from 2/14-28 (DRy, KG*, DAL*, JTh*, mob). An imm. female was found dead near Gilcrest in Weld Co. in late February. It was sent to the Denver Museum of Natural History.

Northern Pygmy-Owl: It was a good winter to find this rare and elusive resident. The species was recorded on the Penrose CBC (RB), at Oak Creek Grade in Fremont Co. on 12/21 (BG, RB), in the Poudre Canyon below Rustic on 12/23 (CBr, RAR), on the Pikes Peak CBC on 1/3, northwest of Masonville in Larimer Co. on 1/24 (DAL, DCE), along the Stove Prairie Road in Larimer Co. on 1/28 (SJD, RK), in Green Mountain Falls on 2/13 (RB), at Crystola in Teller Co. (RB), near Rockvale in Fremont Co. on 2/13 (DP), and in RMNP, where two were seen on 2/19 (SRa) .

Long-eared Owl: One was seen on the south side of Bonny Res. on 12/16 (DBr), and four were seen at Tamarack Ranch on 12/19 (DBr). Fourteen were tallied on the Longmont CBC on 12/20. Two were seen in Boulder Co. from 12/20-21 (TP, mob). Up to four were seen at the RFSWA from 12/22-1/1 (BKP, CLW, mob). Four wintered in a Siberian elm shelterbelt on Fort Carson after first being discovered on 12/26 (RB). Up to 40 were seen at Jackson Res. from 2/1-24 (DAL, DCE, mob). One was seen near Hamilton Res. on 2/1 (GPq, RLw) and one was at a Longmont residence on 2/2 (JHr). One was seen at the Wellington SWA on 2/11 (SCh, RK, BBH).

Short-eared Owl: One was seen near Holly on 1/ 2 (BW, LW). One was seen at the Wellington SWA on 1/12 (JK, CLW, TL), where the species is regular in

the winter. Up to five were seen here through 2/14. A dead bird was found in Kiowa Co. on 2/26 (DAL).

Northern Saw-whet Owl: One found in Green Mountain Falls on 12/2 was a treat (RB). Two were discovered on the Lake Isabel CBC on 1/3 (VAT, BKP).

Anna's Hummingbird: An adult male was discovered in late October and remained until 12/5 in Boulder (fide SSv) <**ND**>. This is the 2nd year in a row this species has made an appearance in Colorado.

Red-bellied Woodpecker: A lone male at Two Buttes Res. from 12/17-1/3 (DAL) was a very rare find.

Yellow-bellied Sapsucker: An adult male was located during the Pueblo Res. CBC on 12/20 (MY). An imm. was seen on 12/20 during the Longmont CBC and was found again through 1/9 (DWK). An imm. female was found in Pueblo City Park from 1/10-18 (FL, mob).

Williamson's Sapsucker: Considered casual in winter, two were observed near Boulder in December. A female was seen on 12/6 (JTs) and a male during the Boulder CBC on 12/21(fide BK).

Three-toed Woodpecker: A pair was seen in Green Mountain Falls in December and January (RB).

Say's Phoebe: This species is rare in Colorado in the winter. One was seen on the Penrose CBC on 12/21 (SM, DP), one on the Grand Junction CBC on 12/21 (RL), one in Delta Co. on 2/7 (RL), and one in Cañon City on 2/27 (VAT).

Tree Swallow: An enigmatic bird was still insistent on staying put at VPSWA on 12/5 (BKP, mob). An even later bird was seen on the Grand Junction CBC on 12/21 (CD, mob). These are extraordinarily late dates for Colorado.

Blue Jay: Unusually far west, was one seen in Eagle on 2/23 (JMe).

Western Scrub-Jay: Unusually far east, were three seen on the Rocky Ford CBC on 12/22 (JK, AV) and one in Swink in Otero Co. on 2/20 (VAT).

Chihuahuan Raven: This species seems to be pushing farther northward each winter, as at least six wintered in El Paso Co. (RB). Amazingly, up to 41 were seen from 1/13-14 at Chatfield Res. (BS, JBH, mob). There were many other reports from the areas around Pueblo Res., Cañon City, and Lamar.

Mountain Chickadee: The species was extremely difficult to find at lower elevations this winter.

Bushtit: Seventeen were located near Lyons on 1/17 (DWK); this is the most persistent northern contingent of the species in eastern Colorado.

Red-breasted Nuthatch: This montane species stayed put this winter and was seldom noted away from the higher elevations.

Carolina Wren: One was found at Two Buttes Res. from 12/17-18 (DAL*) and another sang in Pueblo from 2/21-28 (DJ, DS, mob) <**ND**>.

House Wren: This species is casual in winter in Colorado. Two were found on the Boulder CBC on 12/21 (BK, ABr) <**ND**>. One was seen on the Pueblo CBC on 12/28 (DS) <**ND**>.

Winter Wren: One of these rare and reclusive winter residents was seen in the Wheatridge Greenbelt from 12/13-15 (DSh, BB, KS). Another was seen at Two Buttes Res. from 12/17-18 (DAL). One was seen along the Cañon City Riverwalk on 12/21 (CLW, BKP). Two were found on the Boulder CBC on 12/21 (DWK). One was seen at the RFSWA on 12/22 (BKP, mob). The last report was of one along Boulder Creek at 75th Avenue in Boulder from 1/3-6 (SFy, mob).

American Dipper: One wandered all the way downhill to Westminster on 1/4 (DH, MH). A singing pair was also lower in elevation than usual in Loveland in January and February (DFg).

Golden-crowned Kinglet: One was seen at the unexpected location of Two Buttes Res. from 12/17-18 (DAL).

Ruby-crowned Kinglet: One at Two Buttes Res. from 12/17-18 (DAL) was unusual.

Eastern Bluebird: Up to six were seen north of Fort Collins from 1/18-2/21 (WPL, mob). This is a very westerly report during a period when the species would be considered very rare anywhere on the northeastern plains. Equally unusual was one reported on the Longmont CBC on 12/20. Farther south, where the species is more likely in winter, there were many reports. Two were seen at Two Buttes Res. from 12/17-18 (DAL). One was found on the Pueblo Res. CBC on 12/20 (SM, MK). Thirty-three were found a day later on the Penrose CBC (SM, MPe). Up to 39 were observed from 12/22-2/28 at the RFSWA (BKP, CLW, mob). Very odd, was one found on the Lake Isabel CBC on 1/3 (MY).

Western Bluebird: Considered a locally rare species in the winter, a male was seen east of Longmont from 1/2-13(FAC).

Mountain Bluebird: Another locally rare species in the winter, one was seen northeast of Carter Lake in Larimer Co. on 12/5 (DBt). Two were found on the Longmont CBC on 12/20.

Hermit Thrush: Three(!) were found on the Grand Junction CBC on 12/21 (RLa, CD).

Varied Thrush: For the 2nd time in three years, this species was discovered at the Colorado State Forest Service Nursery during the Fort Collins CBC. This female was seen from 12/20-1/12 (DAL*, JM, mob).

Gray Catbird: A late bird was seen on 12/1 at a Lyons residence (PBk), and one seen from 12/17-1/3 at Two Buttes Res. (DAL, mob) may have survived the winter period.

Northern Mockingbird: Several were reported this winter. One was seen in the Lyons area on 12/13 (DBt, JSg). Another bird was reported at a Longmont residence during January and February (JHy). One was seen at the Timpas SWA on 1/17 (SO), and one was at the Wellington SWA from 1/19-2/14 (MPl, SPl, FDx, JDx, mob). A very rare record came from Vail, with two birds reported (EW).

Sage Thrasher: One was seen at Pueblo Res. from 12/3-7 (BKP). Up to four were seen from 12/20-1/19 at Pueblo Res. (MJ, TL, BD, mob). One was seen in Temple Canyon Park on 1/11 (TL, JK, CLW).

Brown Thrasher: One was seen in Teller Co. on 12/5 (JJ, WW). One was seen at a residence west of Loveland on 1/1 (GB). One was seen in RMNP during the CBC on 1/3 (fide WPL).

Bohemian Waxwing: Reports of this species this winter were scant. Three were seen on the Longmont CBC on 12/20 (fide DWK) and 10 were seen near Wolcott in Eagle Co. on 1/20 (PHa).

Northern Shrike: This species was an enigma this winter. It was reported as nearly non-existent in El Paso Co., unlike recent years (RB). In northern Colorado, however, the species seemed to be much more prevalent in the foothills and mountains than normal, while it seemed to be very scarce on the northeastern plains.

Loggerhead Shrike: One seen at Tamarack Ranch on 12/19 (DBr) was a good winter find.

Orange-crowned Warbler: One was found on the Denver CBC on 12/20 (DSc) and another was seen on the Grand Junction CBC on 12/21 (BMc).

Yellow Warbler: Two hardy birds were discovered in Brighton on 12/27 (PPl, BK, EPl, TL). At least one was observed into January. This is an extraordinary winter record and possibly only the 2nd winter record for Colorado. The only other record I'm aware of was a dead bird found in Clifton on 12/4/1996 (Ely 1997).

Yellow-rumped Warbler: Two "Myrtle race" birds were found on the Longmont CBC on 12/20. Another "Myrtle race" bird was seen at the Colorado State Forest Service Nursery from 1/7-24 (WPL, JFB, mob). An "Audubon's race" individual was at a Greeley feeding station from 12/1-1/15 (NEr).

Pine Warbler: This species is an accidental winter visitor in Colorado. One was seen at VPSWA from 12/5-2/8 (BKP, mob) <**ND**>.

Palm Warbler: One or two "yellow race" individuals were seen at VPSWA from 12/8-1/21 (BKP, mob). This is another species of accidental occurrence in the winter.

Northern Waterthrush: This was another great bird found at the winter warbler hotspot, VPSWA, on 1/20 (LBr).

Common Yellowthroat: An extremely tardy bird was still present at VPSWA on 12/3 (BKP). Another was found on the Fort Collins CBC on 12/20. A female found along the Cañon City Riverwalk on 2/7 (BKP, DFO) must have overwintered.

Wilson's Warbler: Another great wintering warbler was a male of this species at VPSWA from 12/8-1/13 (BKP, mob).

Northern Cardinal: Two were seen at unexpected western locations. A male was seen at Rockvale in Fremont Co. from 1/3-17 (KGL), and one was seen at Palmer Lake on 1/31 (JA).

Chipping Sparrow: Two were reported on the Denver CBC on 12/20 (NE, DSc) <**ND**>. Another was reported in Boulder on 12/26 (MPl) <**ND**>. This is a casual winter resident and reports should be documented.

Vesper Sparrow: One was reported on the Colorado Springs CBC.

Savannah Sparrow: One was found southeast of Highline Res. in Mesa Co. on 12/7 (TL, RL). The species is casual in winter in Colorado.

Fox Sparrow: One individual of the eastern subspecies (*Passerella iliaca*), rare anytime in Colorado, was found at Red Rocks Park from 12/30-1/10 (mob).

Swamp Sparrow: A locally rare find, one was seen at Cottonwood Springs on Fort Carson on 12/26 (RB). There were six other reports of single birds.

White-throated Sparrow: There were three reports of wintering birds. One was seen from 12/1-2 in Rye (DS), another at the Cañon City Riverwalk from 1/1-2/28 (MJ, mob), and an imm. at the LCCW on 1/28 (DAL).

Harris's Sparrow: There were 38 reports spanning the period. The high count was of six imm. at VPSWA and Rock Canyon.

McCown's Longspur: One was seen in Morgan Co. on 12/2 (JRi), one at Vilas in Baca Co. (DSv), one on 12/20 at Big Johnson Res. (RB) and two were along Squirrel Creek Road in El Paso Co. on 1 /2 (RB). The species is casual in winter.

Lapland Longspur: This species was reportedly present in above-average numbers on the PNG this winter (JH).

Chestnut-collared Longspur: Three were seen on Turkey Track Ranch in El Paso Co. on 1 /2 (RB). This is also a great winter find. Another was seen on the PNG on 2/15 (NK). This may have been a wintering bird or an opportunistic early returnee.

Snow Bunting: Two were seen at Big Johnson Res. on 2/22 (JDi). This is a very southerly location for this fairly rare winter visitor. In the north, where the species is more expected, one was reported northwest of LaSalle in Weld Co. (TKz).

Yellow-headed Blackbird: Two adult males and two females were found near Barr Lake SP on 12/27 (TL, RB, SY) and two females were seen near Barr Lake SP on 1/1 (TL). A male was seen in Larimer Co. on 1/22 (NK). A male was seen at Big Johnson Res. from 2/1-8 (RB) and another at John Martin Res. on 2/24 (SJD). On the Western Slope, two males were seen in Delta Co. on 2/7 (RL).

Rusty Blackbird: Up to eight were seen from 12/1-2/6 along the Arkansas River near VPSWA (BKP, MY, mob). This has become a fairly reliable spot to find the species during the winter in recent years. One was seen at Olive Marsh in Pueblo on 12/20 (DS) and another was located on 12/28 during the Pueblo CBC (DS). A female was seen from 1/1-27 near Brighton (TL). Two were found in Colorado City on 1/3 (LBr). Up to eight were found in Fort Collins along the Poudre River from 1/3-2/15 (DAL, mob).

Great-tailed Grackle: A male found in east Boulder on 1/31 (SSv) was unusual, as were six found in Larimer Co. on 2/7 (PSw, JFt).

Common Grackle: Fifty were seen at Fort Lyon on 12/3 (DAL), while a male was seen at the unlikely location of Georgetown on 12/8 (TL). Up to 10 wintering at a Longmont feeder (KBt) was a high winter count for the area. Up to 24 in Lakewood throughout the period was also significant (TBu). There were 11 other reports for the period from the Front Range and eastern plains.

Brown-headed Cowbird: A male seen on 2/1 at a feeder in Orchard (DAL, DCE) was farther north than where the species is normally found in Colorado in the winter.

Bullock's Oriole: One seen at Jackson Res. on 2/24 (JJ) was an excellent find. The species is casual in winter on the eastern plains.

Rosy-Finches: All three species of rosy-finches were seen at Georgetown feeders from 1/19-2/28, but that was one of the few places they were seen this winter. After last year's big flight, the species all but disappeared. Richard Bunn noted that his Green Mountain Falls feeders did not have them for the first time in seven years.

Pine Grosbeak: This species was a bonus for birders making their way to Georgetown to check out the rosy-finches. They were present from 1/19-2/28.

Purple Finch: One was seen at Fountain Creek Regional Park from 12/6-7 (KPa, mob). An imm. was observed at the Red Rocks Park feeders from 12/25-1/10 (TL, mob) <**ND**>.

Cassin's Finch: This species didn't disperse to lower elevations this winter and was scarce even in the mountains, according to the reports.

Red Crossbill: This species was virtually unreported during the period.

White-winged Crossbill: A calling bird was noted at Pebble Creek Ranch north of Silverthorne on 12/14 (TL).

Common Redpoll: One was observed near the south end of the golf course in Estes Park on 12/13 (SRa). A few were seen on Fort Carson on 12/20 (CC, BM, VM). One was in Green Mountain Falls from 1/6-12 (RB). Twelve were seen at Fort Carson on 1/7 (RB). Three were at a feeder in Colorado Springs the last week of January (JA). One frequented a feeder at the work station just north of CVCG from 2/16-24 (DWb, mob). Observers in El Paso Co. noted that the species had a fairly good year.

Pine Siskin: This species was a tough find this winter.

Lesser Goldfinch: One was found on the Grand Junction CBC on 12/21 (fide RL). Three were found in Colorado Springs on 2/7 (GBu). A great find was one at a feeder in Boulder on 2/11 (CBr).

American Goldfinch: Most people seemed to think this species was more common than normal.

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Cited Observers

Jim Ahl (JA), Phyllis Baker (PBk), John Barber (JFB), Gary Beemer (GB), Kat Bennett (KBt), Dave Bolton (DBt), Sue Bonfield (SBo), Clait Braun (CBr), Dan Bridges (DBr), Leon Bright (LBr), Alex Brown (ABr), Bob Brown (BB), Cliff Bruning (CBr), Tamie Bulow (TBu), Richard Bunn (RB), Greg Butcher (GBu), Charlie Campbell (CC), Sherry Chapman (SCh), Denver Field Ornithologists (DFO), Coen Dexter (CD), Jordan Dimick (JDi), Stephen J. Dinsmore (SJD), Virginia Dionigi (VDi), Ferd Dirckx (FDx), Jo Dirckx (JDx), Ron Edgerton (RE), David C. Ely (DCE), Norma Erickson (NEr), Norm Erthal (NE), Foothills Audubon Club (FAC), Darrell Fargo (DFg), Joe Fontaine (JFt), Steve Frye (SFy), Peter Gent (PG), Ken Giesen (KG), Bob Goycoolea (BG), Bob Gustafson (BGu), Tom Hablitzel (THb), B.B. Hahn (BBH), Jeanne Halsey (JHy), Pat Hammon (PHa), Joe Harrison (JHr), J.B. Hayes (JBH), Dean Hill (DH), Mona Hill (MH), Joe Himmel (JH), Mark Janos (MJ), Dave Johnson (DJ), Jeff Jones (JJ), Tina Jones (TJ), Bill Kaempfer (BK), Joe Kamby (JKa), Norma Kamby (NKa), Joey Kellner (JK), Mike Ketchen (MK), Hugh Kingery (HK), Urling Kingery (UK), Rachel Kolokoff (RK), Nick Komar (NK), Tom Kozan (TKz), Ron Lambeth (RLa), K.G. Lane (KGL), Rebecca Lawrence (RLw), David Leatherman (DAL), Tony Leukering (TL), Rich Levad (RL), Lindsay Lilly, Jr. (LL), Bill Lisowsky (WPL), Forrest Luke (FL), Joe Mammoser (JM), Richard Maxfield (RM), Bill Maynard (BM), Virginia Maynard (VM), Bruce McLean (BMc), Jack Merchant (JMe), SeEtta Moss (SM), many observers (mob), Stan Oswald (SO), Ken Pals (KPa), Dave Pantle (DP), Tom Parker (TP), Greg Pasquariello (GPq), Brandon Percival (BKP), Mark Peterson (MPe), Eric Plage (EPl), Peter Plage (PPl), Myron Plooster (MPl), Suzi Plooster (SPl), Kim Potter (KPo), Scott Rashid (SRa), John J. Rawinski (JJR), Jack Reddall (JRd), Don Reyher (DRy), Ron Ryder (RAR), Sanders (Sn), Pearle Sandstrom-Smith (PSS), Karleen Schofield (KS), Dick Schottler (DSh), Scott Severs (SSv), Dave Silverman (DS), Clif Smith (CS), Jerry Spangler (JSg), Dan Svingen (DSv), Paul Sweet (PSw), Janeal Thompson (JTh), Van Truan (VAT), John Tumasonis (JTs), Alan Versaw (AV), Susan Ward (SW), Rosie Watts (RWt), Duane Weber (DWb), Brian Wheeler (BW), Lisa Wheeler (LW), Elizabeth Williams (EW), Walt Wilson (WW), Chris Wood (CLW), Mark Yaeger (MY), John Yaeger (JY), Sherrie York (SY); 118 Cited Observers including "mob."

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