

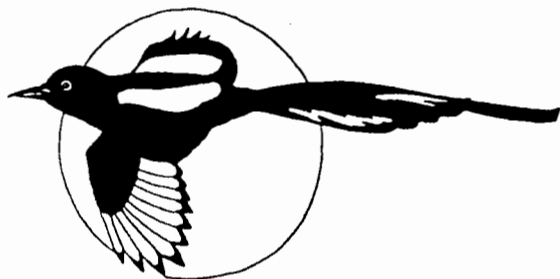
---

# *C.F.O. Journal*

The Colorado Field Ornithologists' Quarterly

---





*C.F.O. JOURNAL* (ISSN- 1066-7342) is published quarterly by the Colorado Field Ornithologists, 1782 Locust St., Denver, CO 80220. Subscriptions are through annual membership dues. Second Class Postage paid at Denver, CO 80202. POSTMASTER: Send address changes to: *C.F.O. Journal*, PO Box 481, Lyons, CO 80540

#### **OFFICERS OF THE COLORADO FIELD ORNITHOLOGISTS:**

Dates indicate end of current term. \* means eligible for re-election.

- President:** Steve Bouricius, 50152 Hwy. 72, Peaceful Valley, Lyons, CO 80540 1993\* (303) 747-2367
- Vice-President** Coen Dexter, 175 Sunset Circle, Palisade, CO 81526 (303) 241-9531
- Secretary:** David Pantle, 1826 Flora Ct., Canon City, CO 81212, 1993\* (303) 333-8352
- Treasurer:** Raymond Davis, P.O. Box 481, Lyons, CO 80540 1993\* (303) 823-5332
- Directors:** David Silverman (*ex officio*); Beth Dillon, Fort Collins 1995; Mike Carter, 1993\*; Bob Dickson, Pueblo 1995; David Leatherman, Fort Collins 1993\*; Susan Blackshaw Paynter, 1997\*; Brandon Percival, Pueblo West 1996\*; Kim Potter, Rifle 1996\*; Alan Versaw, 1997\*; Linda Vidal, Aspen 1995.
- Journal Editor:** David Leatherman, 2048 Whiterock Ct., Fort Collins, CO 80526 (303) 484-5445
- Editorial Board:** Paul Opler, Mona Hill

#### **C.F.O. OFFICIAL RECORDS COMMITTEE:**

Bill Prather (Chairman), Longmont 1995; Peter Gent, Boulder 1994; Joe Himmel, Greeley 1994; Rich Levad, Grand Junction 1995; Paul Opler, Ft. Collins, 1995; Dick Schottler, Golden 1994; Van Truan, Pueblo 1993.

**ANNUAL MEMBERSHIP DUES** (renewable at the beginning of the year): Regular \$12; Contributing \$20; Supporting \$30; Sustaining \$100. \$12 of the annual membership dues pays for a one-year subscription to the *C.F.O. Journal*. All members receive the *C.F.O. Journal*. Contributions are tax deductible to the extent allowed by law. **Send membership inquiries, renewals, and change of address to Colorado Field Ornithologists, Raymond Davis, P.O. Box 481, Lyons, CO 80540.**

## TABLE OF CONTENTS

<b>PRESIDENT'S MESSAGE.....</b>	<b>93</b>
Steve Bouricius	
<b>PROCEEDINGS OF THE 32ND ANNUAL CONVENTION OF THE C.F.O.....</b>	<b>95</b>
Steve Bouricius	
<b>C.F.O. BOARD AND MEMBERSHIP MEETINGS.....</b>	<b>97</b>
David Pantle	
<b>PAPER SESSION SUMMARIES</b>	
<b>CONSERVATION OF GRASSLAND BIRDS.....</b>	<b>99</b>
Stanley E. Senner	
<b>WATERBIRDS OF THE SAN LUIS VALLEY- PAST, PRESENT &amp; FUTURE.....</b>	<b>100</b>
Ronald A. Ryder	
<b>BIRDS OF THE SOUTHWEST.....</b>	<b>101</b>
James Karo	
<b>C.F.O. CONVENTION FIELD TRIP REPORT.....</b>	<b>101</b>
Dave Johnson	
<b>C.F.O. FIELD TRIP REPORT, 22 MAY 1994.....</b>	<b>103</b>
Peter Gent	
<b>IN MEMORIAM: NANCY M. TAGGART.....</b>	<b>106</b>
<b>NEWS FROM THE FIELD: WINTER '93-'94.....</b>	<b>107</b>
Coen Dexter	
<b>A DECADE OF INDIAN PEAKS BIRD COUNTS.....</b>	<b>114</b>
Dave Hallock	
<b>INSTRUCTIONS TO CONTRIBUTORS.....</b>	<b>131</b>

## ILLUSTRATIONS

**GREEN HERON (approximately 1 month old).  
Martinez Park, along Poudre River, Fort  
Collins, CO. 14 June '93.  
By Dave Leatherman.....Cover**

**[2 nests at this site in 1994, perhaps first  
confirmed colonial nesting for this  
species in Colorado]**

**VESPER SPARROW NEST. Pine Ridge Open Space  
west of Fort Collins (Horsetooth Mt. BBA  
priority block)  
By Dave Leatherman.....105**

**GREAT HORNED OWL (immature). ARS High  
Plains Grassland Research Station,  
Cheyenne, Wyoming. 6 May '94.  
By Dave Leatherman & Ron Ryder.....130**

**PRESIDENT'S MESSAGE**

**Steve Bouricius**  
**50152 Hwy. 72**  
**Peaceful Valley**  
**Lyons, CO 80540**

On becoming the new C.F.O. president, I have an opportunity to speak directly to you, the members, in a way that I never have before. I am humbled by the responsibility and the sense of history this association and its members represent. It has been a great honor for me to have served the Colorado Field Ornithologists under four fine presidents, three outstanding C.F.O. Journal editors, and a continuing excellent board of directors. The experience has shown me the values of both continuity and change. I have watched the C.F.O. grow, one step at a time, into an exceptional, well-functioning state organization of volunteers. Peter Gent, Bill Prather, Mike Carter, Dave Silverman, Mark Janos, Mona Hill, David Leatherman, Beth Dillon, and so many others, have in their own way, contributed so much to shape the character of the C.F.O. It is a character of openness, integrity, and generosity in sharing the enjoyment and knowledge of birds. I think it says a lot about us when I realize I've never met a C.F.O. member I didn't like. By building upon the assets of our past, we will continue to grow as an organization and advance the endeavor of Colorado field ornithology. The insight, creativity, and efforts of amateur field ornithologists like us continue to move and shake the science. I believe we all have something of value to contribute. As president, it will be my goal, above all, to continue and to expand the traditions of the C.F.O. As the key link in Colorado's birding community, we must strive to become more inclusive. We will have to look at new ways to reach out to young naturalists, new birders, other organizations, academia, and agency professionals, and (with missionary zeal!) bring them all together in a variety of forums for the exchange of information about birds. Given the pressures of human populations on the environment, the birds deserve our renewed commitment.

I can't help but feel my words are overdue--to thank all of you personally and publicly for doing your part to make the Colorado Field Ornithologists the fine organization it is today. First, I would like to commend our retiring president, Dave Silverman, for his excellent leadership. Dave's ability for judicious communication and skillful attention to detail in conducting the business of the C.F.O. has taken us a big step forward. I expect to make use of his valued counsel.

We are very fortunate to have David Pantle continue in his capacity as executive secretary. With exceptional initiative, dedication, and

professional thoroughness, David has set a new standard in his work on the bylaws, in communications, and in records management. Raymond Davis has agreed to continue his fine work as treasurer, a difficult and time-consuming task. As a professional accountant and business manager, Davis is a valuable asset. Paul Opler and Coen Dexter must cycle off the board after two 3-year terms as directors. Thank you both for your splendid service. We will continue to profit from Paul's expertise on both the editorial board and the records committee. I'm very pleased that Coen Dexter serves as our new vice-president. In addition to his work as a director, Coen has worked on the records committee, prepared the seasonal reports, led field trips, and contributed to the C.F.O. Journal. Coen has also worked extensively on the Colorado Breeding Bird Atlas Project and given greatly to the success of the Grand Valley Audubon Society. Thanks to board member Kim Potter for her good work to distribute brochures and, with help from David Leatherman, to solicit participation from university and research institutions. We welcome Susan Blackshaw Paynter and Alan Versaw to the board of directors.

Special thanks are due to Linda Vidal, our working board member extraordinaire. Whenever things seemed to bog down, Linda was there prodding us with critical thinking, fresh ideas, solutions, and the energy to get work done. Besides initiating the effort on the bylaws revision and mission statement, she helped design, write and distribute our new brochure, helped to plan and make arrangements for our conventions in Durango, Northglenn, and Craig, and continues to serve as an important liaison with other organizations to promote the interests of the C.F.O. We are indebted to you, Linda.

Finally, I'd like to acknowledge our appreciation to the workshop and monthly field trip leaders who have shared their time and expertise: Toni Brevellier, Mark Janos, Brandon Percival, Steve Bouricius, Dan Bridges, Coen Dexter, Rich Leivad, Bill Prather, Duane Nelson, Bill Kaempfer, Joe Rigli, Scott Seltman, Linda Vidal, Alan Versaw, Peter Gent, Charles Preston, and Bob Righter.

Let's keep up the good work!



**PROCEEDINGS OF THE 32ND ANNUAL CONVENTION  
OF THE COLORADO FIELD ORNITHOLOGISTS**

**Steve Bouricius  
50152 Hwy. 72  
Peaceful Valley  
Lyons, CO 80540**

The 1994 C.F.O. Convention was held at the Country Club Inn in Trinidad, June 10-12. Sixty-two people from at least 5 states enjoyed perfect weather, many good birds, and a great meeting. The hotel provided an open reception room adjacent to the lobby and restaurant where members gathered to socialize. C.F.O. publications, local area checklists, and some great-looking new t-shirts were available for sale. Christina's Restaurant at the Inn did a wonderful job by opening early for us at 5 a.m. each day before the field trips and by providing refreshments in the reception area.

President Dave Silverman, though just back from birding Attu and sporting a terrible case of laryngitis, ably conducted a very productive board meeting. Dave is to be commended for organizing an excellent convention, including the speakers for the papers session and banquet. Dave Johnson did a super job of coordinating field trips to atlas blocks, which included four-wheel drive treks into some beautiful, seldom-birded areas. Thanks to Dave Johnson and all of the field trip leaders. Thanks, too, to Toni Brevellier and Pearl Sandstrom-Smith for making local arrangements, and to Kim Potter and David Pantle for reception and convention table duties.

Though it seemed species diversity was fairly low in the atlas blocks, several rare birds were found. (See Dave Johnson's report which follows). Many of the conventioners added sidetrips through southeast Colorado to see specialty birds like Mississippi Kite, Ladder-backed Woodpecker, Eastern Phoebe, Eastern Wood-pewee, and Squaled Cale (oops). Many of us picked up a life bird for Colorado with great views of a male Painted Bunting in Cottonwood Canyon.

The Saturday paper session included a talk with slides by Ronald A. Ryder on "Waterbirds Of The San Luis Valley: Past, Present, And Future". Dr. Ryder, a Charter Member and past-president of the C.F.O., is Professor

Emeritus of Wildlife Biology at Colorado State University. Stan Senner, who spoke on "Conservation Of Grassland Birds", is the Migratory Bird Specialist for the National Audubon Society. James Karo presented a show of outstanding bird slides titled "Birds of the Southwest". Jim is an Albuquerque, New Mexico resident and has attended C.F.O. conventions as a member for many years. Hugh Kingery also spoke on the Colorado Breeding Bird Atlas Project.

At our evening banquet featuring roast beef and chicken, Bill Prather conducted a bird checklist countdown. (Isn't eating bird a C.F.O. tradition too?) Steve Bouricius conducted the election of officers and reported on the highlights of the board meeting. The banquet speaker, Dick Roth, presented a fine slide program on "Birding With A Purpose: The Value Of Christmas Counts, Migrant and Breeding Bird Surveys As Monitoring Programs". Dick is the Neotropical Migratory Bird Program Manager for the U.S. Forest Service in the Rocky Mountain Region. Our sincere appreciation goes to all the speakers.

This year, two longtime C.F.O. friends returned to Colorado for the convention. Bruce Webb, a former director and C.F.O. Journal editor came from Roseville, California to bird with us. Also, Tom Shane, a former C.F.O. vice-president, traveled from Garden City, Kansas, with his wife Sara. We were delighted, too, to see Harold Holt, who attended with his wife LaVona before rushing off to the ABA Convention in Minot, North Dakota.

While the focus of C.F.O. conventions has always been birding in the field, it's the people that bind us together as an organization and keep us coming back year after year. Our first-ever meeting in Trinidad showed us new views of birds and distinctive habitats we'll never forget. And our associations with our fellow birders are just as unforgettable. Thanks to each and every one of the attendees for making it a special event.

Many of us are very excited at the prospects for next year's convention in the Grand Valley. Plans are already underway. If you've never attended a C.F.O. convention, now's the time to mark your calendar for Memorial Day weekend, 1995. Bring the kids. It's sure to be birding at its best.





**C. F. O. BOARD AND MEMBERSHIP MEETINGS  
JUNE 11, 1994**

**David Pantle, Secretary  
1826 Flora Court  
Canon City, CO 81212-4577**

The C. F. O. Board met at 4:00 p.m. during the 32nd Annual Convention in Trinidad. Present were Dave Silverman, Steve Bouricius, David Pantle, Raymond Davis, Coen Dexter, Bob Dickson, Paul Opler, Kim Potter, Linda Vidal, and Bill Prather.

1. Minutes. Minutes of meeting of November 11, 1993 were approved. It was reported that the Board by mail ballot had also unanimously approved, with one abstention, a donation of \$500 to the Colorado Breeding Bird Atlas and that the check had been sent. This brings to \$2500 the total CFO financial contribution to the BBA to date.

2. T-Shirts. The Secretary reported he had purchased 50 new t-shirts, in emerald and maroon colors at \$6.43 each, to sell at the convention for \$10 each. (By the end of the convention 15 had been sold.) The Board indicated it likes to have shirts available and that it felt the price is reasonable.

3. Financial. Davis reported that 62 persons have registered for the convention. CFO has grown from 300 to 350 members, including 43 new members since the beginning of the year. 74 members had not renewed by March, and over 40 renewed and 30 did not respond after renewal notices were sent. CFO has cash assets of over \$11,000. Davis and Bouricius will prepare a proposed annual budget to present at the next meeting.

4. Membership brochure. Linda Vidal, Coen Dexter, Steve Bouricius and Kim Potter have actively distributed the brochures in bird stores, nature centers and Forest Service offices. Only a few hundred of the 3,000 printed are left. The brochure has probably helped increase membership. The Board approved revising the brochure as necessary (e.g. for the dues increase) and to spend \$500 to print 5,000 more.

5. C. F. O. Journal. The Journal costs approximately \$1,000 per issue. No change in its budget was made. The new Editor has been having 550 copies printed. 350 are sent to members, 100 are given to CSU for its library exchange program, and the rest are kept for new members and inventory. The Board concluded to leave to the Editor the number of copies to print and to monitor this. The Board commends the new editor, Dave Leatherman, for doing an excellent job. The Board approved a letter drafted by Kim Potter and Dave Leatherman to be sent to universities and others, especially those outside Colorado, doing research on birds in

Colorado, requesting that they submit articles for publication in C. F. O. Journal.

6. C. F. O. Records Committee. Chairman Bill Prather reported that the present rules were well written, but asked whether any changes are now needed. Bob Dickson commented there are several inconsistencies, and that Mark Janos has suggested the rules be rewritten and has prepared a draft of revised rules. Bill Prather and Bob Dickson will work as a committee to review the rules and suggest any changes. Mark Janos has agreed to assist the committee with this work. They will try to have this ready to present to the Board at its fall meeting. Any C. F. O. member who would like to propose changes should send them to a committee member by this fall. Prather indicated that he does not need a secretary to assist him and that the Denver Museum of Natural History through Phil Hayes is doing a good job of filing and managing the completed records. About 120 records are received by the Committee each year. 1993 records are about ready to be sent to the Committee, plus they are revoting on 1992 records. Prather will begin sending postcards acknowledging receipt of records submitted to the Committee. The Board thanked Prather for his service.

7. Checklist. Bouricius asked whether the CFO Field Checklist needs to be revised. Prather would like to wait until the 1992 records are complete. Linda Vidal has been actively distributing them for resale by more organizations, such as the Rocky Mountain Nature Association and Tucson Audubon. She will continue with these efforts.

8. Nomination of Officers and Directors. Under the By-laws, it is time for Paul Opler and Coen Dexter to cycle off the Board. Their service has been appreciated. Paul will continue as a member of the Editorial Board of C. F. O. Journal. Susan Blackshaw Paynter and Alan Versaw, each of Colorado Springs, have agreed to join the Board. Steve Bouricius was nominated for President and Coen Dexter for Vice-President.

9. Seasonal Reports. Coen Dexter has written seasonal reports for C. F. O. Journal for a full annual cycle and was commended by the Board for his work. The primary sources of information are seasonal reports sent by about 20 people to Hugh Kingery to use for American Birds. Kingery sends copies of the forms on to the C. F. O. writer. C. F. O. Journal publishes its seasonal reports before publication by American Birds. Reports for Spring and Fall are twice as long as for Summer and Winter. Coen asked to be relieved of this responsibility, since as Vice-President of CFO he will be planning field trips and the convention. Kim Potter agreed to begin writing the seasonal reports.

10. Dues. The Board had previously approved an increase to \$16 for Regular, \$25 for Contributing, and \$40 for Supporting members, beginning

in 1995. Sustaining is \$100. Higher categories contribute about \$250 per year to CFO. Paul Opler recommended that additional dues categories be established. Most organizations charge more for institutional memberships than for individuals. The Board approved creating three new categories: Student \$12, Family \$20, Institution \$25. There will be no limit on the number of years which a member may prepay.

11. Future Conventions. The 1995 convention will be in Grand Junction over Memorial Day weekend. The possibility of holding a joint convention with Western Field Ornithologists in 1997 in Estes Park will be investigated.

12. Annual Business Meeting. At the Banquet that evening, attended by over 60 persons, officers and directors were elected by unanimous vote of the members present. Elected as officers for the next year, to hold office until the next annual convention, were Steve Bouricius, President, Coen Dexter Vice-President, David Pantle, Secretary, and Raymond Davis, Treasurer. Susan Blackshaw Paynter and Alan Versaw were elected as directors for terms expiring in 1997.



## PAPER SESSION SUMMARIES

### **CONSERVATION OF GRASSLAND BIRDS**

**Stanley E. Senner  
National Audubon Society  
4150 Darley Ave., Ste. 5  
Boulder, CO 80303**

The late Robert Mengel identified 12 species of birds that he considered to be endemic to grassland habitats and another 25 species that are more widespread but that he considered to have secondarily evolved in grasslands (Mengel 1970). Taken as a group, federal Breeding Bird Survey data indicate that grassland bird species have shown steeper, more consistent, and more geographically widespread declines than any other behavioral or ecological group of North American species over the last quarter century (Knopf 1994). Species showing statistically significant declining trends during the period 1966-1991 are: Mountain Plover, Franklin's Gull, Cassin's Sparrow, Lark Bunting, Eastern Meadowlark, Dickcissel, Grasshopper Sparrow, Henslow's Sparrow, Lark Sparrow, and Brewer's Sparrow.

Concerns about the conservation of grassland-dependent birds were discussed in relation to several issues: (1) In 1995 the Congress will be considering whether and in what form to extend the Conservation Reserve

Program (CRP), which pays farmers not to cultivate areas with highly erodible soils. Nationally, more than 36 million acres of land are under 10-year CRP, including nearly 2 million acres in Colorado. Studies in North Dakota, for example, have shown strong benefits to such species as the Lark Bunting on CRP versus adjacent cultivated lands (Johnson and Schwartz 1993). (2) The USDA Forest Service administers 20 national grasslands totalling about 3.8 million of acres, including two units in Colorado--the Pawnee and Comanche National Grasslands. Most national grasslands are in short-grass prairie habitats, and, because they are in public ownership, they represent a tremendous opportunity to maintain and restore habitat for grassland birds. In order to make recommendations about the management of national grasslands for the benefit of birds, field ornithologists need to learn more about the habitat requirements of such species as the Cassin's Sparrow, about which little is known. (3) Secretary of the Interior Bruce Babbitt has established the National Biological Survey to better inventory the nation's biological resources. Some members of Congress are attacking the authority of the new survey to use volunteers to gather data, such as in Breeding Bird Surveys, atlases, and Christmas Bird Counts. The National Audubon Society and other organizations are working in support of funding for the survey and its ability to use volunteers to study and monitor bird populations.

## **WATERBIRDS OF THE SAN LUIS VALLEY - PAST, PRESENT AND FUTURE**

**Ronald A. Ryder**  
**Dept. of Fishery and Wildlife Biology**  
**Colorado State University, Ft. Collins, CO 80523**

Archeologists have found bird remains in middens left by paleoindians in what is now the Blanca Wildlife Habitat Area (BLM) north of Alamosa. Sandhill Cranes are depicted in pictographs made by early man in cliffs near Del Norte. Pike served wild goose to his Spanish captors in 1807. Early ornithologists working out of Ft. Garland (notably H.W. Henshaw) reported 104 species for the Valley in the 1870's including many nesting waterbirds. Sizable colonies of White-faced Ibises, Snowy Egrets and Black-crowned Herons still occur, especially at the Russell Lakes, San Luis and Head Lakes, Adams Lake, and the two federal refuges, Alamosa and Monte Vista. Migrant flocks of Sandhill Cranes still stop each fall and spring. Duck numbers have declined in the past 20 years, but geese have increased. The Valley is one of the best areas in Colorado to observe nesting American Avocets, Black-necked Stilts, Snowy Plovers and Wilson's Phalaropes. The future of waterbirds looks good, with many wetlands being preserved and managed by state, federal and private organizations.

**BIRDS OF THE SOUTHWEST**

**James Karo**  
**1621 Cedar Ridge Drive NE**  
**Albuquerque, NM 87112**

[A verbal summary of Jim's presentation would not do it justice. Besides, at one-thousand words per picture, there is not adequate space. At \$300 per color reproduction, a graphic summary is not affordable. We will all have to look forward to seeing Jim's super photography displayed in future Journals. That's a promise - Editor]



**CFO CONVENTION FIELD TRIP REPORT**  
**JUNE 11-12**

**David Johnson**  
**1920 Greenwood**  
**Pueblo, CO 81003**

Total species down. Confirmed breeders up.

That sums up the story of the 1994 Convention field trips. The total species count of 133 is below average for convention totals. (It may be somewhat higher than 133 because I didn't receive results from one of the Sunday trips.) Compensation for the low total species was getting into four priority blocks, completing three of them, and nearly completing the fourth.

Finding breeding American Redstarts and several pairs of Ovenbirds was a special treat for those who went to Starkville with Hugh Kingery. Those who went on the Trinchera Cave trip not only saw good birds, but also got to visit a little known archaeological site with Mike Crosby who helped develop the site back in the early 1970's. A non-breeding Nashville Warbler was one of the highlights of the Gulnare block.

Following is a list of species seen on Convention field trips:

Pied-billed Grebe	Snowy Egret
Western Grebe	Cattle Egret
Clark's Grebe	Black-crowned Night-heron
Double-crested Cormorant	Canada Goose
Great Blue Heron	Mallard

Turkey Vulture	Barn Swallow
Mississippi Kite	Stellar's Jay
Cooper's Hawk	Scrub Jay
Swainson's Hawk	Pinyon Jay
Red-tailed Hawk	Clark's Nutcracker
Ferruginous Hawk	Black-billed Magpie
Golden Eagle	American Crow
American Kestrel	Chihuahuan Raven
Prairie Falcon	Common Raven
Wild Turkey	Black-capped Chickadee
American Coot	Mountain Chickadee
Killdeer	Plain Titmouse
Spotted Sandpiper	Bushtit
Ring-billed Gull	Red-breasted Nuthatch
California Gull	White-breasted Nuthatch
Rock Dove	Pygmy Nuthatch
Mourning Dove	Brown Creeper
Yellow-billed Cuckoo	Rock Wren
Greater Roadrunner	Canyon Wren
Great Horned Owl	Bewick's Wren
Burrowing Owl	House Wren
Common Nighthawk	Marsh Wren
White-throated Swift	Ruby-crowned Kinglet
Black-chinned Hummingbird	Blue-gray Gnatcatcher
Broad-tailed Hummingbird	Western Bluebird
Belted Kingfisher	Mountain Bluebird
Lewis' Woodpecker	Townsend's Solitaire
Ladder-backed Woodpecker	Hermit Thrush
Downy Woodpecker	American Robin
Hairy Woodpecker	Gray Catbird
Northern Flicker	Northern Mockingbird
Western Wood-Pewee	Curve-billed Thrasher
Hammond's Flycatcher	Cedar Waxwing
Gray Flycatcher	Loggerhead Shrike
Cordilleran Flycatcher	European Starling
Eastern Phoebe	Solitary Vireo
Say's Phoebe	Warbling Vireo
Ash-throated Flycatcher	Orange-crowned Warbler
Cassin's Kingbird	Nashville Warbler
Western Kingbird	Virginia's Warbler
Eastern Kingbird	Yellow Warbler
Horned Lark	Yellow-rumped Warbler
Tree Swallow	Black-throated Gray Warbler
Violet-green Swallow	American Redstart
N. Rough-winged Swallow	Ovenbird
Cliff Swallow	MacGillivray's Warbler

Hooded Warbler	Western Meadowlark
Western Tanager	Red-winged Blackbird
Black-headed Grosbeak	Yellow-headed Blackbird
Blue Grosbeak	Brewer's Blackbird
Lazuli Bunting	Great-tailed Grackle
Indigo Bunting	Common Grackle
Green-tailed Towhee	Brown-headed Cowbird
Rufous-sided Towhee	Northern Oriole
Canyon Towhee	House Finch
Cassin's Sparrow	Red Crossbill
Chipping Sparrow	Pine Siskin
Vesper Sparrow	Lesser Goldfinch
Lark Sparrow	American Goldfinch
Lark Bunting	Evening Grosbeak
Song Sparrow	House Sparrow
Dark-eyed Junco	



### CFO FIELD TRIP REPORT - SUNDAY, MAY 22, 1994

Peter Gent  
55 S. 35th St.  
Boulder, CO 80303

I now know how to predict when and where warblers on migration will NOT show up - let me schedule a CFO field trip to the warbler hotspots sometime in May. Several years ago the CFO Convention was held in Boulder around May 10th and I led a field trip to the Boulder warbler hotspots. We did not see any warblers at all on the CU campus or in Gregory Canyon and, after desperation set in, finally found a single Virginia's Warbler in Bluebell Canyon. This year I decided to try the Wheatridge Greenbelt, which is probably Denver's best warbler hotspot, and where on obliging Red-faced Warbler showed off to many birdwatchers on May 3, 1993. That was enough to put the jinx on the Greenbelt and ensure that no very unusual warblers have been seen there during the first three weeks of May, 1994. This trend continued on Sunday May 22nd, despite the best, maybe frantic, efforts of myself and five other CFO members who also participated in the field trip.

Three Red Foxes, at the bridge, welcomed us to the Greenbelt and then a Yellow-breasted Chat gave its own inimitable welcoming song. Near the tree-bridge, a male Rose-breasted Grosbeak was also in full song. A Black-crowned Night-heron caught two good-sized fish at the edge of the

Greenbelt pond. By 9:30 AM, we had thoroughly confirmed the death of migrants and decided on drastic measures to pad the warbler list, and went to Apex Gulch, southwest of Golden. We were splendidly rewarded with the only migrant warbler of the day - a male Wilson's Warbler at the entrance to the Gulch. This spurred us onward and upward past more singing Chats, Virginia's Warblers, Lazuli Buntings and Black-headed Grosbeaks. Finally, we all saw well a cooperative Empidonax Flycatcher, which sat still for a few minutes. We looked carefully at the pear-shaped eyering to the rear of the eye, (a very good fieldmark when seen well), and the quite yellowish hue of the underparts and declared it a Cordilleran Flycatcher. The trip finished at noon. One of these years, a warbler trip and the warblers will rendezvous at the same time and place!

Species Seen:

- |                               |                        |
|-------------------------------|------------------------|
| Double-crested Cormorant      | American Robin         |
| Black-crowned Night-heron     | European Starling      |
| Canada Goose                  | Warbling Vireo         |
| Mallard                       | Virginia's Warbler     |
| Red-tailed Hawk               | Yellow Warbler         |
| Killdeer                      | Yellow-rumped Warbler  |
| Ring-billed Gull              | Common Yellowthroat    |
| Rock Dove                     | Wilson's Warbler       |
| Mourning Dove                 | Yellow-breasted Chat   |
| Broad-tailed Hummingbird      | Rose-breasted Grosbeak |
| Downy Woodpecker              | Black-headed Grosbeak  |
| Northern Flicker              | Lazuli Bunting         |
| Western Wood-pewee            | Rufous-sided Towhee    |
| Cordilleran Flycatcher        | Vesper Sparrow         |
| Western Kingbird              | Song Sparrow           |
| Northern Rough-winged Swallow | Red-winged Blackbird   |
| Cliff Swallow                 | Western Meadowlark     |
| Barn Swallow                  | Common Grackle         |
| Stellar's Jay                 | Brown-headed Cowbird   |
| Black-billed Magpie           | N. (Bullock's) Oriole  |
| Common Raven                  | House Finch            |
| Black-capped Chickadee        | American Goldfinch     |
| House Wren                    | House Sparrow          |







**VESPER SPARROW NEST**

**Pine Ridge Open Space,  
west of Fort Collins in remnant  
prairie habitat (Horsetooth Mt. BBA)**

**22 June '91**

**Dave Leatherman**

## IN MEMORIAM: NANCY M. TAGGART

We are saddened to hear of the passing of Nancy M. Taggart of Colorado Springs who died in her home, December 30, 1993. Nancy was a longtime Supporting Member of the C.F.O., a Director from 1984 to 1987, and helped to organize our Colorado Springs convention in 1986. She was also an active contributor to the Aiken Audubon Society and the Fountain Creek Regional Park.

Nancy was a teacher, and introduced many people to birding. In her last year, at age 69, she took several birding trips and conducted a Breeding Bird Survey route near her cabin on Tarryall Creek with her friend Wilbur Fulker. Nancy Taggart was a lovely lady and will be missed by the Colorado Field Ornithologists.

S.M.B.



**NEWS FROM THE FIELD. SEASONAL REPORT WINTER  
(December 1993-February 1994)**

**Coen Dexter  
175 Sunset Circle  
Palisade, Colorado 81526**

This is the last seasonal report that I'm scheduled to write. Kim Potter has graciously agreed to take over. Please consider your future role in this capacity. If you have questions regarding what it requires, feel free to give me a call

The winter season was very mild in the west but closer to average east of the Divide. Rare wintering birds were plentiful in the Colorado River Valley. The Grand Junction C.B.C. reached 100 species, the first Western Colorado count to do so. Montane birds were abundant on the Grand Mesa due to a good cone crop. Birds were reported at average or above throughout the western slope but below average east of the divide. Dave Hallock reported record low montane species numbers in the Boulder area. Winston Brockner reported the same experience around Evergreen with finches. Janeal Thompson reported very dry conditions in southeastern Colorado with very few birds.

Best birds in the report include: Red-shouldered Hawk, Lesser Black-backed Gull, Scarlet Tanager, and White-winged Crossbill. I tried to give all accounts of the Rosy Finches due to the interest recent splitting may have created.

**Pacific Loon** - rare to uncommon fall and early winter migrant on eastern plains. 1, Pueblo Res. 12/21 (Van Truan, Brandon Percival and Lilly).

**Common Loon** - very rare winter resident. 1, Loveland 2/21 (Alan Versaw) and 1, Fort Collins 12/4-2/1.

**Pied-billed Grebe** - rare winter resident. This species wintered throughout much of the state due to warmer temperatures and open water.

**Horned Grebe** - rare winter resident on eastern plains. Grebes were reported as late as 12/5 and as early as 2/20 in migration in the Denver area; 3, in Boulder until 12/19; and 13-15 wintered at Hamilton Res. (R. Ryder).

**Red-necked Grebe** - accidental on northeastern plains. 1-2 were at Hamilton Res. Dec. to 1/16.

**Western Grebe** - rare to uncommon winter resident at low elevation. The grebe was reported up until 12/5 in Denver, 12/19 in Boulder, 12/18 at Horsetooth Res. and 2 did winter at Hamilton Res. (Ryder).

**Double-crested Cormorant** - very rare winter resident on eastern plains and casual in western valleys. 3, Grand Jct. 12/1-1/1; 6 at Boulder until 12/19; 1, Boulder 1/1; and 3, Fort Collins 1/18 (David Ely).

**Green Heron** - accidental in winter. 1 imma. was near Grand Jct. 1/3-7 (Mike Wright).

**Black-crowned Night-heron** - uncommon winter resident on eastern plains. 5 wintered in Denver 1/23; and 5 wintered in the Loveland area.

**Yellow-crowned Night-heron** - no previous winter records. 1 adult was reported 1/13 near Canon City on the Arkansas River (Sylvia Wheelock).

**Tundra Swan** - very rare winter resident in eastern plains and western valleys. 1 near Fruita 12/6- 1/14 on the Colo. River (Ron Lambeth & Coen Dexter); 1 at Berthoud 12/3 (Bobbie Christensen); and 1, Fort Morgan 2/25 (Sally Niemann).

**Trumpeter Swan** - Casual winter resident in western valleys. 1 reported with green collar near Grand Jct. 12/19-20 (Levad, Dexter & Henwood).

**Greater White-fronted Goose** - Rare winter resident on eastern plains. 1 was found at Windwor Lake (Joe Mammoser).

**Ross'Goose** - rare to uncommon winter resident in western valleys and on eastern plains. 1 along Piceance Creek 2/14-16 (Kim Potter); and 1 near Greeley on 1/15 (Joe Himmell); and 3 near Hasty on 2/21 (David Leatherman).

**American Black Duck** - casual winter resident on eastern plains. 1 in Pueblo 12/18 - 1/3 (Wood & David Silverman).

**Cinnamon Teal** - had already begun spring migration in Pueblo area, 2/4 with the return of 3 ducks (Truan).

**Eurasian Wigeon** - very rare spring migrant on eastern plains. 1 at Pueblo 2/27-3/3 (Smith & Silverman); and 1 along the Platte River near Denver on 1/11 (Leatherman).

**Greater Scaup** - rare local winter resident. 1 female reported from Grand Jct. 1/12 (Levad); and 2, Ester Park 1/30 (Warner Reeser).

**Oldsquaw** - very rare mid-winter on eastern plains and early winter in western valleys. 1 at Parachute 12/4-9 (Potter); 1 at Pueblo Res. 12/18 (Townsend & Smith); 2, Hamilton Res. throughout the winter period.

**Black Scoter** - accidental in winter. 1 adult female at Hamilton Res. 1/4-1/19 (Leatherman & Ryder).

**Surf Scoter** - rare fall migrant on eastern plains. 1 on Pueblo Res. 12/4 (Percival, Truan & Townsend).

**Barrow's Goldeneye** - rare winter resident. Records were numerous from the western valleys where nearly 100 ducks were reported. Potter reported a high count of 54 ducks from four locations in the Rifle area. Are these numbers normal? Is this our local population from the Flat Tops? 1 male on 12/11 and 1/9 both near Pueblo (Mark Janos); 1 at Longmont, 12/6 (Barbara Hyde).

**Common Goldeneye x Hooded Merganser** - Leatherman and Mammoser found (1) of these rare hybrids on Sloan Lake on 1/31. This combination is the only known for the merganser, although this Goldeneye reportedly crosses with several other waterfowl.

**Red-breasted Merganser** - rare to uncommon winter resident on eastern plains and casual in western valleys. 2 or 3 ducks remained in the Grand Jct. area until 12/19; 18 were reported in the Denver area; and 12 were found wintering in the Fort Collins area.

**Northern Goshawk** - rare winter resident in Colo. 6-8, Grand Jct.; 3, Boulder; 1, Evergreen; 3, Rifle; 4, Pueblo; and 3, Lyons.

**Red-shouldered Hawk** - accidental winter resident on northeastern plains. 1 adult was reported east of Pueblo, 12/1-2/28 (Janos, Roth, and others).

**Merlin** - rare to uncommon winter resident. 1, Fort Morgan; 3, Evergreen; 3, Rifle; 3, Boulder; 1, Lyons; and 1, Grand Junction.

**Peregrine Falcon** - very rare winter resident in western valleys and eastern plains near foothills. 1, reported, 12/19 in Boulder and 12/18 and 1/30 at Grand Jct.; 1, Lyons, 2/18.

**Gyr Falcon** - casual winter resident on northeastern plains. 1, Longmont, 2/10 (Mark Nikas); and 1 dark phase imma. near Greeley 12/9 (Himmell).

**Sharp-tailed Grouse** - (1) seen for second year in a row at Crow Valley, 2/14 (Leatherman).

**Virginia Rail** - rare winter resident in western valleys and the eastern plains. Reports were numerous statewide.

**Sandhill Crane** - casual in mid-winter. 5 wintered near Fruita until 2/16.

**Whooping Crane** - has no previous winter records. 1 wintered with 5 Sandhill Cranes until 2/16, near Fruita. This crane was a member of the Gray's Lake flock.

**Semipalmated Plover** - no previous winter records. 5 to 6 were reported from the shore of McPhee Res. on 12/11 (Lucille Bainbridge).

**Greater Yellowlegs** - casual winter resident. 1 reported near Grand Jct. 1/7 (Wright).

**Dunlin** - accidental in winter. 1 reported on Colo. River near Fruita on 2/26 (Dexter and Wright); 1 reported 2/20 at Cherry Creek Res. (Phil Hayes); 1 at Boulder 12.4 (Bill Prather and Bill Kaempfer).

**Herring Gull** - accidental in winter in western valleys. 1 reported on Colo. River near Grand Jct. 1/27 (Henwood & Dexter); Denver reported 9 gulls; Boulder reported 4; 1, Ester Park 12/25.

**Thayer's Gull** - rare winter resident on eastern plains. 1 at Pueblo Res. 2/20 (Janos); 1, Estes Park, 12/25 (Reeser); and 1 at Greeley 1/13 (Himmel).

**Lesser Black-backed Gull** - accidental winter. 2 reported from Denver 1/9 and 1/15 (Phil Hayes).

**Greater Black-backed Gull** - accidental in winter on eastern plains. The Pueblo Res. gull is still present after one year.

**Snowy Owl** - rare winter resident on northeastern plains. 1 was found at Riverside Res. on 12/6 (Leatherman).

**Northern Pygmy-owl** - rare resident in foothills and mountains. 12 have been reported, as well as 3 roadkills up and down the Front Range.

**Long-eared Owl** - rare resident but may be locally uncommon around winter roosts. 1 reported near Fort Morgan 12/18; 7 owls were reported in the Fort Collins area.

**Short-eared Owl** - 1 was reported near Fort Collins 12/3 (Bill & Paula Lisowsky).

**Northern Saw-whet Owl** - winter status in western valleys is uncertain. 1 roadkill found near Gateway 1/15 (Levad); 1 found near Fruita 1/21 (Levad & Dexter); 1, roadkill near Eagle 3/2 (Jack Merchant); and 1, Lyons 12/13 (D.W. King).

**Yellow-bellied Sapsucker** - very rare winter resident on northern plains. 1 imma. Lyons in Dec. (Mary Griest); 1 imma. Loveland 1/8 (Bernice Weldon); and 1, Fort Collins 11/15-12/15 (Leatherman & Lisowsky).

**Red-bellied Woodpecker** - 1, near Ovid 1/23 (Himmel).

**Three-toed Woodpecker** - rare or very locally uncommon resident in higher mountains. 3, Grand Mesa; and 2, Boulder.

**Carolina Wren** - very rare visitor to eastern plains south to Pueblo. 1 at Beulah 12/1 -2/28 (Pat Flynn); 1, at Pueblo, 12/1- 2/28 (Johnie & Bob Dickson); and 1, Boulder 12/19 (Paula Hansley).

**Winter Wren** - rare winter resident on eastern plains; 1, Pueblo on 12/11-12 (Janos & Percival); 1, Boulder, 12/19 on C.B.C.; 1, Lyons, 12/3 (King); and 1, at Fort Collins throughout the period (Mammoser & Leatherman).

**Golden-crowned Kinglet** - rare in winter. Not so this year, as reports are too numerous to mention.

**Blue-gray Gnatcatcher** - casual in mid-winter. 1, was near Grand Jct. 12/19 (Levad & Dexter).

**Hermit Thrush** - casual in mid-winter. 2 or 3 birds could be found in Grand Jct.; 1, at Rifle Gap 12/3 and 1, at Glenwood Springs 2/22 (Potter); and 1, Colo. Springs 2/6 (Versaw).

**Varied Thrush** - very rare winter resident along the lower edge of the eastern foothills and adjacent plains from Larimer County south to Pueblo County. 1 adult male reported from Canon City 12/19-20 (Donna Engard, Pat Monaco, and Laura Danielson).

**Gray Catbird** - very rare winter. 1, Boulder 12/19 (B. Prather and Walter Collins); and 1 wintered in Longmont area reported on 1/18 and 1/31 (Leatherman).

**Northern Mockingbird** - rare winter resident in western valleys and low foothills on eastern plains. 2 winter in the Grand Valley, 1 at Mike Henwood's feeder and 1 at a farm near Highline State Park (Versaw); 1, Evergreen Jan. and Feb. (Barbara Jean Gard); 1, Longmont 12/2; 1, Berthoud 12/11 (Christensen); and 1, Boulder 12/19 (Gillian Brown).

**Bohemian Waxwing** - were reported only at Rifle (Potter).

**Northern Water Thrush** - accidental in winter. 1, Longmont 12/6 (John Prather).

**Scarlet Tanager** - first winter record. 1 imma. male wintered in Boulder (Carol Cushman).

**Northern Cardinal** - rare on eastern plains in winter. 1 male at Julesburg 2/7 (Bridges & Leatherman).

**Green-tailed Towhee** - rare winter resident in low foothills and adjacent valleys and plains. 1, Indian Hills 1/9 (Gordon Olinger).

**Lark Sparrow** - winter status is unclear. 1, Boulder 12/15 (Cushman).

**Sage Sparrow** - migrate very early. 1 returned to Eagle 2/26 (Merchant).

**Fox Sparrow** - rare on eastern plains in winter. 1 spent the winter at a feeder near Boulder (Dave Hallock); 1, Indian Hills 12/31 (Susan Harper); and 1 eastern race 2/26 Rocky Ford (Percival).

**Swamp Sparrow** - rare winter resident on eastern plains and western valleys. 1, 1/16 Molina; 1, 1/1 Pueblo; 1, 2/13 Denver; 1, 12/19 Boulder; and 5 birds were found in the greater Fort Collins area during the winter period.

**White-throated Sparrow** - rare winter resident in western valleys and on eastern plains. 1, Fort Morgan 12/18; 1 Molina 1/29; 1, Boulder 12/19; 1, Longmont 12/18; and another 8-10 birds were reported from the Fort Collins area.

**Golden-crowned Sparrow** - very rare winter resident on northern plains near foothills south to El Paso County and casual on the western slope. 1, Molina 1/29 (Dexter); 1, Red Rocks Park that wintered (Brockner and Brown).

**Yellow-headed Blackbird** - rare winter resident in western valleys and on eastern plains. 1, Fort Collins 12/18; 3, Latham Res. 1/9; and for a second year Steve Martin had a female spend the winter at his Fort Collins feeder.

**Rusty Blackbird** - rare winter resident on eastern plains. 2 females and 1 male at Pueblo, 12/1 - 2/25; 1, Boulder 12/19 (B. Prather); 4, Longmont 12/6 (J. Prather); 14, Fort Collins 1/7 and 19, Lamar 2/21 (Leatherman).



**Great-tailed Grackle** - rare to uncommon very local winter resident in western valleys and southeastern plains. 30 wintered on the Colo. River near Fruita (Potter, Levad & Dexter); 25, Las Animas in Jan. (Truan).

**Common Grackle** - winter residents on eastern plains. 6, reported from Fort Collins 2/18 (Joe Rigli); 2, Loveland 1/2-6 and 2/14 (Jean Christensen & Patsy Spight); 2, Holly 1/2 (Janos).

**Brown-headed Cowbird** - winter resident in western valleys and eastern plains. 4, reported from Fort Morgan 12/18; several dozen wintered in feedlots near Fruita; 1, Longmont 1/7; and 1, Fort Collins 12/16.

**Northern Oriole** - casual in winter on eastern plains near foothills. 1 reported in Englewood 12/22 (Dan George).

**Gray-crowned Rosy Finch** - 1, near Boulder; 5, Loveland 12/3; 6, Fort Collins 12/18; 20-30, Ward 1/1-3; 20, Idaho Springs 1/2-4; 30, Numm 12/22; 50, Walden 1/22; 30, Cowdrey 1.22; and 150, Idaho Springs 2/18.

**Black Rosy Finch** - 80 wintered in Colo. National Monument; and 1, Idaho Springs 1/3-4.

**Brown-capped Rosy Finch** - 10, Ward 1/1-2; 5, Idaho Springs 1/2-3; and 3, Idaho Springs 2/18.

**White-winged Crossbill** - winter status in western Colo. is unknown. 18-20 birds could be found on the Grand Mesa at 10,000 feet 1/1 to 2/20 (Levad); 1 male near Gould on 2/26 (Ely); and a flock at Gould was reported on the North Park C.B.C. (Ron Ryder).

**Common Redpoll** - 1, reported at Holly on 1/2 (Wood, Janos & Percival); 3, Loveland 2/14 (Bill Washnck); and 2, Crow Valley 2/26-28.

**Lesser Goldfinch** - casual in winter in lower foothills and in western valleys. 2 birds wintered at Ron Lambeth's feeder in Grand Jct.; 1 male Canon City 1/7-13 (Silvia Wheelock); 1, Boulder 12/19 (C.B.C.).



## A DECADE OF INDIAN PEAKS BIRD COUNTS

Dave Hallock  
Boulder County Nature Association  
2478 Eldora Road  
Nederland, CO 80466

**In the Beginning...** We had heard stories about Fox Sparrows nesting in dense willow thickets, White-winged Crossbills feeding on spruce cones and Ring-necked Ducks on mountain lakes with chicks in August. There had been the occasional sighting of Tennessee and Canada Warbler, Osprey and Pacific Loon. As our minds wandered, we had visions of Snow Buntings, Boreal and Snowy Owls. Since we all liked to go into the mountains for hikes, ski tours and weekend drives, why not combine these activities with a little bird watching and see if our hunches were true?

So began the Indian Peaks Four Season Bird Counts. Dedicated to providing birders with another reason to get out of the house and go into the mountains on their days off, the counts have completed their first ten years. The first organized event was the Indian Peaks Christmas Bird Count held on New Years Day, 1982. Twenty-five participants braved the cold and wind to search the high country. The 100 field hours and 200 miles traveled yielded all of 33 species and less than 15 birds seen each hour. Little did we know that this was average for the winter. We even paid money to do it. Because the count was so much fun and in order to get a true picture of seasonal variations in mountain bird populations, it was expanded to all four seasons.

**Organization.** The count area is a 7.5 mile-radius circle centered one-half mile northeast of Rainbow Lakes Campground. The circle extends north to Beaver Reservoir, south to Rollinsville, east just beyond Castle Rock in Boulder Canyon and west slightly over the Continental Divide. The communities of Nederland, Ward, Eldora and Rollinsville are within the count area.

Habitat within the count circle is dominated by three forest types - Ponderosa Pine/Douglas-fir below 8,500 feet elevation, Engelmann Spruce/Subalpine Fir from 9,500 feet to 11,000 feet and Lodgepole Pine with scattered Aspen stands between 8,000 feet and 10,000 feet (Mutel 1976). Mixed within these forest types are open woodlands, meadows, wetlands, streams, lakes/reservoirs, urban areas and Limber Pine forests. Found along the Continental Divide is alpine tundra and stunted krummholz.

The count circle is divided into 25 sub-areas. As many of the 25 areas as possible are covered by participants each count - generally, 12-20 areas are covered. Participants walk, drive, or ski throughout each area, recording all birds seen and/or heard. Several feeders are watched. Participants also keep track of time, distance and habitat covered in each

sub-area. Counts have averaged 80 hours of field time and covered almost 200 miles of ground.

A count period is set for each of the four seasons, during which participants are asked to visit their respective areas (one trip to each count area per count period). The count period for the breeding and winter counts generally lasts a month (June and January, respectively), while the spring and fall count periods last one to two weeks (during May and September, respectively).

**Acknowledgements.** Over the count's 10 years, 185 people have participated. They have been the heart and soul of the Indian Peaks Four Season Bird Counts. The following have taken part for at least 5 years (names preceded by \* have participated all 10 years): Dave Alles, \*Barbara & Earl Bolton, Alex Brown, \*Diane Brown, Marcia Cardetti, George Coffee, Jack & Tressa Coss, Lee & Virginia Evans, \*Mike Figgs, \*Dave Hallock, Paula Hansley, Lillian Harlow, Lynn Hoffmann, \*Jim Holitza, Bill Huntley, Roger Jakoubek, Steve Jones, \*Bill Kaempfer, Joe Krieg, \*Nan Lederer, Merle & Sally Miller, Carol Newman-Holitza, Gail Shickley, Elm Sturkol, \*Tom VanZandt, Marjorie & Tom Zapf. The counts have been sponsored by the Boulder County Nature Association and Boulder Audubon.

**Seasonal Comparisons.** During the count's first decade, 176 species have been seen. Including records from non-count periods, particularly the historic records of the late Gail Shickley, 209 species have been seen within the count circle.

The breeding counts have averaged the greatest number of species and numbers of individuals (Fig. 1). Per count, the spring and fall counts have averaged slightly less species than the breeding count. However, considering total 10-year lists, both spring and fall counts have reported more species than the breeding count. The spring and fall counts have also averaged slightly fewer individuals than the breeding season. The winter counts have averaged 40% fewer species than the breeding counts, and less than 50% of the numbers of individuals.

#### **WINTER SUMMARY**

**The Season.** The winter count provides information about a season that generally has the lowest number of species and individual birds in the high country. Much of the ground is covered by snow, while gusty winds and cold temperatures contribute to make a harsh environment. The primary variables that influence the count numbers are: 1) snow cover and weather - a mild winter and/or lack of snow cover allows for the presence of ground feeders such as Northern Flicker, American Robin and Dark-eyed Junco, or birds needing open water like Belted Kingfisher and American Dipper; and 2) the seed crop of cone producing trees which, when in abundance, can attract large numbers of Clark's Nutcracker, Red-breasted Nuthatch, Red Crossbill and other seed eating birds. Additionally, the average numbers reported do not reflect the winter birding experience. Due to the flocking tendency of most winter residents, one may see large numbers of birds in a matter of minutes and then observe virtually nothing

Figure 1

Seasonal Comparisons				
Indian Peaks Four Season Bird Counts				
	Count			
	W	S	B	F
Ave # of Species	36	80	96	79
Total Species (over 10 years)	66	136	133	141
Ave # of Ind. (per count hour)	18	35	39	32

W=winter; S=spring; B=breeding; F=fall

Figure 2

Most Numerous and Widespread Winter Birds			
Most Numerous		Most Widespread	
	#/Count Hour		% of Count Areas
Mountain Chickadee	4.85	Mountain Chickadee	95%
Bohemian Waxwing	2.58	Steller's Jay	70%
Rosy Finch	2.47	Common Raven	62%
American Crow	.99	Hairy Woodpecker	45%
Evening Grosbeak	.85	Clark's Nutcracker	42%
Steller's Jay	.84	Red-breasted Nuthatch	37%
Red Crossbill	.69	White-breasted Nuthatch	36%
Dark-eyed Junco	.52	Brown Creeper	35%
Pine Siskin	.42	Golden-crowned Kinglet	35%
Common Raven	.35	Evening Grosbeak	33%

Figure 3

Species Seen on 30% or Fewer Counts	
Northern Harrier	Fox Sparrow
Common Snipe	Song Sparrow
Great Horned Owl	White-throated Sparrow
Belted Kingfisher	Snow Bunting
Northern Flicker	Red-winged Blackbird
Brown Thrasher	Brewer's Blackbird
Rufous-sided Towhee	White-winged Crossbill
Loggerhead Shrike	Common Redpoll

for the next hour. Flocks can be of all one species, such as Rosy Finches or Bohemian Waxwings, or they may be mixed flocks of small insectivorous birds such as chickadees, nuthatches, creepers, kinglets and woodpeckers.

A total of 66 species have been observed on the ten winter counts, with an average of 36 species per count (range of 33-42 species). The montane lifezone averaged 32 species per count, while the subalpine/alpine lifezones produced an average of 18 species. Regarding numbers of individuals, an average of 18 was seen per count hour (range of 12 -28/hour). Again, the montane lifezone produced more birds than the subalpine/alpine areas, with averages of 26/hour and 9/hour, respectively.

**Common Species.** Mountain Chickadees dominate Indian Peaks winter birding, as they comprise just over a quarter of all birds seen (Fig. 2). They are usually found throughout the entire count circle. Both numerous and widespread are Steller's Jay, Common Raven and Evening Grosbeak. Many resident species, such as Hairy Woodpecker, Red-breasted Nuthatch, Brown Creeper and Golden-crowned Kinglet tend to be widespread but are not abundant. Many species that are numerous but not widespread, such as Rosy Finch, Bohemian Waxwing and Red Crossbill, are found in several large flocks. Annually their numbers can vary greatly. American Crows generally congregate around Nederland. The ten most numerous species listed in Figure 2 comprise 82% of all birds seen on an average winter count.

**Rare Species.** Sighting any of the Figure 3 species during a winter count would be a highlight. Some are summer residents, such as Brown Thrasher, Rufous-sided Towhee, Fox Sparrow, Song Sparrow, White-throated Sparrow and Red-winged Blackbird, which failed to migrate south or to lower elevations. Often, these species are found at feeders. Snow Bunting, White-winged Crossbill and Common Redpoll are irregular winter visitors, while species such as Common Snipe, Belted Kingfisher and Northern Flicker are more common at lower elevations. But with favorable weather, they may occur in the Indian Peaks count area.

Another group of species considered good finds for the winter count are those which are inconspicuous and/or occur at low density (Fig. 4). Although seen on at least five winter counts, none of these species have been found every year.

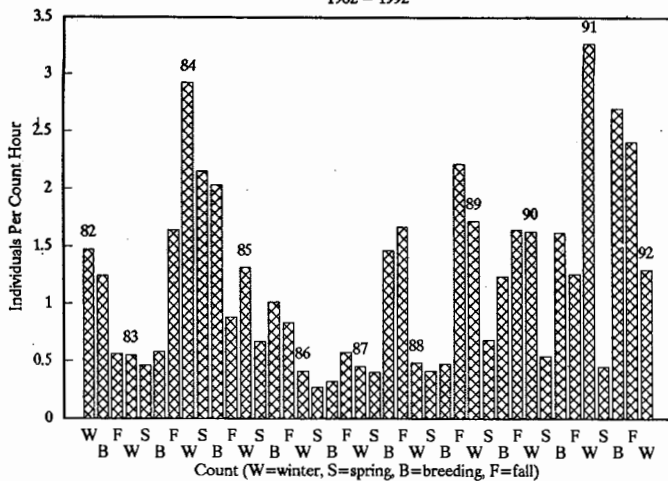
**Irruptive Seed Eaters.** The first decade has included at least two extraordinary periods for seed eating birds. The numbers of Clark's Nutcracker, Red-breasted Nuthatch, Pine Grosbeak, Red Crossbill and White-winged Crossbill have varied greatly from year to year and season to season. Count data show three general peaks in seed eater populations, which appear related to seed production by various coniferous trees (Fig. 5). The years 1983, 1986, 1987 and 1988 could be considered poor seed years based on numbers of seed eaters present. The years 1982, 1985, 1989 and 1990 were moderate cone crop years. Finally, 1984 and 1991 were great or "bumper" cone crop years. The Engelmann Spruce cone crop seems to have the greatest influence on seed eater numbers. This was especially true in the "bumper" years of 1984 and 1991, as well as the

Figure 4

Species Observed on 60% or More of Winter Counts and Average Number Observed is Less Than 5 Per Count	
Northern Goshawk	3-toed Woodpecker
Blue Grouse	American Dipper
White-tailed Ptarmigan	Northern Shrike

Figure 5

NUMBERS OF SELECTED SEED EATERS ON INDIAN PEAKS FOUR SEASON BIRD COUNTS 1982 - 1992



moderate years of 1985, 1989 and 1990. The Ponderosa Pine cone crop in the montane lifezone contributed to the 1984 bumper year, as well as the moderate years of 1982, 1985 and 1990. Subalpine Fir, known as an infrequent seed producer, had a significant cone crop only during the bumper year of 1984.

**Resident Species.** Resident species are those residing in the Indian Peaks count area all year. They include: Blue Grouse, White-tailed Ptarmigan, Downy Woodpecker, Hairy Woodpecker, Three-toed Woodpecker, Gray Jay, Steller's Jay, Clark's Nutcracker, Black-billed Magpie, American Crow, Common Raven, Black-capped Chickadee, Mountain Chickadee, Red-breasted Nuthatch, White-breasted Nuthatch, Pygmy Nuthatch, Brown Creeper, Golden-crowned Kinglet, Townsend's Solitaire, Pine Grosbeak, Red Crossbill and Evening Grosbeak. While individuals of each species may come and go - such as solitaires moving to lower elevations during harsh weather or crossbills immigrating due to poor cone crops elsewhere - generally, these species are present throughout the year.

Figure 6 indicates the winter count is heavily dominated by resident species, comprising 63% of all birds seen. Resident species make up 32%, 23% and 13% of the fall, spring and breeding counts, respectively. In terms of absolute numbers of resident species, the fall and winter counts generally have the highest counts, with the winter count being slightly higher. This is probably due to immigration during favorable seed production years. The numbers then decrease into the spring and breeding counts, possibly suggesting the affects of mortality. Certainly there are other factors influencing these numbers, such as the flocking tendency of resident birds in winter and the inconspicuous nature of some residents during the breeding season (for example, Stellar's Jay).

## THE CHANGING SEASONS - SPRING & FALL SUMMARIES

**The Seasons.** The spring and fall counts occur during times of movement and change. Similarities between these count seasons include: 1) average number of species per count (spring-80, fall-79); 2) individuals seen per count hour (spring-35, fall-32); and 3) total species seen over the ten years (spring-136, fall 141). Both migratory season count lists are greater than that for the breeding count, indicating the associated bird movements increase the probability of seeing something unusual. Both raptors and waterfowl are well represented on these counts.

These counts also monitor early and late migrants. The spring count period, held during the first week of May, includes good numbers of sparrows and bluebirds but few hummingbirds, flycatchers, thrushes, vireos and warblers (except occasional good numbers of yellow-rumped warblers). By the fall count, held the third week of September, most hummingbirds, flycatchers thrushes and vireos are gone. Warblers and sparrows are still common.

### Spring Summary

The numbers of individuals observed on the spring count are much greater than the average winter count, but short of totals seen during the breeding season. Though early May is a migration period, several groups of birds including buteos, woodpeckers, sapsuckers and many corvids, are already conducting breeding activities.

**Common and Rare Species.** The most numerous spring count birds are a mix of resident species plus elevational and neotropical migrants (Fig. 7). The most numerous species comprise almost 50% of all individuals observed, with robins and juncos alone accounting for 25% of the total.

Of the 136 species observed, 30 have been seen on only one count. Some unusual sightings have been American White Pelican, Wood Duck, Redhead, Solitary Sandpiper, Lewis' Woodpecker, Rose-breasted Grosbeak and White-throated Sparrow. Late migrants seen during the first week of May only once were Western Wood-pewee, Hammond's Flycatcher, Dusky Flycatcher, Swainson's Thrush and Wilson's Warbler.

Seventeen species of waterfowl and shorebirds have been observed on the spring count compared with 7 for the breeding count, 15 in fall, and 1 during winter. Mallards numerically predominate, followed by Green-winged Teal and Ring-necked Ducks.

Average numbers of Ring-necked Ducks almost tripled between the first 4 years of the spring count and the second 5 - - from 9 per count to 25. Brewer's Blackbirds and Brown-headed Cowbirds more than doubled their average numbers. Some noticeable declines were Northern Goshawk (from 4 per count down to 1) and Evening Grosbeak (0.67 per count down to 0.22).

### Fall Summary

Numbers of species and individuals for the fall count are similar to the spring count. With this count being held during the third week of September, most flycatchers and thrushes have left the forests. Waterfowl are fairly common, while shorebirds are scarce. Some species such as Mountain Bluebirds and American Robins are observed in single-species flocks, while others such as Wilson's and Yellow-rumped Warblers occur in mixed groups. The tundra can be very active with raptors, including Northern Harrier and American Kestrel. Pygmy Nuthatches and Steller's Jays are more common than normal at higher elevations. Townsend's Warblers make their only appearance in the mountains during the fall migration.



**Common and Rare Species.** The ten most numerous species on the fall count make up 63% of all birds seen (fig. 8). Good numbers of American Robin, Yellow-rumped Warbler, Chipping Sparrow and Mountain Bluebird are moving through the count area. Also present are high numbers of resident species, including Mountain Chickadee and Steller's Jay.

Twenty-four species have been observed on only 1 fall count. Rare finds have been Double-crested Cormorant, Ruddy Duck, Common Yellowthroat, Clay-colored Sparrow and White-winged Crossbill. Early-departing migrants that were observed only once on the fall count were Spotted Sandpiper, Hammond's Flycatcher, Violet-green Swallow, Yellow Warbler, Western Tanager and Black-headed Grosbeak.

**Raptors.** The spring and fall counts are the best times for observing raptors (Fig. 9). Vultures, hawks, eagles, falcons and owls all utilize the mountains, some specializing in forested habitats, while others prefer open country and tundra for finding prey.

Red-tailed Hawks numerically dominate the scene for all four seasons. Between 30% and 45% of all raptors observed are this species. Accipiters - Sharp-shinned Hawk, Cooper's Hawk and Northern Goshawk - comprise another 30%.

The winter season yields the lowest number and diversity of raptors (fig. 10). Rough-legged Hawks are seen mostly in the winter and sometimes into the spring count period. Sharp-shinned Hawks have not been reported on the winter count and Cooper's Hawks only 20% of the time, indicating the migratory nature of these small forest-dwelling accipiters. Winter Bald Eagles have been seen in the mountains and are present in good numbers on the Boulder County plains, but have not been reported on an Indian Peaks winter count.

The spring count period records a dramatic increase in raptors, dominated by Red-tailed Hawk and accipiters. Most raptors are already conducting breeding activities by the first week of May. There is one suspected nesting site for Golden Eagle within the count circle. The current nest site is not known - historic nest sites exist near Hessie and near South Arapaho Peak. Osprey are not known to nest within the count circle (Andrews and Righter 1992), but have been seen feeding at lakes and reservoirs during the spring and breeding seasons. It is probable that Bald Eagles, Swainson's, Ferruginous and Rough-legged Hawks seen during the spring count period are late migrants or transients.

The fall count period sees the greatest number of raptors - an average of 50 birds per 100 count hours. The tundra is especially active as Northern Harriers make their primary mountain appearance. American Kestrels, other falcons and buteos also frequent these higher elevation grasslands.

Several owl species are present in the count circle. Great Horned Owl is the most conspicuous and the only one reported during all four seasons. Long-eared Owl, Northern Saw-whet Owl, Northern Pygmy-owl and Boreal Owl have also been reported on the count, the latter being reported near Red Rock Lake, Hessie and the old-growth forests of Chittenden

Figure 6

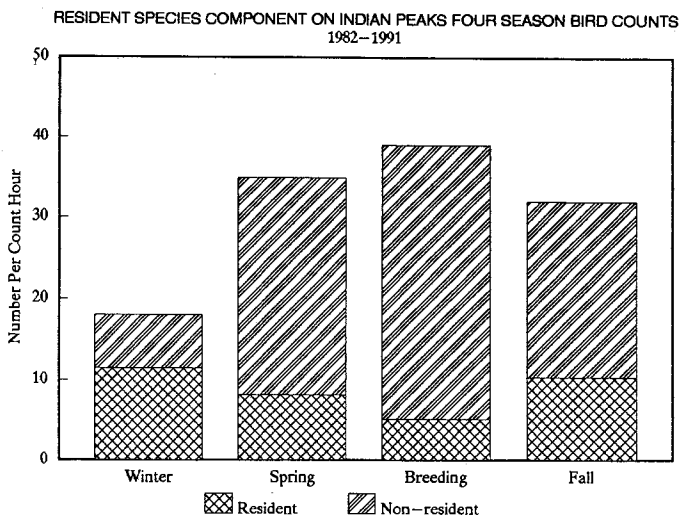


Figure 7

Numerous Species - Spring Count	
Species	Ave. #/Count Hour
Am. Robin	4.97
Dark-eyed Junco	4.25
Mountain Chickadee	2.48
Rosy Finch	1.69
Steller's Jay	1.44
Ruby-crowned Kinglet	1.41
Brown-headed Cowbird	1.28
Pine Siskin	1.21
Brewer's Blackbird	.95
Tree Swallow	.89

Figure 8

Numerous Species - Fall Count	
Species	Ave #/Count Hour
Dark-eyed Junco	4.51
Mountain Chickadee	3.94
American Robin	2.23
Pine Siskin	2.21
Yellow-rumped Warbler	1.78
Steller's Jay	1.57
Chipping Sparrow	1.32
Water Pipit	.93
White-crowned Sparrow	.90
Mountain Bluebird	.85

Mountain. Flammulated, Snowy and Short-eared Owls have been locally reported, but not on the count.

Over the first ten years of the Indian Peaks Bird Counts, the apparent decline of one species stands out - the Northern Goshawk. Comparing the first five years of the count with the second indicates goshawks are being observed on fewer counts during the latter five-year period and, except for the fall count, fewer individuals are being seen (Fig. 11). The Northern Goshawk is gaining regional interest as a species that may be adversely affected by "habitat fragmentation" - the cumulative impacts of homes, roads and certain types of forest management. Other biologists point to increasing tree density, particularly in Ponderosa Pine forests, as disfavoring goshawks, which prefer open-canopy forests for feeding (Reynolds et al. 1992). Northern Goshawks will need increased attention to determine if and why there is a decline.

### Breeding Summary

**The Season.** The breeding count provides information about the majority of our nesting species in the montane, subalpine and alpine lifezones. The count is generally held during the month of June, concentrating on the second and third weeks. The majority of species, including neotropical migrants that arrived in May, are conducting breeding activities in June.

A total of 133 species have been observed on the ten breeding counts, with an average of 96 species per count (range of 88-102 species). The montane lifezone averaged 86 species per count, while the subalpine/alpine areas averaged 66. An average of 39 individuals was seen per count hour (range of 32-50/hour). The montane and subalpine/alpine lifezones averaged 41 and 36 individuals per count hour, respectively.

Not all species breed during this season. Black Swifts breed later in the summer, while Red Crossbills may nest during any month (Bailey and Niedrach 1965). Many resident species begin breeding activity in April or May - Clark's Nutcrackers can have young on the wing by early June. Buteos and woodpeckers also commence breeding in the spring. Additionally, not all species present during this season are breeding. Great Blue Herons are nonbreeders in the mountains, as are California Gulls. There is speculation of nesting Ospreys, but no confirmation.

**Common Species.** During the late 1940's, Dana Paul Snyder conducted several breeding bird censuses between Nederland and the Mountain Research Station. In his article published in *The Condor*, he felt the western forest bird community should be called Parus-Spinus, after the mountain chickadee and pine siskin. Figure 12 indicates chickadees and siskins are still some of the most common species.

American Robin, Broad-tailed Hummingbird, Dark-eyed Junco, Yellow-rumped Warbler and Ruby-crowned Kinglet are also numerous and widespread. White-crowned Sparrows are generally numerous in the

Figure 9

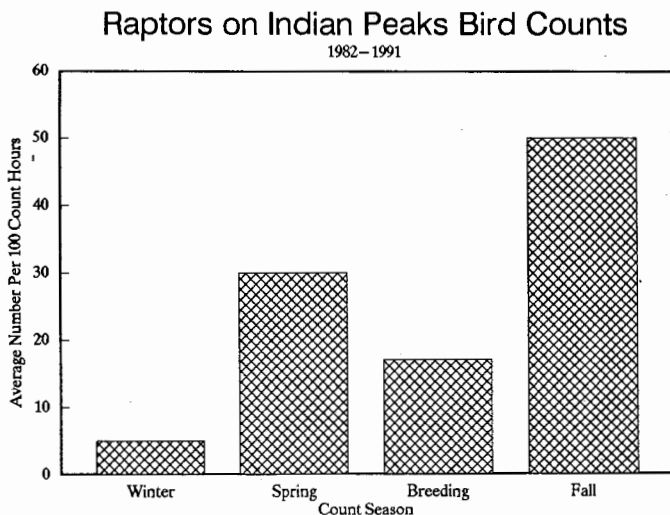


Figure 10

	<u>Season</u>			
	<u>W*</u>	<u>S*</u>	<u>B*</u>	<u>F*</u>
Turkey Vulture		X	X	X
Osprey		X	X	X
Bald Eagle		X		
Northern Harrier				X
Sharp-shinned Hawk		X	X	X
Cooper's Hawk	X	X	X	X
Northern Goshawk	X	X	X	X
Swainson's Hawk		X		X
Red-tailed Hawk	X	X	X	X
Ferruginous Hawk		X		X
Rough-legged Hawk	X	X		
Golden Eagle	X	X	X	X
American Kestrel		X	X	X
Prairie Falcon		X	X	X

\* W=winter; S=spring; B=breeding; F=fall

subalpine/alpine lifezones but few are found in the montane. Steller's Jay, Northern Flicker and Brown-headed Cowbird are widespread, but not numerous enough to make the top ten. Tree and Violet-green Swallows, Mountain Bluebird and Red-winged Blackbird are other common species of the montane, while American Pipit, Hermit Thrush and Lincoln's and White-crowned Sparrow are common in the subalpine or alpine lifezones.

Mountain Chickadee and Steller's Jay are the only resident species appearing on either list. American Robin, Pine Siskin, Dark-eyed Junco, Northern Flicker and White-crowned Sparrow are principally elevational migrants. Broad-tailed Hummingbird, Yellow-rumped and Wilson's Warblers, Ruby-crowned Kinglets and Warbling Vireo are generally long-distance or neotropical migrants.

**Rare Species.** Twenty-one species were observed only once on the breeding count (Fig. 13). Included in this group are lower elevation breeders that occasionally make it into the count circle - Common Poorwill, Lewis' Woodpecker, Western and Eastern Kingbirds, Cliff and Bank Swallows, Blue Jay, Common Bushtit, Gray Catbird, Common Yellowthroat, Lazuli Bunting and Brewer's Sparrow. Late or early migrants include Common Loon, Rufous Hummingbird and Rose-breasted Grosbeak. Common Merganser and Boreal Owl could be nesting in the count circle, but need additional research for verification. Black Swifts nest later in the summer.

Savannah Sparrows were historically listed by Alexander (1937) as moderately common Sparrows summer residents, 8,000' - 9,500' elevation in Boulder County, while Betts (1913) listed them as a species characteristic of the mountain zone. Their rarity today is of interest. One possible explanation is changing agricultural practices. Early homesteaders utilized flood irrigation practices in mountain meadows to help hay and crop production, a practice seldom used in the mountains of Boulder County today. Wet meadows appear to be the preferred nesting habitat of Savannah Sparrows (Webb 1985).

Other good finds for the breeding count are those species which occur at low densities and/or are inconspicuous (fig. 14). Grouse, ptarmigan, and Three-toed Woodpeckers are simply hard to find, as are accipiters. High elevation and limited habitat influence American Kestrel, Belted Kingfisher, Willow Flycatcher, Rufous-sided Towhee and American Goldfinch. California Gulls are normally limited to Barker Reservoir, while House Finches and sparrows are found in Nederland and occasionally Rollinsville.

There are a few additional species that may breed in the mountains but have yet to be found on the Indian Peaks Count. Flammulated, Northern pygmy and Northern Saw-whet Owls have been heard within the count circle but never during the count period. Ovenbirds have been heard singing locally twice during the past 10 years.

**Urban/Suburban/Agricultural Species.** The original range of the Brown-headed Cowbird was considered to be the plains (Hanka 1985). Snyder, in his bird studies in the mountains of the county during the late

**Figure 11**

<b>Northern Goshawk Observations on Indian Peaks Bird Counts 1982-1991</b>			
<u>Season</u>	<u>Count Period</u>	<u># of Counts Observed</u>	<u>Ave. # Per Count</u>
Spring	1983-86	4 of 4	4.0
	1987-91	4 of 5	1.0
Breeding	1982-86	5 of 5	1.8
	1987-91	3 of 5	1.0
Fall	1982-86	4 of 5	1.8
	1987-91	3 of 5	2.0
Winter	1982-86	5 of 5	1.8
	1987-91	3 of 5	1.0

**Figure 12**

<b>Most Numerous and Widespread Breeding Birds</b>			
<b>Most Numerous</b>		<b>Most Widespread</b>	
	<u>#/Count Hour</u>		<u>% of Count Areas</u>
American Robin	3.25	American Robin	98%
Pine Siskin	2.76	Pine Siskin	96%
Broad-tailed Hummingbird	2.30	Mountain Chickadee	94%
Yellow-rumped Warbler	2.11	Broad-tailed Hummingbird	92%
Ruby-crowned Kinglet	1.87	Dark-eyed Junco	91%
Dark-eyed Junco	1.65	Yellow-rumped Warbler	90%
Warbling Vireo	1.62	Ruby-crowned Kinglet	84%
Wilson's Warbler	1.48	Northern Flicker	81%
Mountain Chickadee	1.34	Steller's Jay	81%
White-crowned Sparrow	1.34	Brown-headed Cowbird	78%

1940's, did not report any cowbirds. Now they are found throughout the county and state. Their eggs have been found in at least 38 passerine species in Colorado, including Olive-sided Flycatcher, Mountain Chickadee, Warbling Vireo, Wilson's Warbler and Lincoln's Sparrow (Andrews and Righter 1992). Brown-headed Cowbirds are found throughout the Indian Peaks Count Circle but are most common in the montane lifezone.

Nederland, the largest settlement in the count circle with just over 2,000 residents, is home to a full compliment of urban/suburban avifauna - European Starling, House Finch, House Sparrow and Rock Dove. Nederland is the only location where the latter two species have been observed. Starlings have been seen in Rollinsville, Eldora and along Sugarloaf Road, while House Finches have been seen in Rollinsville.

**Other Findings.** The numbers of birds sighted over the ten years of the breeding count have increased - from 34 per count-hour during the first five years to 43 per count-hour during the last five years. More detailed population studies conducted in the count circle over this same period have not shown similar increases. Our conclusion is that we are getting better as birders.

Considering this overall increase, species that declined from the first to the second five years of the count are of interest. The Northern Goshawk decline has already been noted. Their sightings declined on the breeding count from almost 2 per count to just 1. Additionally, goshawks were seen on each of the first five counts but only three of the next five. Other decliners were Green-winged Teal (0.12 to 0.08/hour), Killdeer (0.05 to 0.03), Spotted Sandpiper (0.16 to 0.12), Band-tailed Pigeon (0.29 to 0.17), Pine Grosbeak (0.17 to 0.12) and Evening Grosbeak (0.30 to 0.10).

Neotropical migratory birds are of special interest to avian researchers. Flycatchers, warblers and sparrows are apparently declining - this has been most evident in the eastern United States, where the suspected causes are habitat fragmentation and destruction of both eastern deciduous forests and the rainforests of Central and South America (Finch 1991). Possible declines of neotropical species of the interior west are less evident. On the Indian Peaks Breeding Bird Counts declines of neotropical migrants from 1982-1991 are not apparent. Additionally, ongoing local breeding bird censuses are not showing declines of neotropical migrants.

Cavity-nesting birds play an important role in the ecology of our local forests (Mannan et al. 1980). Most cavity-nesting birds including woodpeckers, swallows, chickadees, nuthatches and bluebirds are insectivorous and help to control numbers of forest insects. Primary cavity-nesters utilize large-diameter trees and snags for making nest holes. More suitable nesting trees are found in older-aged forests than in young forests. In Boulder County, old-growth forests represent about 14% of all forest stands (Lowry 1992). Less than 1% of Ponderosa Pine/Douglas-fir forests are considered old-growth. In general, most of the forests in the county are middle-aged (roughly 100-150 years old), having been cut or burned just before the turn of the century (Veblen and Lorenz 1991). Except

**Figure 13**

<b>Species Seen on Only 10% of Counts</b>	
Common Loon	Bank Swallow
Common Merganser	Blue Jay
Northern Harrier	Bushtit
Boreal Owl	Winter Wren
Common Poorwill	Gray Catbird
Black Swift	Common Yellowthroat
Rufous Hummingbird	Rose-breasted Grosbeak
Lewis' Woodpecker	Lazuli Bunting
Western Kingbird	Brewer's Blackbird
Eastern Kingbird	Savannah Sparrow
Cliff Swallow	

**Figure 14**

<b>Species Observed on 60% or More of Breeding Counts and Average Number Observed is Less Than 5 Per Count</b>	
Great Blue Heron	Sora
Cinnamon Teal	California Gull
Turkey Vulture	Belted Kingfisher
Sharp-shinned Hawk	Downy Woodpecker
Cooper's Hawk	3-Toed Woodpecker
Northern Goshawk	Willow Flycatcher
Golden Eagle	Rufous-sided Towhee
American Kestrel	House Finch
Blue Grouse	American Goldfinch
White-tailed Ptarmigan	House Sparrow



for spruce/fir and aspen, most forest stands do not have an abundant supply of large-diameter trees and snags. On the Indian Peaks Bird Counts, cavity-nesters comprise about 16% of all birds detected. This figure appears normal, compared to local breeding bird censuses in spruce/fir forests, but below normal for Lodgepole Pine and Ponderosa Pine/Douglas-fir forests. The latter two forest types were heavily cut and burned around the turn of century by early settlers and miners, as indicated by the low percentage in old-growth today. Numbers of cavity-nesters have slightly increased from the first to the second five years of the count, which could be a trend related to the aging of our forests.

### LITERATURE CITED

- Alexander, G. 1937. The birds of Boulder County, Colorado. Univ. Colo. Stud. 24:79-105.
- Andrews R. and R. Righter. 1992. Colorado Birds. Denver Museum of Natural History.
- Bailey, A. and R. Niedrach. 1965. Birds of Colorado. Denver Museum of Natural History.
- Betts, N. 1913. Birds of Boulder County, Colorado. Univ. Colo. Stud. 10:177-232.
- Finch, D. 1991. Population ecology, habitat requirements, and conservation of neotropical migratory birds. U.S.D.A. Forest Service Gen. Tech. Rep. RM-205.
- Hanka, L. 1985. Recent altitudinal range expansion by the brown-headed cowbird in Colorado. *Western Birds* 16:183-184.
- Lowry, D. 1992. An old-growth forest inventory procedure for the Arapaho and Roosevelt National Forests, CO. Pgs 121-127 in M. Kaufann, W. Moir and R. Bassett, tech. coords. Old-growth forests in the Southwest and Rocky Mountain regions. U.S.D.A. Forest Service Gen. Tech. Rep. RM-213.
- Mannan R., E. Meslow and H. Wright. 1980. Use of snags by birds in Douglas fir forests, Western Oregon. *Journal of Wildlife Management* 44:787-797.
- Mutel, C. 1976. From grassland to glacier. Johnson Publishing Co., Boulder.
- Reynolds, R., R. Graham, M. Reiser, and others. 1992. Management recommendations for the northern goshawk in the Southwestern U.S. U.S.D.A. Forest Service Gen. Tech. Rep. RM-217.
- Snyder, D. 1950. Bird communities in a coniferous forest biome. *The Condor* 52:17-27.
- Veblen, T. and D. Lorenz. 1991. The Colorado Front Range - a century of ecological change. Univ. of Utah Press, Salt Lake City.
- Webb, B. 1985. Birds subgroup report. Pgs. 33-39 in B. Winternitz and D. Crumpacker, eds. Colorado wildlife workshop - species of special concern. Colorado Div. of Wildlife, Denver



**THE FUTURE OF VOLUNTEER  
LAW ENFORCEMENT? : GREAT  
HORNED OWL (immature)**

**ARS High Plains Grassland Research Station  
Cheyenne, Wyoming. 6 May '94  
Dave Leatherman and Ron Ryder**

## INSTRUCTIONS TO CONTRIBUTORS OF THE C.F.O. JOURNAL

The *C.F.O. Journal* is devoted to the field study of birds in Colorado. Articles and notes of scientific or general interest and reports of unusual observations are solicited. Articles are informal and are not restricted to any particular style, but authors are asked to consult recent issues for the general format. Photos and drawings reproduce best if black and white, showing good contrast. Other material will be used if it can be printed in black and white. Please send negatives or slides, as well as prints, to save on costs of printing; both will be returned.

Contributors who use a computer are encouraged to send a hard copy of articles, as well as a disk. The editor would prefer computer-generated articles that use Microsoft Word for Macintosh or Word Perfect for IBM. Please attach a note to each disk, indicating the software used. After the article is published, the disk will be returned. Please double-space all typed or computer-printed material. Authors may receive one extra copy of the *Journal*. Additional copies are \$3.00 each. Authors who anticipate needing additional copies of their articles should contact the editor prior to printing.

Send manuscripts, photographs, drawings and questions to David Leatherman, 2048 Whiterock Court, Fort Collins, CO 80526 [phone: (303) 484-5445]. Deadlines are December 1, March 1, June 1 and September 1, for issues dated January, April, June and October, respectively. More instructions available on request.

\*\*\*\*\*

### HOW TO SUBMIT RECORDS TO THE C.F.O. OFFICIAL RECORDS COMMITTEE

Standard reporting forms are available in the "Colorado Bird Distribution Latilong Study", from the *C.F.O. Journal* Editor, or an *American Birds* Mountain West form is available from Hugh Kingery. Forms are preferred, as completion of all sections ensures most pertinent information is included.

If photographs are submitted, please send two copies, as the records are duplicated before being sent to committee members.

Send records of rare birds to the C.F.O. Official Records Committee, c/o Zoological Collections, Denver Museum of Natural History, City Park, Denver, CO 80205.

