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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. Send manuscripts with photos and drawings to: Mark Janos, 902 Colorado Ave., La Junta, CO 81050. Send rare bird reports to: CFO Official Records Committee, c/o Zoological Collections, Denver Museum of Natural History, City Park, Denver, CO 80205. Send membership inquiries, renewals, and change of address to Steve Bouricius, 50152 Hwy. 72, Peaceful Valley, Lyons, CO 80540.

TABLE OF CONTENTS

A MESSAGE FROM OUR PRESIDENT, BILL PRATHER	46
A TAPE OF BIRD CALLS AND A CASSETTE RECORDER: TOOLS FOR SURVEYING INCONSPICUOUS MARSH BIRDS	48
Karen M. Mancí	
NEWS FROM THE FIELD: SPRING 1989 (MARCH, APRIL AND MAY).	56
David E. Martin	
AGES OF LOGGERHEAD SHRIKE YOUNG.	73
Hugh Kingery	
A SPECIMEN OF SURF SCOTER (<u>Melanitta perspicillata</u>).	75
FROM WESTERN COLORADO	
Clinton W. Jeske	
COLORADO ATLAS UPDATE.	76
Hugh Kingery	
1989 C.F.O. MEMBERSHIP NEWS.	78
Steve Bouricius	
C.F.O. RUFFED GROUSE TRIP.	81
I.M. Cold	
BOOK REVIEWS: BIRDS OF YELLOWSTONE	83
Reviewed by Hugh Kingery	
ANNOUNCEMENTS.	84

COVER ILLUSTRATION: Virginia Rail by Karen M. Mancí.

The caption for the previous cover illustration (C.F.O. Journal Vol. 23, No. 1) should have read: The Mountain Chickadee and Black-capped Chickadee together along the foothills in fall. My apologies to Karen.

A Message from our President, Bill Prather...

Dear CFO Members,

Six years ago, I was lucky enough to be at Jumbo Reservoir at the same time as a Ross' Gull and now I'm president of CFO. That shows the kind of great things that can happen to you when you go birding. I am proud to be associated with such an excellent organization. I believe CFO is getting even better all the time and it is due to the efforts of you, its members. I would like to acknowledge some of these efforts.

Peter Gent has done a remarkable job of getting excellent people on the CFO Board and into Record Committee and officer positions. He has given me an example of leadership that will be very difficult to match. I cannot thank David Martin enough for his role in recruiting new members and making them feel involved. We are all indebted to him for the fantastic job he does on the Colorado Bird Alert and in writing the seasonal summaries for our journal. Mark Janos took on the massive job of CFO Journal Editor and has put out great issues on time. Steve Bouricius, with a lot of help from his cousin, Debbie Bouricius, has spent hundreds of hours putting CFO's financial records on computer and getting them in top shape. Beth Dillon has expertly managed the tasks of Executive Secretary including dealing with the often difficult postal service regulations and keeping the board of directors informed. Richard Bunn is handling the blizzard of bird record reports. Vic Zerbi has taken it upon himself to continue the legal tasks of incorporation and tax-exempt status for the organization. I also appreciate his efforts when he was president and the great convention he organized in Lamar last year. This year's convention was wonderful, also, and I want to thank Beth Dillon and Paul Opler for organizing it, Ron Ryder for arranging the paper session, Dave Leatherman for setting up field trips and putting out great information on area birds, and Dave Leatherman, Ron Ryder and Joe Mammoser for leading field trips. The papers presented were very interesting and informative. David Silverman has volunteered to organize the convention in Pueblo next year. We have had some great field trips already this year and more are coming up. I have mentioned only a few of the great jobs members have done for CFO; there are many others deserving mention also. I thank all of you and I am grateful to be associated with you.

I hope CFO continues to grow and mature. It will take the efforts of many members. Anyone is welcome and encouraged to submit articles to the CFO Journal. If you have ideas or suggestions for field trips, please contact David Martin. As population and industrialization pressures on the environment increase, we are going to be presented with difficult tasks and opportunities to study and protect birds. We all need to consider how CFO will work with other organizations to meet these challenges. As president, I want to be totally accessible to CFO members at all times. If you have problems, suggestions, or complaints, I would like to hear them. If I can assist in some task, please let me know. You may call me at home, (303) 776-2191, at any hour-I don't mind waking up to talk about CFO or birds. You may call me at work, (303) 772-7552. I may not be able to talk to you very long while at work but I will get back to you.

Thank you very much.

Bill

A TAPE OF BIRD CALLS AND A CASSETTE RECORDER:
TOOLS FOR SURVEYING INCONSPICUOUS MARSH BIRDS

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INTRODUCTION

Birds will often respond by calling when a cassette tape of their calls is played on a portable recorder. The use of taped calls, commonly referred to as a playback recording, has great potential for use with highly vocal avian species that are otherwise difficult to detect in the field.

Playback recordings have been in use for more than 2 decades. At least 51 species have been shown to be responsive to playback recordings, including rails, owls, hawks, quails, vireos, and warblers (Johnson et al. 1981). Recordings have been used to: (1) detect secretive, elusive, or nocturnal birds by researchers and birdwatchers (e.g., the Audubon Christmas Bird Count); (2) investigate avian social behavior and territoriality; and (3) estimate population size (Marion et al. 1981). However, only a fraction of the responsive species have been surveyed using playback recordings. The use of playback recordings has probably been the most overlooked major technique for surveying birds (Johnson et al. 1981).

Tape playing of rail calls has become a principal means of counting these birds due to their elusive nature and the dense vegetation that they typically inhabit (Johnson and Dinsmore 1986). Conventional nest surveys for rails often are biased by the fact that their nests are well-concealed and some are usually missed even after an intensive search (Glahn 1974). Direct counts or flushing also have obvious disadvantages in counting species seldom seen and rarely flushed. The use of playback recordings allows the detection of rails by their calls and does not depend on visual clues.

I used playback recordings to obtain population indices for seven species of marsh birds during 1980 to 1982 at Horicon National Wildlife Refuge (NWR) in Wisconsin (Manci and Rusch

1988). All seven species surveyed also occur in Colorado: the Virginia Rail (Rallus limicola), Sora (Porzana carolina), Least Bittern (Ixobrychus exilis), American Bittern (Botaurus lentiginosus), and Marsh Wren (Cistothorus palustris) are known breeding species; the Sedge Wren (C. platensis) is a possible breeding species; and the King Rail (R. elegans) is a rare species with less than 10 documented records (Gent 1986). In this paper, I describe the technique I used to survey inconspicuous marsh birds at Horicon NWR, comment on other researchers' use of the technique, and discuss the advantages and some possible disadvantages of using playback recordings to survey marsh birds.

USE OF THE PLAYBACK TECHNIQUE

To survey inconspicuous marsh birds at Horicon NWR, I had a cassette recording made of the seven target species of marsh birds from the Peterson "Field Guide to Bird Songs of Eastern and Central North America." The calls were recorded onto a cassette tape at a sound studio at the University of Wisconsin campus radio station. Of course, a copy also can be produced by the use of two cassette players, but background noise is more noticeable. I did use this type of reproduction during my initial work in 1980 and birds appeared to respond as well to this tape as to the one produced in the sound studio. Due to racial and dialectal variations, the use of local recordings from the field is preferred. However, if local recordings are unavailable, the use of a good quality commercial recording is adequate for most species.

I recorded descending advertising calls to elicit responses from both sexes of rails, and male calls to elicit responses from bitterns and wrens. Duet recordings of breeding rail pairs appear to be more effective than tapes of single rails in eliciting responses during the nesting period (Johnson and Dinsmore 1986). Rails also will respond to calls other than their own species, particularly during the prelaying season. The order of tape responses does not appear to affect the responses of either Virginia Rails or Soras. Virginia Rails have exhibited a higher responsiveness to conspecific calls during the postlaying period (Johnson and Dinsmore 1986).

The first 2 minutes of the tape that I used in the field consisted of blank tape with no sound to count the number of individuals calling without the aid of the playback recording.

Three sequences of calls from each of the seven species were then played consecutively on the cassette tape with a 5- to 10-second pause separating the calls of different species (total time of 3 minutes). Intervals between calls allow a brief pause for the observer to listen for answering calls without interference from calls on the tape. Setting the recorder down and walking around it at a distance of several meters also aids in distinguishing answering calls while the tape is being played. Two minutes of blank tape again followed the taped calls to record individuals that first called after the recording was played. A signal was used to indicate the end of the timed count. Total time of the count was 7 minutes. Glahn (1974) used a 5-minute tape consisting of 10 calls each of Soras and Virginia Rails to elicit their responses.

The volume for playing the tape recorder can be determined by trial and error. Ideally, the optimum volume would be used when birds are answering from the greatest possible distance while still allowing the observer to hear responses above the noise of the tape recorder. I found that the portable cassette player, without any extra amplification equipment, elicited responses from rails with equal detectability within an 80-m radius.

The stops for playing the tape at Horicon NWR were located at least 100 m apart. Johnson et al. (1981) suggested that stops generally be made every 25 to 100 m, depending on the thickness of cover and bird densities. Other researchers have allowed at least 60 m for rails in cattail (Typha spp.) marshes (Glahn 1974; Grieser et al. 1980).

For most species, one person with a portable tape recorder can conduct an accurate survey. Keeping a predetermined schedule is secondary to an accurate survey (Johnson et al. 1981). Variances of visual and audible counts (without the aid of a playback recording) tend to be lower when the rapid change in bird conspicuousness near dawn is avoided (Shields 1977); thus, differences in bird density among various habitats or years can be more easily detected. I avoided surveying birds on rainy days or when the wind was strong (greater than 20 km/hr) because these conditions tend to depress counts (Robbins 1981).

Researchers often use playback recordings within the first few hours near sunset or sunrise (e.g., Glahn 1974, Johnson and Dinsmore 1986). Johnson and Dinsmore (1986) found that during

late incubation and brood-rearing, Virginia Rails responded more to night broadcasts (1-4 hr after sunset) than during morning counts (1 hr before to 2 hr after sunrise).

Research on rails in Colorado indicates that calls are not elicited by playback recordings prior to mid-April. Both Virginia Rails and Soras arrive in early April, but appear to be silent for a few weeks after arrival (Glahn 1974). At Horicon NWR, I also did not hear rails or Marsh Wrens calling on study plots until mid-April. Sedge Wrens began calling in mid-May. Bitterns initially called in early May and numbers soon peaked within a week of initial calls heard. Peak counts at Horicon NWR of the other species were as follows: Virginia Rails and Marsh Wrens, third week of May to end of May; Soras, first 2 weeks of May; Sedge Wrens, first week of June; and King Rails, early to mid-June. Only 12 individual calling sequences of King Rails were heard at Horicon NWR during the study. The King Rail is at its northern limit in Wisconsin; thus, the relative scarcity of this species was expected.

Temporal shifts in responses to playback recordings appear to reflect differences in nesting phenology (Johnson and Dinsmore 1986). At Horicon NWR, initial and peak numbers of Soras, Virginia Rails, and Marsh Wrens were heard 1-2 weeks later in 1982 than in 1981, corresponding to a 1- to 2-week delay in growth of emergents, which may have been caused by excessive cold in early April 1982. Glahn (1974) reported that the earliest date of calling responses of Soras and Virginia Rails coincided with emergence of the first shoots of cattail above water.

During my study, playback recordings elicited more responses from Virginia Rails, King Rails, and possibly Least Bitterns that were silent during the 2 minutes of blank tape before the playback than from Soras, wrens, and American Bitterns. More than half of the Soras and wrens were first detected during the first 2 minutes of blank tape. Fewer than 7% of all birds were initially detected within the last 2 minutes of blank tape following the playback, indicating that the playback sequence that I used was adequate to detect the majority of individuals present within the study plots. Glahn (1974) found that from 13 April to 25 June, playback significantly increased the rate and frequency of calling for both Virginia Rails and Soras in a cattail marsh near Fort Collins, Colorado.

Two to 4 weekly counts for rails and wrens were adequate to obtain indices to populations of these species at Horicon NWR. Semiweekly counts were recommended for bitterns because their calling activity rapidly peaked and declined and so few were observed (less than 10 calling sequences per species during the 4 peak weeks). Density of Soras were similar in all habitats sampled: deepwater cattail (average water depth of 29 cm in early June), shallow water cattail (average water depth of 5 cm in early June), dry cattail (no standing water in early June), river bulrush (*Scirpus fluviatilis*) (standing water through mid-August), and sedge (*Carex* spp.) (dry by late June). Virginia Rails were only heard calling in deepwater and shallow water cattail and river bulrush. Marsh Wren density varied by habitat with lowest numbers in dry cattail and highest in deepwater and shallow water cattail. No Marsh Wrens were heard calling from sedge habitat; Sedge Wrens were only heard in this habitat. Least Bitterns called from shallow water or deepwater cattail; American Bitterns called from the dry and shallow water cattail. Sedge Wrens and American Bitterns occasionally called from grasslands adjacent to marshes; thus, these habitats also should be incorporated into surveys for these two species.

I ceased playing the tape at the end of June when calling frequency tapered off considerably. Johnson and Dinsmore (1986) found that after June in northwestern Iowa, neither morning nor night broadcasts for either Virginia Rails or Soras elicited responses. Griese et al. (1980) found that rail responses were difficult to evoke in August and September at study sites in Colorado. However, during fall and winter, it is possible to get rails to respond to playback recordings.

In early October of 1988, I played the taped calls at a cattail marsh in Fort Collins to see if rails would respond. I heard about 10 Virginia Rails calling within an approximately 1-ha cattail stand (water depth about 10 cm); they appeared to respond more to the call of the Virginia Rail than to the Sora. One individual was lured into an opening in the vegetation and was visible for a few seconds during the playing of the tape. No Soras were heard; however, I have observed Soras at this site during summer. At the same location last December, I played the recording during the Audubon Christmas Bird Count (26 December) and a Sora and Virginia Rail responded to the tape (the area still had some open water). The Virginia Rail also was visually observed when it stepped out of the cattail for a few seconds

during the playing of the tape.

DISCUSSION

Playback recordings have been shown to increase the total number of bird species counted and increase the total numbers of individuals seen or heard for a given species in comparison to conventional surveys (e.g., sight observations alone, nest counts) for a variety of vocal species (Johnson et al. 1981). Glahn (1974) found that the use of a playback recording in cattail marshes near Fort Collins increased the number of Sora and Virginia Rail territories located by 71% compared to a standard nest survey. In addition, birds may respond to tape recordings at times when they would otherwise be more silent (e.g., mid-day or during the nonbreeding season).

The playback technique can be particularly useful in detecting rare species even if the tape does not contain the species' call. From a dense stand of sedge on Horicon NWR, a Yellow Rail (Coturnicops noveboracensis) responded to taped rail calls on 1 May 1981. The Yellow Rail is rarely sighted in lower Wisconsin. The Yellow Rail, in addition to the King Rail and Black Rail (Laterallus jamaicensis), also is rare in Colorado (Gent 1986). Griese et al. (1980) documented the presence of both the King Rail (at Bonny Reservoir, May 1976) and the Black Rail (Ft. Lyons, June 1976) by using the playback technique.

In discussing survey techniques for forest birds, Robbins (1978) stated that indiscriminate use of tape recordings on repeated visits during the breeding season can bias the results because birds may alter their habits or their territory nearby. Although this may be true in some instances, Johnson et al. (1981) would like to see better evidence of this hypothesis. Johnson et al. claim that the idea that birds come from territories some distance away to the recorder, thereby biasing the results, is generally false. As they state, "Where are the birds that should be defending their territories as these distant intruding males flock to be counted." Johnson et al. feel that the increase in the number of birds calling is the result of heightened responses from otherwise silent or hidden birds, those that would have been missed by a more conventional survey.

Of course, as with any bird survey work, care should be taken not to disturb the birds by repeated visits. Frequent disturbance

of birds can be particularly critical during the nesting season. However, the use of call counts aided by playback recordings would appear to be less disturbing to breeding birds than nest searches, which involve closer contact and a greater potential of disturbing surrounding vegetation.

The use of playback recordings is a relatively inexpensive technique. Portable cassette recorders can be purchased for less than the cost of a pair of good quality binoculars. The reliance on the taped calls does require the foresight of bringing a backup tape and extra batteries along in the field, in case either fails during a survey. The tape player also can be used to record observations and field notes, with the precaution taken to frequently check if the player is properly recording information. Another advantage of using the tape of calls is the reinforcement of the proper identification of species' calls each time the tape is played.

In Colorado, playback recordings can be a valuable tool for surveying inconspicuous but vocal marsh birds and for recording occurrences of rarer species such as Yellow, Black, or King Rails. In addition, the tapes may lure secretive marsh birds into the nearest opening in the vegetation to investigate the taped calls, providing the opportunity to visually observe these birds.

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NEWS FROM THE FIELD

SPRING 1989 (March, April and May)

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As usual, this issue's New's From the Field consists of two parts. The first covers reports from Winter 1988-1989 which were received after our last publication deadline and are mostly gleaned from reports sent to Hugh Kingery for American Birds. An article about last fall's sightings appeared in the C.F.O. Journal Vol. 23, No. 1, and I will not include here birds discussed in that article. The second part is a report for spring 1989: March, April, and May. To report any sightings, please drop me a note, or just leave a message after calling the Colorado Bird Report at (303)-423-5582.

I would like to point out that the sightings published here are undocumented. Documented sightings are reviewed by the Official C.F.O. Records Committee and published in the C.F.O. Journal on a regular basis. Observers who report rare or unusual sightings are urged to send documentation to the C.F.O. Records Committee, c/o Curator--Zoological Collections, Denver Museum of Natural History, City Park, Denver, CO 80205. Your reports will help to secure a permanent place for your sightings in Colorado's ornithological annals.

Winter 1988-1989 (December, January and February)

Over 50 Eared Grebes were seen during December at Pueblo Reservoir by David Silverman and 7 were found on Nee-so-pah Reservoir December 10 by Mark Janos. Two Western Grebes were seen at Grand Junction on January 14 by Coen Dexter. First Double-crested Cormorants of the season were seen at Grand Junction by Dexter and Rich Levad on February 25. A pair of early Great Blue Herons was found on February 20 by Jack Merchant at the Eagle heronry. Silverman reported a dozen Greater-white Fronted Geese on Pueblo Reservoir on January 12, and 25 wintering Red-breasted Mergansers. Bald Eagles were counted on January 15 in the southern San Luis Valley. Seventy-seven were seen at the Alamosa

and Monte Vista National Wildlife Refuges. Silverman estimated that up to 50 Northern Harriers wintered in the Arkansas River Valley around Pueblo. The 168 Rough-legged Hawks estimated by Brian Wheeler to be wintering in northeastern Colorado was a very poor year for this species. The 29 Merlins that Wheeler found wintering in the northeast were most often found around farms and cattle feeding areas where they could prey on House Sparrows.

Mourning Doves don't always winter in Denver, so 24 found by Kingery was a good-sized flock. Forty Red-breasted Nuthatches found on the Indian Peaks Christmas Bird Count west of Boulder was a good turnout, as were the 26 Golden-crowned Kinglets found there. Single Hermit Thrushes were found on December 15 at Fort Collins by Alex Cringan and on January 23 in Pueblo. The Pueblo bird was the second area winter record. Northern Mockingbirds were seen on December 4 in Pueblo and on December 14 at Two Buttes Reservoir by Joe Himmel. A Curve-billed Thrasher was reported from Florence on December 28 by Jim and Rosy Watts. Dexter and Levad reported over 200 Water Pipits wintering in Grand Junction. Bill Brockner found 20 Cedar Waxwings in Evergreen on January 24, a rarity this winter. A single Rufous-crowned Sparrow was seen on New Year's Day by Janos in Cottonwood Canyon.

Rusty Blackbirds wintered in Pueblo, where Silverman reported up to 10 seen, as well as one Great-tailed Grackle found on January 29. Three Brown-headed Cowbirds were found by Dexter and Levad in Grand Junction on January 8. The Indian Peaks Christmas Bird Count produced one White-winged Crossbill, found by Dave Hallock on December 20 and 26.

Spring 1989 (March, April and May)

March weather was dry and windy, with a major windstorm on March 14. In April, a storm dumped 12 inches of snow on Denver on the 9th. This was followed by dry and hot weather culminating with a high of 89°F on April 20, the hottest April day in the history of Denver. April 30 brought more snow to Denver with about 6 inches in a wet storm over the weekend. Even so, April was much dryer than usual. The only major fallout of birds came from the April 30 storm where a Denver Field Ornithologist (hereafter DFO) field trip at Chatfield Reservoir reported 96 species of birds seen in one day. Even more remarkable was the fact that very few birds were found in the morning. As the storm

broke up at noon, birds literally were falling from the sky. Leaders Brenda Cockrell and Joey Kellner said there were so many birds in the trees in the afternoon that the addition of a few more observers would have added another ten species to the group list. May was pleasantly wet and cool with eastern Colorado getting more rain than the west, where drought is still the word.

Eared Grebes returned on schedule with 4 seen on March 12 at Lake Meredith by Janos. Nine Horned Grebes were found by Cheryl Scott on March 20 at the lake in the Pinery south of Parker. On April 7, 17 Horned Grebes were found on Denver's Sloans Lake by Scott Fitzmorris. Western and Clark's Grebes were found in good numbers by Janos on March 26 at Cheraw and Holbrook Reservoirs, north of La Junta.

The first White Pelicans of the season were 10 birds seen on March 12 at Lake Meredith by Janos, with many reports for the rest of March from all over Eastern Colorado. Duane Nelson reported that the Great Egrets which have nested for the last few years at Boulder Valley Farms east of Boulder were back on April 15. More good heron news came on April 22 from John Rawinski who reported seeing an adult Little Blue Heron at Monte Vista Wildlife Refuge where they nested last year for the first Colorado record. A single Cattle Egret was found on April 21 at Cherry Creek Reservoir by Ira Sanders. Dexter and Levad reported all three egrets species in a flock that included 7 Cattle Egrets seen on April 26 at Grand Junction. Green-backed Herons were seen on May 2 and 25 in Grand Junction by Dexter and Levad, and on May 13 at Barr Lake by Dick Schottler. Karen Muncy found an adult Yellow-crowned Night-Heron north of Severance on May 14. For the second year in a row, Glossy Ibis were found in Weld County, when Bill Prather found two with a flock of White-faced Ibis south of Erie during an Audubon Birdathon on May 7. These birds, if accepted by the Records Committee, would represent the third state record for the species. They stayed around until the 9th and were seen by many observers.

A Trumpeter Swan was found on March 24 at Gainer Lake south of Longmont by Jim Dowling, and probably the same swan was found again east of Longmont on April 12 and seen through May 13 at Foster Reservoir by Bill Prather and Mark Nikas. A pair of Greater White-fronted Geese was found by Fitzmorris from March 10-13 on Sloans Lake, and a single was found by Himmel at Jackson Reservoir on April 1. A single Snow Goose was found by Hugh

Kingery at Chatfield State Park from March 7-21. On March 5, Janos reported 5000 Snow Geese including 20 blue morph birds at John Martin Reservoir and 2000 Snow Goose with 20 blue morphs on the high plains reservoirs north of Lamar. Of the 800 white geese Janos found at Adobe Creek Reservoir on March 31 and April 1, 600 were Snow Goose and 200 were Ross' Geese. This has been a trend for the past several years where flocks of migrant Snow Geese in southeast Colorado include large numbers of Ross' Geese mixed in. This is apparently due to an increase in the Ross' Goose population. A pair of Ross' Geese was seen on March 19 at Escalante State Wildlife Area in Delta by Dexter. A single was found on March 26 by Joe Himmel at Lower Latham Reservoir south of Greeley, and a pair was seen on the same day further north at New Windsor Reservoir by John Barber. The 35 Ross' Geese found on April 8 at Little Jumbo Reservoir by Larry Sanders may have been from the same population as those found further south. On May 19, Scott Seltman found 13 Ross' Geese still at Nee-so-pah Reservoir. Four Canada Geese, found on April 6 at the Pinery by Scott, were of the rarely reported minima race.

A Wood Duck at the Clifton sewer ponds was showing off her 7 ducklings for Levad on May 21. This is also where a male Cinnamon/Blue-winged Teal hybrid was well described on May 8 by Dexter. On March 19, Dexter found most species of migrant ducks in Grand Junction. On the front range, Bill Fink reported huge numbers of ducks on April 15 in Prospect Valley, including 17 species. A male Eurasian Wigeon, which has been found each spring for the last 5 years by Jerry Cairo, was found again this spring from March 24-26 at Carbody Lake north of Greeley. April 11 brought two more male Eurasian Wigeons to the front range with one found at Chatfield by Dorothy Horton and another at Foster Reservoir east of Longmont by Nikas. A female Greater Scaup was seen on April 12 in the Wheat Ridge Greenbelt by Nelson. Scoters are very rarely seen in the spring in Colorado, so surprising were a male Surf Scoter found by Nikas April 29 at Union Reservoir and a female White-winged Scoter found by Lee and Marilyn Rowe on April 26 on a Prospect Valley farm pond. On April 12, a pair of Barrow's Goldeneyes were seen in Grand Junction by Dexter and Levad, and 7 more were reported by Walter Collins at Shadow Mountain Reservoir in Grand County. All 3 merganser species were seen by Patty Echelmeyer on Sloans Lake on March 6.

Ospreys put in their usual spring appearances, with the first found by Dexter and Levad on March 18 when they saw two at

Crawford. On the eastern slope, 4 were found by Aaron Sell on April 7 at Chatfield Reservoir. After having a nesting platform built for them, the now famous Barr Lake Bald Eagle pair hatched two chicks in early April. The chicks, which were determined to be a male and a female from blood samples taken, were not far from fledgling at press time. A Northern Harrier nest with four eggs was found by Bridges on May 28 at John Martin Reservoir.

A Red-shouldered Hawk was spotted by Bill Brockner on May 15 at Chatfield State Park, in the same area where one was found last year. No fewer than 14 Broad-winged Hawks were reported on the eastern plains between April 22 and May 27, making this the best spring in several years for finding this species. The best time to look for Broad-winged Hawks in Colorado is the last few days in April and the first week in May. Three Red-tailed Hawk nests were found on May 9 in the Arikaree Breeding Bird Atlas block by Kingery and a bold band of bird busters. Three Merlins and 4 Prairie Falcons were spotted on March 1 on the plains west of Fort Collins by Kevin Cook. This was a good spring for Peregrine Falcons on the front range with 6 spotted between April 12 and May 7, always at a lake full of ducks and shorebirds. And last but certainly not least, Don Radovich reported that Gunnison's Red-backed Buzzard returned on March 15 for the third year in a row, with an extremely early Swainson's Hawk in tow.

A rare bird is defined as unexpected in the area or season it is found, and it should not be confused with escapes. Chukars and Bobwhites are commonly used to train hunting dogs, where a trainer will let a bunch of the birds loose and shoot them so the dogs will learn to point and retrieve. Some of these birds escape and survive for a while in the wilds. All Bobwhites and Chukars on the Rocky Mountain Arsenal, as well as those seen in and around Denver, fall into this category. So do others, like the Chukar that Bridges found below Bonny Reservoir on May 11 at Hale Ponds, where a local farmer described a bunch of guys letting go a "whole truck load of them." The 12 White-tailed Ptarmigan seen on March 11 on Guanella Pass by Bob Spencer were guaranteed native birds, as was the pair on Cameron Pass at the Zimmerman Lake trailhead reported by Bill Prather on March 29. Sage Grouse were on their leks March 27 in North Park when they were visited by David Leatherman. More Sage and dancing Sharp-tailed Grouse were seen by the DFO at Hayden on April 23 and were still dancing on May 28. Nearby on April 23, a confused Blue Grouse was seen performing for his lady on the barren sage flats. Baca County's Lesser Prairie

Chickens were also booming on April 8 when Karl Stecher visited them. To the north, the state's Greater Prairie Chickens were reported doing well by several observers in Yuma County. Janos reported seeing Wild Turkeys on each visit to Cottonwood Canyon from early March through early May.

Sandhill Cranes were seen on March 5, north of Hasty, where Janos saw 1850, in Grand Junction on March 19 where Dexter and Levad reported seeing them in large flocks, and north of Greeley where the DFO reported 62 on April 15. Six Whooping Cranes, seen by Bruce Eubanks, were reported from March 8-11 with Greater Sandhill Cranes at Monte Vista National Wildlife Refuge.

Black-bellied Plovers were not well reported, with the only sightings being at Cheraw Reservoir by Janos on May 11, and at Union Reservoir on May 13 by Nikas. Bill Prather saw a Lesser Golden Plover on April 16 at Lower Latham Reservoir, a bird uncommonly found in spring. Two early Snowy Plovers were seen at Cheraw Reservoir on April 6 by Janos. He also saw 4 Snowy Plovers at Nee-so-pah Reservoir on April 23, where they probably breed. Not as expected were a Snowy Plover seen on April 30 by Bob Evans at Jumbo Reservoir, one found by Levad at Clifton on May 5, and another found by Kingery at Chatfield State Park May 13. Semipalmated Plovers put in a good appearance this year with the species commonly reported in eastern Colorado from April 15 to May 15. Twenty-two birds were seen through May 21 on the western slope by Dexter and Levad. Piping Plover, a species not found annually in Colorado was seen by Evans on April 30 at Jumbo Reservoir in breeding plumage, and two were found by Janos on May 14-15 at Cheraw Reservoir. At both of these locations, the Piping Plovers were found with Snowy Plovers. Mountain Plovers were well reported on the Pawnee Grasslands this spring, with a pair seen by the DFO on April 15, and two pairs with young seen on May 21 by the CFO.

Black-necked Stilts were seen throughout April and May in areas where they are probably nesting. These include most of the lakes in the Arkansas Valley, and at Lower Latham Reservoir in Weld County. American Avocets were well reported, and on May 27 TenBrink found them sitting on eggs at 88th and Dahlia Streets in Northglenn. The first shorebirds to arrive in the spring are usually the Greater Yellowlegs, and 3 were seen on March 25 in Grand Junction by Dexter and Levad. An Upland Sandpiper was found by Bridges at their traditional Colorado stronghold at Red Lyon

State Wildlife Area. A single Upland Sandpiper was found at the intersection of Weld County Roads 42 and 47 by Nelson on May 21, and 3 were found by TenBrink nearby on May 28. There is a small population of Upland Sandpipers generally south of Lower Latham Reservoir, but they are usually hard to find. A complete surprise was a colony of Upland Sandpipers found by Kingery on the Arikaree River. Whimbrel are always an exciting find, and this spring was good for this species, with the first seen on April 23 at Adobe Creek Reservoir by Wade Leitner, followed by one at Chatfield on May 3 found by Horton, 3 at Boulder Valley Farms on May 4 seen by Bill Prather, a pair two days later at Prospect seep found by Joe TenBrink, 4 which Nikas found at Union Reservoir on May 9, singles on May 13 found by Kingery at Chatfield and by Peter Gent at Union Reservoir, and 3 more found on May 16 south of Bonny Reservoir by Nick Lethaby. Very late were 4 Whimbrels found by Joe Himmel on May 29 at Lower Latham Reservoir.

The shorebirds of the season were 5 Hudsonian Godwits found by Lois Webster and seen from May 2-4 at Weld County's Prospect seep. This spot, which is a shallow pond below Prospect Reservoir, is always good for shorebirds in the spring and fall, because the water level is dependable. A single breeding-plumaged Hudsonian Godwit was found by Janos at Cheraw Reservoir on May 14. Marbled Godwits passed through in good numbers with 95 found by Bob Spencer on April 22 at the Prospect seep, and 25 still there on the 30th. Kingery found a single Sanderling on May 13 at Chatfield, and 40 more were found by Bill Hays at Union Reservoir the next day. Here on the eastern plains, we think nothing of a Semipalmated Sandpipers, but the well described individual found by Dexter and Levad on May 8 in Grand Junction was a rarity there. The season's first Least Sandpiper was found by John Barber on March 27 east of Timnath. Nikas found the first White-rumped Sandpiper on May 12 in Weld County, and at least 25 were seen May 28-29 at Prospect seep by Nick Watmough. First Baird's Sandpipers were at Cheraw Reservoir on March 25 where Janos saw a dozen. Two days later, Barber found 15 in the northern part of the state at Timnath. Two Dunlins were found this spring, both on April 15, one found by the DFO at Lower Latham Reservoir and a second in breeding plumage found by Fink at the Prospect seep that remained 4 days. Stilt Sandpipers are a late migrating shorebird, and the first found were 40 seen on May 12 by Nikas in Weld County. Forty more were found by Janos at Cheraw Reservoir on May 14. Stilt Sandpipers were reported for the next week, and were then gone from eastern Colorado. Early was a Long-billed Dowitcher seen on

March 19 in Grand Junction by Dexter and Levad. Only two reports were received this spring on Red-necked Phalaropes, the first was on April 12 at Chatfield Reservoir where Joey Kellner saw one, and another was found by Leitner on May 13 at Lake Henry, north of Ordway. Wilson's Phalaropes, Colorado's only breeding phalarope, was reported in normal numbers on the eastern plains.

Franklin's Gulls were first seen on March 22 when TenBrink reported 3 at Walden Pond in Boulder. On March 26, Janos found the first Bonaparte's Gulls of the season on Holbrook Reservoir east of Rocky Ford. The gull events of the season were the second and third state records of Glaucous-winged Gull, both found by Colorado's Mr. Gull, Jack Reddall. The first was an immature at Jumbo Reservoir which stayed from April 2-6, and the second was at Cherry Creek Reservoir where it remained from April 11-19. The Jumbo gull was in first winter plumage, and the Cherry Creek gull was reported as a second winter. Observers at Cherry Creek Reservoir noted 7 gull species on April 12: Glaucous-winged, Franklin's, Bonaparte's, Thayer's, Herring, Ring-billed, and California. Two Great Black-backed Gulls were seen in April, the first was a third year bird found by Himmel northeast of Greeley on the 10th, and the other was in first winter plumage and was found by Janos at Adobe Creek Reservoir on the 22nd. Caspian Terns were well reported in late April and May, with two seen on April 25 at Highline Reservoir north of Mack by Dexter and Levad who found another the next day along the Colorado River. Singles were also noted on May 3 by Bill Prather at McIntosh Lake in Longmont and on May 13 by Kingery at Chatfield. On May 20, Bridges observed 3 at Red Lyon Wildlife Area near Sedgwick. A Common Tern was found by Dexter and Levad on May 8 at Grand Junction, and another was seen by Nelson on May 13 at Lake Meredith. Two Least Terns were seen along the Colorado River with Forster's Terns by Dexter and Levad on May 14-15. Fourteen Black Terns were reported at Prospect seep by Watmough on May 28.

It will be the end of summer before we can judge this year's cuckoo crop, but promising was one Black-billed Cuckoo seen on May 14 at Bonny State Park by Bridges. A Yellow-billed Cuckoo was seen by Kingery in the Arikaree Breeding Bird Atlas block on May 25. A singing Roadrunner was observed by Janos on March 13 in Baca County at Cottonwood Canyon, where he saw 4 on a return trip on May 7. After a population crash in the early 80's, the Roadrunner seems to have fully recovered in southeastern Colorado. Common Barn-Owl nests were reported on April 4 on the Pawnee

Grasslands where Barber found one in a dirt bank, and in Fort Collins where by April's end, Ron Ryder reported several nests in town all with eggs. The pair of Barn-Owls at Colorado Springs State Wildlife Area had chicks when checked on May 13, and a Barn-owl at Delta had 5 chicks on May 21. Other Barn-Owl sightings included one seen by Leitner on May 6 flying around the Chatfield rookery in broad daylight, and another found by Bridges at Bonny State Park on May 13. Flammulated Owls were first heard at their traditional Boulder and Jefferson County nesting groves in the second week of May, which is probably when they first behave territorially. Spencer reported finding 3 different roosting Eastern Screech-Owls on May 10 in the Wheat Ridge Greenbelt, where the habitat is ideal and this species is common. A calling Eastern Screech-Owl was heard by Schottler at Boulder Creek on the C.U. campus on May 20. Janos found 7 Western Screech-Owls calling the evening of May 7 at Cottonwood Canyon, an exceptionally good spot for this owl. A single Long-eared Owl was seen on March 25 at Barr Lake by Lee and Marilyn Rowe. Another single Long-eared Owl was found on April 14 by Kingery in the Castle Rock North Breeding Bird Atlas block. A pair of Long-eared Owls was seen from April 10 to May 25 at Crow Valley Campground by Himmel and Kamm, and are possible nesters. The Long-eared Owls at Cherry Creek Reservoir were successful nesters this year, with a young of the year seen on May 1 by Bridges. A very cooperative calling Northern Pygmy Owl was seen from March 7-24 in Nelson's yard in Coal Creek Canyon. The only two nights this owl didn't call were when desperate out-of-state birders came by to see it. Four Burrowing Owls were seen by the DFO on April 15 north of Barnesville, and Burrowing Owls were reported in April and May in the prairie dog towns at Chatfield State Park and Cherry Creek Reservoir. A Boreal Owl nest was found at the end of March on Cameron Pass, and the male was feeding young the third week of May. A Northern Saw-whet Owl nest was found by Randy Lentz in March at Castlewood Canyon State Park, and the site was successful at least through April. Janos reported lots of calling Common Poorwills on May 7 in Cottonwood Canyon, and one was heard the same night by David Martin at Eldorado Springs. Very exciting was a fourth state record of Whip-poor-will seen at Lake Henry on May 13 by Nelson and Larry Halsey.

White-throated Swifts made their usual early entrance and were found on March 26 at Red Rocks by Brenda Cockrell. Broad-tailed Hummingbirds were exceptionally early, with the first seen in Grand Junction on April 13 by Ira Sanders. Cockrell reported

the first Broad-tailed Hummingbirds on the eastern slope at Red Rocks on April 16. Black-chinned Hummingbirds arrived at the earliest date since the Watts have been keeping records in Penrose. The bird of the season could turn out to be a young Ruby-throated Hummingbird seen on May 16 at Tamarack State Wildlife Area by John and Bill Prather and Cairo. This species is not on the state list, and this sighting might correct that vacancy.

A single Lewis' Woodpecker was seen in the Wheat Ridge Greenbelt on May 10-19 by Patty Echelmeyer, making this the second spring in a row this woodpecker has put in an appearance here. Another Lewis' was at the Denver Federal Center on May 17 where John Hartister watched it forage along a fence. This species nests locally west of Denver in the foothills, but is much more common further south, such as at Colorado Springs State Wildlife area where Martin found 12 on May 13. A Red-headed Woodpecker was seen on May 23 at Chatfield by Ives Hannay as it foraged in the large dead trees where the Platte River enters the reservoir. Two Ladder-backed Woodpeckers were seen by Janos on May 7 in Cottonwood and Carrizo Canyons and another was found by Leitner on May 20 in Canyon City's Pioneer Cemetery. A single Three-toed Woodpecker was heard on April 18 by Nelson in Coal Creek Canyon, and another was seen by Brockner in early May at Evergreen's Elk Management Area. A Yellow-shafted Flicker was seen on March 1 on DTC Parkway in Denver by Robin Byers. There seem to be more reports of this race in Denver in winter. On May 19, Bob Evans found a hybrid flicker in Boulder which he said exhibited all the characteristics of a Gilded Flicker, reminding us all of my Flicker Rule: Look around for a giant Saguaro Cactus, if you can see one, then that flicker is a Gilded.

An Eastern Wood-Pewee, found by Joey Kellner, was calling persistently from May 23-31 at Chatfield State Park and was in the same spot where an Eastern Wood-Pewee was found at last August. Leitner reported that Gray Flycatchers had returned to Canyon City's Temple Canyon Park by April 25. Very unusual was a Black Phoebe found by Horton on April 25 at Chatfield State Park. An Eastern Phoebe was reported on May 7 by Janos as it sat on four eggs inside the old house at the Cottonwood Canyon campground. The "Phoebe Early Arrival" prize went to a Say's seen by Janos at Cottonwood Canyon on March 13. A female Vermilion Flycatcher was the star of the DFO Chatfield State Park fallout fieldtrip on April 30, where 96 species were found that day. The first Eastern

and Western Kingbirds of the year were found by Janos on May 14. A Scissor-tailed Flycatcher, found by Bill Bevington on April 27 south of Chatfield, was kind enough to stick around for a whole week, giving all a good show. Bevington found a Scissor-tailed Flycatcher at this same spot last year but it only stayed two days then. Another Scissor-tailed Flycatcher was found by Ryder on May 29-31 south of the Rawhide Power Plant where it has been seen each spring for 4 consecutive years.

The 4 Purple Martins found by Levad on May 21 on the Uncompahgre Plateau have been found here for 3 years in a row. Four Violet-green Swallows were very early when spotted on March 12 by Joey Kellner in Chatfield State Park. Twenty-two Tree Swallows were seen on March 25 by Dexter and Levad in the Colorado River Valley at Grand Junction.

A calling Chihuahuan Raven was a surprise for Cockrell and Kellner south of Chatfield on April 8. Kingery reported 4 jay species on April 15, consisting of Blue, Steller's, Scrub, and Pinyon. All were found in the Castle Rock North Breeding Bird Atlas block, with some breeding evidence exhibited by the Pinyon Jays. A good sighting can turn up almost anywhere such as Larry Sanders' report on May 5, when he first heard and then saw 9 Pinyon Jays flying up Broadway at Arapahoe Road in Denver. Sometimes we can learn something just by watching the most common of birds, as Leatherman found out on March 16. Dave was working on a list he keeps called "List of animals seen with magpies sitting on them," when he saw Black-billed Magpies on top of sheep in a flock of Bighorn Sheep in Poudre Canyon. Closer observation revealed that the opportunistic Magpies were feeding on grape-sized ticks which had become engorged with the sheep's blood. Tell that one to the family at breakfast!

A Black-capped Chickadee found by Janos May 7 in Cottonwood Canyon was the first ever reported there. If the rest of the year is like the first five months, then 1989 will go down as the year of the Carolina Wren in Colorado. The pair that has been in Marty Pool's Denver yard since last December, nested and at press time had chicks, for a first Colorado nesting record. Other Carolina Wrens were found in Reddall's Cherry Creek yard on March 12-14, at Barr Lake from March 24-April 6 found by Kellner, and in southern Weld County on May 6 found by TenBrink. The resident Bewick's and Rock Wrens were singing on March 13 when Janos visited Cottonwood Canyon. Rowe found the abundant Marsh Wren population at Lower

Latham Reservoir actively on territory on April 26. This spring brought lots of Blue-gray Gnatcatcher reports from the front range area, as did last spring. The first Latilong 12 breeding record of Blue-gray Gnatcatcher was documented by Denver Museum of Natural History workers in their Breeding Bird Atlas Block south of Franktown, and one was found in at 8000 feet elevation in ponderosa and douglas fir in Coal Creek Canyon by Nelson on May 27.

Eastern Bluebirds seem to be doing well in eastern Colorado, with 3 reported by Janos on April 22 north of Las Animas, five pairs found nesting by Kingery on May 9 along the Arikaree River, 3 seen on May 11 by Bridges at Bonny State Park, and a pair found by Leatherman on May 11 at the Iliff exit of I-76. Hundreds of Mountain Bluebirds were reported by Else Van Erp on March 4 at Chatfield State Park during a storm. Scott found four Western Bluebirds back at their nestboxes on March 12 at the Pinery, and Cockrell reported them at Genesee by March 26. Veerys put in a modest appearance with one found by Leitner May 3-4 at the Wheat Ridge Greenbelt, another reported by Bridges at Two Buttes Reservoir on May 6, one found by Kingery on May 11 at the Last Chance Park, one at Lake Henry on May 14 found by Janos, and another found by Adam Mammoser in Laporte on May 20. Gray-cheeked Thrushes are very rarely found in migration so the one seen on May 12 at Bonny State Park by Himmel and Cairo was a real treat. Early was a Hermit Thrush seen on April 13 by Janos at Rocky Ford Wildlife Area. Very late was a Varied Thrush found on the Denver spring bird count by Ruth Breckon on May 13 at Bear Creek Park. This sighting follows an unconfirmed report of two Varied Thrushes a week earlier at nearby Loretto Heights College.

Northern Mockingbirds are uncommon in the Grand Valley, so it was a surprise when Levad found their numbers up at the west end of the valley on May 6. Pueblo observers found 4 Curve-billed Thrasher nests north of Fowler in April, a spot where this species has been a sure bet the last few years. A Curve-billed Thrasher was seen on May 13 at Cottonwood Canyon by Janos. Water Pipits are seen each migration, but thousands were observed on April 29-30 at Chatfield by Lois Forman and on May 13 there by Kingery. All sightings were during stormy weather.

A dozen Cedar Waxwings visited Thompson Marsh's Denver yard on March 1. A few were periodically seen in La Junta in April and were not reported again until 6 were found at Crow Valley

Campground by CFO birders on May 21.

On May 19, Seltman found a White-eyed Vireo 1/4 mile into Kansas, south of Holly. Maybe next time we will have an eastern breeze and it will blow into our state. A Bell's Vireo found by Leitner May 4-5 in the Wheat Ridge Greenbelt was a new Latilong record. Leatherman reported that Bell's Vireos had returned by May 11 to Tamarack State Wildlife Area near Crook. Red-eyed Vireos were seen on May 20 by Fink at Waterton, where they nest, and migrating on May 25 at Crow Valley Park where found by Himmel.

Thirty-one species of warblers were reported in eastern Colorado in May, but there were few reports of "fallouts" or of excited birders caught up in a warbler feeding frenzy. The rule was that you were lucky if you saw any one of the warblers reported below. Not mentioned are the common migrant and resident warblers which all were well reported and showed no population trends. These included Orange-crowned, Yellow, Yellow-rumped, and MacGillivray's Warblers, Common Yellowthroat, Wilson's Warbler, and Yellow-breasted Chat. A stunning male Blue-winged Warbler was found on May 6 in Lyons by John Prather. A singing male Golden-winged Warbler was found for three days in a row on May 12-15 at Bonny State Park by Bridges, and another singing male Golden-winged Warbler was in Lakewood's Bear Creek Lake Park, where Mary Kay Waddington found it on May 18-19. Tennessee Warblers were seen on May 9 and 25 by Leitner in the Wheat Ridge Greenbelt, and on May 13 at Bonny State Park by Cairo and Himmel. A male Nashville Warbler was seen in the Wheat Ridge Greenbelt on May 10 by Leitner and at Bonny State Park by Bridges on May 22. A single Northern Parula was reported on May 6 in Boulder by the Boulder Audubon Society. Chestnut-sided Warblers put on a good show this spring with one seen at Bonny State Park on May 12 by Cairo and Himmel, and another found there by Bridges on the 14th. Males were found in Lakewood by Waddington on May 13, by Gent in Boulder on May 14 and by Evans on May 15, and a pair from May 25-30 found by Fitzmorris and Dale Peterson at the Wheat Ridge Greenbelt. Will they breed? Magnolia Warblers were reported by Janos on April 23 at Two Buttes Reservoir, by Bridges on May 11 at Bonny State Park and at Lake Henry on May 21 by Leitner. This spring two Black-throated Blue Warblers were found, a male on May 13 at Bonny State Park found by Cairo and Himmel, and a female found by Watmough at Crow Valley on May 28. Leitner reported that Black-throated Gray Warblers had returned to their nesting areas in Temple Canyon by April 23, and Martin found them on territory in

Western Moffat County at 7000 feet elevation on April 30. Black-throated Gray Warbler were also almost common on the eastern plains where it was seen regularly at almost every spot frequented by birders. Three Townsend's Warblers, rare in the spring, were found during this period: on Boulder Creek by Evans on May 4, at Bonny State Park on May 13 by Cairo and Himmel, and north of Golden at White Ranch by Alan Hay on May 21. Two Black-throated Green Warblers were found on Boulder Creek, one on May 9 by Bob Fiehweg and the second on May 15 by Bill Kempfer. Neal Ward enjoyed the Memorial Day cookout on May 29 at his son's Denver backyard because he was serenaded all day by a male Blackburnian Warbler from a tree overhead. A Yellow-throated Warbler was found in Loveland on May 13 by Foothills Audubon. Palm Warblers were seen on May 5 by Bob Spencer in the Wheat Ridge Greenbelt, on May 6 at Two Buttes Reservoir by Bridges, on May 7 in Cottonwood Canyon by Janos, and south of Holly on May 19 by Seltman. Blackpoll Warblers were seen on May 1 in Boulder by Bill Prather, on May 13 at Bonny State Park by Cairo, on May 16 at Chatfield by Peterson, and on May 25 at Crow Valley by Himmel. Black-and-white Warblers gave their usual good show with one on May 9 in the Kingery yard in Denver, a singing male found by Horton on May 12 in Waterton, a female found at Holly on May 15 by Janos, and others were found throughout the period. American Redstarts are local nesters and are most commonly found nesting along the Platte River from Kingfisher Bridge in Chatfield State Park to the mouth of Waterton Canyon. They were reported here by several observers in May, and were found in May along the front range at most of the birded areas. Worm-eating Warblers seem to have been found annually for the last few years and 3 were found this year in May. The first was seen on May 6 in Boulder's Gregory Canyon by Boulder Audubon, another was seen on May 11 at Crow Valley Campground where Himmel reported its brief appearance and the third was found by Alex Brown on May 17 along South Boulder Creek. Ovenbird is another of the local eastern slope foothill breeding birds which are more often seen in migration. One was in the Wheat Ridge Greenbelt where Leitner saw it on May 18 and Fitzmorris found two more there on the 28th. Northern Waterthrushes were well reported this spring with 10 seen. This species is one of our more regular migrant warblers and is commonly reported by birders who have learned to look for it along small creeks and to listen for its loud chip. Two of the best spots in the Denver area are the Wheat Ridge Greenbelt and South Boulder Creek. "Warbler Finder of the Year" award goes to Dorothy Horton who studied a female Connecticut Warbler as it quietly sat in the middle of a bush on

May 18 in Roxborough Park southwest of Denver. A close second goes to Watmough who found a male Mourning Warbler which just "popped up" in front of him as he was trying to look at a thrush on May 21 at Prewitt Reservoir. A Hooded Warbler seen May 9-13 in the Wheat Ridge Greenbelt was first found by Leitner, and another was found on May 16 in Boulder's Gregory Canyon by Hope Layton. The "different song" heard by Bridges on May 21 at Bonny State Park turned out to be a singing male Canada Warbler, a spectacular find. In what Seltman calls the "Brush with Greatness" department, Forrest Luke found a male Red-faced Warbler in Green River, Wyoming from April 27-30 feeding in flowering fruit trees in town. Colorado observers painfully acknowledge that this first regional record almost certainly came through Colorado but slipped through their fingers.

A Summer Tanager was seen on April 30 through May 2 northeast of Boulder in Ron French's yard. Others were found on May 10-11 in southeast Denver at Gladys Isaacson's yard and on May 21 at Prewitt Reservoir where Watmough found an immature male. Scarlet Tanagers even put in a better appearance than Summer Tanagers with a male seen on May 11 at Bonny State Park by Bridges, another male seen on May 15 at Tamarack State Wildlife Area by Bill Prather, and two in the Denver area, a male seen from May 17-20 in the Wheat Ridge Greenbelt by Lee and Marilyn Rowe, and another male found by Paula Jordan on May 21 at Bear Creek in Lakewood.

Rose-breasted Grosbeaks put on their annual show with this species reported at most regularly birded locations. This species has been hard to miss in the Wheat Ridge Greenbelt during the last half of May and into June for the last 3 years. Unusual was a Rose-breasted Grosbeak at 8000 feet in Coal Creek Canyon found by Carol Nelson. Four Northern Cardinals were reported from northeastern Colorado, one at Bonny State Park on May 12 by Cairo and Himmel, another at Bonny on May 14-15 by Bridges, who found yet another at Sedgwick on May 21, and a male by Kingery on May 25 on the Arikaree River.

A Field Sparrow was seen by Bridges on May 6 at Two Buttes Reservoir, and 3 singing males were found by Kingery on May 24 on the Arikaree River. Three more singing males were found by Bridges on May 28 south of Holly on the state line. A male Black-throated Sparrow was found on May 14 by Janos, as it sang near the Purgatoire River south of La Junta. This is a very rare and local bird in southeastern Colorado. Speaking of sparrows, Janos

reported witnessing a living, breathing, fieldguide to the sparrows on May 7 when he found a fence in Baca County with the following sparrow species sitting on a 4-foot stretch of barbed wire side-by-side: Cassin's, Clay-colored, Brewer's, Savannah and Vesper. On May 13, south of Colorado Springs, Martin reported Chipping, Brewer's, Lincoln's, and White-crowned all in one small sparrow flock. Lark Buntings were seen by Stecher as they arrived in Baca County on April 8, and two singles were a rarity in Grand Junction where found by Dexter and Levad on May 14 and 21. A singing Fox Sparrow was found on April 10 by Dexter and Levad in a frozen willow carr at the 8000 foot snowline on the Uncompahgre Plateau. Another was heard by Nelson on April 30 near I-70 at Dillon, and Leitner found one on May 20 singing in a small patch of willows with a Lincoln's Sparrow at Golden Gate State Park. Very unusual was an individual of the eastern race Fox Sparrow found by Seltman on May 19 south of Holly. A Golden-crowned Sparrow seen by Nelson on April 11 in the Wheat Ridge Greenbelt may have been the same individual that wintered there, and the Harris' Sparrow reported on April 22 at the Waterton Bridge by Urling Kingery was the last of the winter. McCown's Longspurs are early migrants and this sometimes gets them into trouble. On March 3, Leatherman reported hundreds being killed by cars in western Nebraska where they were trying to land on the roads after a snowstorm had buried the fields.

An albino Red-winged Blackbird was reported 1.5 miles west of Platteville by Hay on April 15 and was still singing on May 30. Ray Davis has reported this same individual for the last two years making 1989 the third year in a row it has been in this marsh. The Bobolinks in Boulder returned on May 7 to their nesting field on Baseline and South Boulder Creek. A singing male Bobolink was seen in Lakewood by Ann Southcott on May 23 in good habitat. Yellow-headed Blackbirds were found by Dexter and Levad on March 25 in Grand Junction and on March 26 by Cockrell north of Barr Lake. Great-tailed Grackles are becoming more and more common statewide. Himmel saw one on March 28 at Lower Latham Reservoir, and 10 were seen just south of there on May 13. A pair of Great-tailed Grackles found by Urling Kingery on May 11 at Idalia were still a surprise.

John Barber reported lots of Brown-capped Rosy Finches on March 16 at the Gould Cafe feeder. Crossbills were reported on Cameron Pass where Kevin Cook found up to 20 Red Crossbills from March 1 to April 14, and up to 8 White-winged Crossbills through

May 21, with strong suspicion, but no confirmation, that the White-wingeds were nesting. Mort Statts found 3 Red Crossbills eating sand on March 24 on the road to Guanella Pass.

AGES OF LOGGERHEAD SHRIKE YOUNG

Hugh Kingery
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While working in the Mariano Wash East Breeding Bird Atlas block (3710887), near Towaoc, J. R. Guadagno, Allan Lavery, and I saw a family of recently fledged Loggerhead Shrikes (by distribution assumed to be Lanius ludovicianus excubitorides). The young had differing degrees of ability to fly: one flew very well, one fairly well, and one could not fly at all.

The youngest bird's flight was so poor that we caught it, photographed it in the hand, and then released it. Upon release, it immediately headed for the interior of a saltbush (Atriplex sp.). Its plumage development indicated very recent fledging. The head feathering showed remnants of downy feathers and it had a very short tail.

In Bent (1950), A. H. Miller stated that the female Loggerhead Shrike (California race L. l. gambeli) "begins to cover the eggs usually with the laying of the next to last egg of the set" which would imply that a shrike family's young are all the same age except one who is sometimes one day younger.

On the other hand, a 1975 paper by Porter, et al (1975) reported observations of nests which "contained young of widely divergent weights due to asynchronous hatching, probably the result of incubation beginning before the completion of the clutch." Dr. R. A. Ryder stated (pers. comm.) that others have observed this same trait.

Our observation agreed with those of Porter et al. since the young shrikes in the group which we observed were different ages, and must have hatched at different times.

This note is offered to call attention to the apparently outdated information in Bent. Porter et al. (1975) contains substantial data on the nest ecology of shrikes on the Pawnee Grassland, and updates Bent's life history information.

I suggest to Colorado observers that our field observations can add details to the knowledge of life histories of the birds which occur here. This particular observation is cumulative rather than original, but others may have new behavioral observations which do not yet appear in literature.

My thanks to Dr. Allan Phillips and to Dr. Ron Ryder for their suggestions about this note.

LITERATURE CITED

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A SPECIMEN OF SURF SCOTER (Melanitta perspicillata)
FROM WESTERN COLORADO

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On 26 October 1988, I was driving east from the Avocet Trail on the Monte Vista National Wildlife Refuge towards the 3 East Road in Rio Grande County when I noticed a scoter resting on an impoundment next to the road. I observed the scoter with a 30 spotting scope at a distance of approximately 30 meters. The scoter had the enlarged area around the nares and two patches of light colored feathers on the face, one just posterior to the bill and one below and posterior to the eye. The bill was dark colored, and the overall body coloration was dusky brown. The bird was about the size of a Mallard (Anas platyrhynchos). I watched the bird for approximately 3 minutes before it flushed. When it flushed, its wings were a uniform dark color with no trace of white. Based upon the lack of white on the wing and its relative size, I identified it as a female or immature Surf Scoter (Melanitta perspicillata).

On 12 November 1988, two individual and a single group of two immature Surf Scoters were observed on San Luis Lake, Alamosa County. An immature female was collected while foraging. Food in the esophagus was sago pondweed (Potamogeton pectinatus) tubers.

In Birds of Colorado, Bailey and Niedrach (1965) list the Surf Scoter as a rare straggler to Colorado. All the Colorado records they list are from the eastern slope with the exception of a record of a juvenile found dead in North Park. R.A. Ryder (pers. comm.) reported a verbal account of a Surf Scoter killed at Russell Lakes, in Saguache County. No date for this specimen was given. More recently, the Colorado Bird Distribution Latilong Study lists the Surf Scoter as accidental in Latilongs 8 (Grand Junction), 16 (Montrose) and 23 (Durango), all in western Colorado.

BREEDING BIRD ATLAS

Hugh Kingery
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Halfway through the breeding season, tantalizing reports highlight Colorado Bird Atlas fieldwork. Observers have found probable, but not confirmed, breeding of three species, each of which, if confirmed, would provide first state nesting records: White-winged Crossbills on Cameron Pass, Summer Tanagers in Pueblo, and Field Sparrows near Idalia.

Two group blocks confirmed Blue-gray Gnatcatcher for the first time in Latilong 12. The Denver Museum of Natural History Zoology Department, led by Betsy Webb, found a pair building a nest in the Ponderosa Park block (Map #39104D6), and the Tuesday Birders group, led by Ann Bonnell, found a nest in Castle Rock North block (Map #39104D7).

Steve Jones reported that last year the Reader Lake block (Map #37102B8) had a good crop of Dickcissels. This year he found none, which he attributes to the drought. The sweet clover in which they nested last year didn't even come up this year!

At the C.F.O. annual meeting in May, Don Schrupp, the computer specialist for the Habitat Section of the Colorado Division of Wildlife, presented a program on Atlas mapping. He showed maps, drawn by computer, illustrating the breeding distribution of a dozen species. In color, the maps showed vividly how the Atlas can present visual data on bird distribution. He included maps comparing the distribution of Swainson's and Red-tailed Hawks, Black-capped and Mountain Chickadees, and Horned Lark and Mountain Chickadee.

The Atlas has issued its first responses to requests for data. The Nature Conservancy inquired about Atlas fieldwork on a prospective Conservancy property and we provided them with a Proof Listing of a similar nearby block that had extensive field work. Naturally, the specific property in which TNC has an interest is not in a priority block, however we offered to conduct a limited amount of field work to help TNC evaluate this property.

The Division of Wildlife plans to examine the status of Burrowing Owls in eastern Colorado. In preparation for the survey (C.F.O. members will receive a request to provide information this fall), the Atlas provided a list of the blocks which so far have reported Burrowing Owls. The Division has received several comments that Burrowing Owls seem to be declining. In response, it will conduct a two-pronged survey in an attempt to determine the status of the prairie owl. One survey will ask for historic data and the other will ask for volunteers to conduct a mid-July (1990) census of Prairie Dogs and Burrowing Owls, using Atlas blocks as the sample.

Atlas reports for Burrowing Owls came from only 20 eastern Colorado blocks out of 146 in which we have done field work. We will have to expand our information by looking at the suitability of the habitat in these blocks for Burrowing Owls, as well as the completeness of the coverage.

As usual, we invite C.F.O. members to volunteer for field work on the Atlas. We especially need field workers in areas more than an hour's drive from the population centers on the Front Range and Grand Junction.

1989 C.F.O. MEMBERSHIP NEWS

Steve Bouricius
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We would again like to thank those people who have made contributions to the Colorado Field Ornithologists in the form of Contributing and Supporting Memberships. The funds generated through these memberships have enabled the CFO to support Colorado ornithology with 1988 grants to the Colorado Breeding Bird Atlas, the Colorado Bird Observatory at Barr Lake, the Colorado Bird Report, and to the Zoological Collections at the Denver Museum of Natural History for archival preservation of the Official Colorado State Bird Records.

Thanks to the following 1988 Contributing and Supporting members not published in the CFO Journal (22:69-71).

CONTRIBUTING:

Robert Evans
Ron Harden
Weir Nelson
Aaron Sell
Bob Spencer
Tom Strother
Tom & Ridi Van Zandt
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SUPPORTING:

Wilbur Fulker
Nyla Kladder
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C.F.O. RUFFED GROUSE TRIP

I.M. Cold

C.F.O. Correspondent

In October, 1988, a Ruffed Grouse (Bonasa umbellus) was shot in Moffatt County in the northwest part of Colorado. This happened one quarter mile inside Colorado, close to where Pot Creek enters the state, to the northwest of Dinosaur National Monument. This is the first verified record of Ruffed Grouse in Colorado. Was this an isolated individual or is there an isolated population breeding in Colorado? On April 28-30, 1989, the intrepid search party of Dan Bridges, Peter Gent, David Martin, Duane Nelson and Dick Schottler set out to find the answer.

First we had to venture into uncharted territory, Utah, to meet the landowners in Vernal. One of them, seeing such a motley crew, took pity on us and, after pointing out that the mountains to the north were now white, gave us the key to his cabin. God bless him. Next morning, the snow cover obscured a rock in the trail that David Martin ran into, damaging the U-joint and exhaust of his car. The trailing observers thought his eyes were already skyward anticipating a drumming Ruffed Grouse. David had to spend two days in Vernal while his car was repaired and recommends not to do this too often. His crippled car would not even make it over to Green River, Utah where there was a Red-faced Warbler.

We did not hear or see any Ruffed Grouse on the trip. We checked the best habitat, which was dense stands of pine on the north-facing slopes of the mountains. The habitat looked good, but not great for Ruffed Grouse and is excellent for Blue Grouse, of which we saw a good number. We thought that despite the cold weather, if Ruffed Grouse were breeding in the immediate area we would have found them by hearing their drumming. Thus we concluded that Ruffed Grouse were not breeding in this particular area. However, there are other areas along the border between Colorado and Utah where they could breed. Perhaps the individual last year was a bird of the year engaged in some post-breeding wandering. There is a corridor of continuous good habitat west from this part of Colorado to the Uinta Mountains 20-30 miles away in Utah where Ruffed Grouse are known to breed.

Birds seen in the immediate area of Pot Creek were:

Green-winged Teal	Clark's Nutcracker
Mallard	Black-billed Magpie
N. Pintail	Mountain Chickadee
Cinnamon Teal	Red-breasted Nuthatch
N. Shovel'er	Ruby-crowned Kinglet
Gadwall	Mountain Bluebird
Redhead	American Robin
Ring-necked Duck	Loggerhead Shrike
N. Harrier	European Starling
Golden Eagle	Virginia's Warbler
American Kestrel	Black-throated Gray Warbler
Blue Grouse	Green-tailed Towhee
Killdeer	Rufous-sided Towhee
Wilson's Phalarope	Chipping Sparrow
Broad-tailed Hummingbird	Vesper Sparrow
Williamson's Sapsucker	White-crowned Sparrow
N. Flicker	Dark-eyed Junco
Say's Phoebe	Western Meadowlark
Horned Lark	Brewer's Blackbird
Pinyon Jay	Cassin's Finch

BOOK REVIEWS

Birds of Yellowstone. Terry McEneaney. 1988. 171 pp. Roberts Rinehart Inc., Box 3161, Boulder, CO. 80303. \$8.95

Reviewed by Hugh Kingery
869 Milwaukee St.
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Visitors to Yellowstone National Park who seek some of the park's bird specialties will find this guide very useful. The author describes it as "first and foremost a Finder's guide to Yellowstone birds." It succeeds admirably, and with copious detail.

He describes the park from a bird-finding perspective, specifying the places to go to find such park birds as Harlequin Ducks, Great Gray Owls, and Bald Eagles.

The book employs a format which previous bird books on Yellowstone (1976) and Grand Teton (1984) have used: a central section describing selected bird specialties of the park, with a checklist at the end. The checklist uses the year/graph format (similar to the one in the Lane/Holt Birds of Colorado), with a lot of extra detail thrown in, like where to find each species, the likelihood of finding them, and the best time to look.

The only problem that I note stems from the fires of 1988 which may make some directions out of date. Changes may have occurred to park forest habitats and therefore in where to find forest species. Perhaps access to some Yellowstone back country sites has changed. The fires also will create enormous opportunities to study changes in birdlife in the park.

The book has nice sketches by Karen McEneaney and handsome color photographs of the 20 "characteristic" Yellowstone birds selected for species accounts. After visiting the geysers, falls, and hot pools of Yellowstone National Park, birders who use this book will want to stay even longer in Yellowstone.

BOULDER COUNTY NATURE ASSOCIATION PUBLICATIONS AVAILABLE

The Boulder County Nature Association (BCNA) has produced a number of publications, many about avian ecology, and may be of interest to CFO members. Publications may be ordered from Nan Lederer, 2635 Mapleton #77, Boulder, CO 80302. Orders must be pre-paid and checks made out to BCNA (price differences reflect membership in BCNA). Include \$1.00 postage and handling.

- No. 2 Status of Nesting Golden Eagles in Boulder County and Adjacent Areas of the Front Range in Colorado: a Preliminary Report. By Mike Figgs and Nancy Lederer. 1986 update of ongoing project monitoring nest success of golden eagles and impacts of human disturbance. 19 pp. incl. photos. \$1.50 memb., \$2.00 non-memb.
- No. 4 Ecology, Status and Avifauna of Willow Carrs in Boulder County. By Dave Hallock, Nancy Lederer and Mike Figgs. 1986. Discusses one of the most productive and threatened habitat types for breeding birds. 38 pp. incl. maps and photos. \$2.50 memb., \$3.00 non-memb.
- No. 5 The Diets and Breeding Biology of Red-tailed Hawks in Boulder County: 1985 Nesting Season. By Daniel T. Blumstein. 1986. Includes literature review and extensive bibliography. 78 pp. \$3.50 memb., \$4.00 non-memb.
- No. 6 Habitat Use by Breeding Birds on City of Boulder Open Space, 1985. By Richard W. Thompson and Joseph G. Strauch. 1986. Study contracted by Open Space Dept. Includes discussions of species found, use of various habitat types, management recommendations, maps. 131 pp. \$5.00 memb., \$5.50 non-memb.
- No. 7 Indian Peaks Four Season Bird Counts: a Five Year Retrospective 1982-1986. By Dave Hallock. 1987. What has been learned from our mountain bird counts. Includes discussions on cavity nesters, forest structure and management, photos. 69 pp. \$3.50 memb., \$4.00 non-memb.
- No. 8 Hawks, Eagles, and Prairie Dogs: Wintering Raptors in Boulder County, Colorado. By Stephen R. Jones. 1987. Seven years' worth of information from an ongoing study of populations, habitat use and prey of our wintering buteos and eagles. 30 pp., incl. photos and maps. \$2.50 memb., \$3.00 non-memb.
- No. 9 A Survey of Plains Riparian Vegetation in Boulder County, Colorado. Prepared by Boulder County Parks and Open Space and Boulder County Nature Association. A study of one of the richest wildlife habitat types in Colorado. 41 pp., incl. photos and maps. \$3.00 memb., \$3.50 non-memb.
- Special Publication. The Notebooks of Denis Gale. Edited by Junius Henderson. Field notes of one of Boulder County's earliest ornithologists; valuable historical information from the late 1800's. Photocopy of microfilm. 310 pp. \$15.00 memb., \$17.50 non-memb.

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