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CFO 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: Peter Gent, 55 South 35th Street, Boulder, CO 80303. Send rare bird reports to: CFO Official Records Committee, c/o Zoological Collections, Denver Museum of Natural History, City Park, Denver, CO 80205.

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FROM THE EDITORS

We knew Bob Andrews had strong ideas about the content and function of seasonal reports, so we asked him to write one and to include his thoughts on how seasonal reports should be written. His report starts on the next page: your comments are welcome. Please note the announcement of the CFO photography contest with the winning entries to be displayed at the annual convention. Finally, please try to participate in at least one of the several excellent field trips that have been planned by Timms Fowler for this spring.

PETER GENT AND TERRY ROOT

Cover Photograph: Blue Grouse on Flattop Mountain Trail, Rocky Mountain National Park by Bill Ervin. Bill is a graduate student in the Department of EPO Biology at the University of Colorado at Boulder.

SEASONAL REPORT--SPRING 1980

by Robert Andrews
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This report is not only an attempt to summarize the notable observations made by Colorado's field ornithologists in the spring of 1980, but is also an attempt to demonstrate what I believe a seasonal report can or cannot do, and should or should not do. I have written several seasonal reports for this journal, and have read many others, and have some to some definite opinions on the purpose and validity of seasonal reports. This report is an expression of those opinions.

In recent years, there has been a healthy but misguided desire on the part of seasonal report writers and editors (in this journal and others, and including myself) to expand coverage from rarities to common species. The assumption behind this is that common species are much more important than extralimital rarities. Therefore, the documentation of their status and dynamics must be of far greater importance, from both a biological and conservation standpoint, than the accumulation of observations of extralimital rarities. This assumption is, I believe, essentially correct. Common species are the core of our avifaunas, and probably should claim more of our interest and effort than they do. We spend much effort in discerning the patterns of occurrence and the field marks of exciting rarities, but the distribution and plumage complexities of common species are often poorly known. The many gaps evident in the first edition of the Colorado latilong study and the confusion over the "Smith's-Chestnut-collared" Longspurs on the Pawnee National Grasslands in the fall are excellent examples of this.

If we, as an organization and as individuals, have a desire to understand our common species better, it should be undertaken as a full and separate activity of its own. It should not be merely added onto an existing process that was originally devised for an entirely different purpose. Extralimital rarities and common species are very different in nature; the process of collecting field observations, and analyzing and reporting those observations must be different. Very few bird-watchers strutcure their birding activities with the rigorous consistency that is necessary to permit valid analyses of population trends of common species. Therefore, the information that comes to seasonal report writers is generally much too uneven to allow meaningful commentary on common species to be made. Writers that are committed to expanding their coverage to common species feel they must say something, but lack the information to do so properly. Thus, a very sizeable percentage of the comments on common species in these reports are at best weakly substantiated and at worst, trivial or worthless. Most writers, including myself, have committed this error. The simple truth is, I believe, that analysis of common species can't effectively be dealt with by the seasonal report format. Latilong and atlas studies, Christmas Bird Counts and Breeding Bird Surveys are better attempts to document the distribution, abundance and status of populations of common species.

The seasonal report is left, then, with only the extralimital rarities. The relative insignificance of such observations was alluded to previously. Certainly such individuals are a minute percentage of the total population, and such individuals often do not survive long. These reasons may be cited as a justification for ignoring such records in our study of birds. Yet many birders incorporate into their activities a scientific attempt to search for and explain trends among their observations of birds. It is undeniable that trends occur among extralimital occurrences; most such observations fall within recognized geographical and temporal patterns. A good case in point is the Buff-breasted Sandpiper; almost all Colorado records fall within a short period in late August and early September. Certain biological characteristics are held in common by most species that persistently occur far beyond their normal ranges. Long-distance migrants are more likely to wander than short-distance migrants or sedentary species, and species of great ecological tolerance wander more than very specialized species. Therefore, we are perhaps justified to expect the Curlew Sandpiper, or even the Black-tailed Godwit, someday in Colorado, but not the Jacana or Rock Sandpiper.

Not all rarities should be dealt with in the same way in seasonal reports. The number of records of many species have reached the point where continuing to list them individually in seasonal reports would be repetitive; the individual reports are not of great interest by themselves. Such observations should be kept on file for future use, but should only be summarized in seasonal reports. Two types of rarities should be dealt with individually. These are observations which fall within a recognized pattern of occurrence but in which the total number of records is small, and observations that follow no known pattern (they may represent patterns not previously perceived, or genuinely new patterns). I have attempted to follow this treatment in this report.

The gradual elimination of species, first the common species and then the most regular rare species, from consideration in the seasonal report format, has left a group of species or observations that are among the most exciting but which many believe to be the least important. This is a valid criticism, and I am in substantial agreement with it. Perhaps the usefulness of continuing seasonal reports in this journal should be questioned, and the strengthening of current activities that better deal with common species or the establishment of additional approaches should be explored. Certainly, if the seasonal reports are to be retained, they should include only those species which the format can effectively address, and should not try to accomplish something with all species.

Comments on these ideas are welcome.

Part I

The following table summarizes the extreme departures and arrivals of the season. The previous extreme dates and the average dates are from Holt (1979; Status and Migration Data of Birds of Eastern Colorado) and Davis (1969; Birds in Western Colorado).

Departures Species and County	Date of Observation	Previous Extreme Date	Average Date
White-fronted Goose(Sedgwick)	26 May	20 April	6 April
White-winged Scoter(Arapahoe)	24-25 May	18 April	11 April
Red-breasted Merganser(Mesa)	25 May	mid-April	mid-March
Herring Gull(Sedgwick)	25 May	11 May	26 April
Snowy Owl(Boulder)	13 April	25 March	14 Feb
Gray-crowned Rosy Finch			
(Larimer)	17 May	22 April	7 April
(Gunnison)	May	late Feb+	early Feb+
Tree Sparrow(Boulder)	17 May	11 May	21 April
Arrivals			
Swainson's Hawk(Grand)	9 March	13 March	4 April
Dunlin(Denver area)	4 April	13 April	21 April
Semipalmated Sandpiper			
(San Luis Valley)	4 April	9 April	22 April
Black Swift (La Plata)	14 April		early June
Common Nighthawk(Boulder)	8-9 April	30 April	14 May
Eastern Kingbird(Eagle)	20 March		mid-May
Lark Bunting(Morgan)	15 March	9 April	24 April
(Morgan)	26 March	9 April	24 April

+These time periods (from Davis) are questionable.

Part II

This table summarizes the observations of a number of species which are of interest, but for which it is not necessary to distinguish among individual observations because the pattern of occurrence is sufficiently well-established and the total number of observations in the state is fairly large.

Species	Total Birds	Dates	County or Location
Green Heron	22	10-26 May	E Colorado
Little Blue Heron	3	15-18 May	Lar, Pueblo
Cattle Egret	9	5-17 May	Adams, Bldr, Lar
Great Egret	7	7-26 May	Bldr,Logan-Sedg
Least Bittern	1	29 May	Bldr
"Blue" Goose	65	15-22 Mar	Extreme NE Colo
Ross' Goose	2	2-6 Apr	Bldr, Lar
Wood Duck	37	3 Mar-17May	NE Colo, Pueblo
	4	12-29 Apr	Ouray

Species	Total Birds	Dates	County or Location
Greater Scaup	10+	4 May	Pueblo
Broad-winged Hawk	9	20Apr-19May	E Colorado
Osprey	35	13Apr-31May	Statewide
Peregrine Falcon	5	11Mar-10May	NE Colorado
Semipalmated Plover†	12	1-18 May	W Colorado
Piping Plover	1	27 Apr	Logan-Sedg
Ruddy Turnstone	2	25-26 May	Logan-Sedg
Whimbrel	8	4-26 May	NE Colorado
Red Knot	3	18 May	Larimer
Semipalmated Sandpiper	1	17 May	La Plata
Black-necked Stilt	4	13-17 May	NE Colorado
	2	30Apr-19May	W Colorado
Northern Phalarope†	27	13-18 May	W Colorado
Least Tern	3	8-19 May	Crowley
Common Flicker(intergrades)†	4	11Mar-14May	Bldr,Jeff
Lewis' Woodpecker†	1	12-13 May	Yuma
Cassin's Kingbird†	4	12-31 May	NE Colorado
Great Crested Flycatcher	2	17-18 May	Yuma
Eastern Phoebe	7	5Apr;10-30May	E Colorado
Least Flycatcher	3	16-17 May	Boulder
Purple Martin	3	22-25 May	Mesa,Moffat
White-necked Raven†	2	30 Mar	Douglas
Pinyon Jay†	17	23 May	Boulder
Carolina Wren	1	5-6 Apr	El Paso
Veery	12	11-26 May	NE Colorado
Philadelphia Vireo	2	17-25 May	Bldr,Logan
Black-and-white Warbler	9	10-20 May	NE Colo,Pueblo
Worm-eating Warbler	2	20-29 Apr	Adams,Bldr
Golden-winged Warbler	2	15-28 May	Jeff,Larimer
Tennessee Warbler	26	27Apr-26May	NE Colorado
Nashville Warbler	6	7-17 May	NE Colorado
Northern Parula	6	4Apr;1-17May	Bldr,Pueblo
Magnolia Warbler	6	13-18 May	NE Colorado
Black-throated Gray Warbler†	2	6-18 May	Bldr,Larimer
Townsend's Warbler	3	11-17 May	Bldr,Yuma
Black-throated Green Warbler	2	16-17 May	Boulder
Chestnut-sided Warbler	5	17-31 May	NE Colorado
Bay-breasted Warbler	2	14-18 May	Pueblo,Yuma
Blackpoll Warbler	28	10-21 May	NE Colorado
Palm Warbler	3	8-20 May	Bldr,Jeff,Pueblo
Ovenbird	8	15-26 May	NE Colorado
Northern Waterthrush	19	5-26 May	NE Colo,Pueblo
Hooded Warbler	1	26 Apr	Pueblo
Bobolink	20	17-23 May	Front Range (Den northward)
	1	25 Apr	Huerfano
	2	mid-May	La Plata,Mesa
Orchard Oriole†	5	17-18 May	Arap,Bldr,Lar
Rusty Blackbird	2	29Feb-5Apr;	Boulder
		17 May	Boulder
Scarlet Tanager	2	22Apr-12May	Boulder
Summer Tanager	4	6-26 May	Bldr,Logan,Pueb

Species	Total Birds	Dates	County or Location
Rose-breasted Grosbeak	54	4-26 May	NE Colo,Pueblo
	4	11-28 May	Chaffee,Cl Creek
	3	13-25 May	Eagle,La Plata, Ouray
Indigo Bunting	21	22Apr-25May	E Colorado
	1	26 May	Clear Creek
	1	mid-May	Gunnison
Dickcissel†	1	17 May	Boulder
Purple Finch	6	1Mar-4Apr	Bldr,Larimer
Gray-headed Junco†	1	29 Apr	Morgan
White-throated Sparrow	5	24Apr-17May	NE Colorado
	1	13 May	La Plata
Swamp Sparrow	1	10 May	Larimer

†Indicates only part of the state is considered (areas where the species is most common are excluded).

Part III

The following observations are considered to be notable enough that they warrant being discussed individually. The number of state records given for each species does not include the specific record mentioned.

Red-necked Grebe(*)-1 at Hygiene, Boulder Co. 1 March (LH). In spite of the increase (sometimes spectacular) of northern divers (such as Arctic Loons and scoters) in recent years, this bird remains an irregularly reported species. The great majority of the 19 records are fall records.

Green Heron-1 Gunnison 15, 21 May (KC)is notable as there are still very few West Slope records of this species.

Great Egret-1 Delta Co. 21-23 March (MJ). This is another distinct rarity for western Colorado, in addition to being a very early bird (the extreme arrival date for eastern Colorado is 4 April, and the average 20 April). There are no arrival dates for the West Slope.

Trumpeter Swan(*)-6 Buena Vista 27 March-11 April (WP,JP). There are only 3 Colorado records.

Brant(*)-1 Pawnee National Grasslands for three weeks during April (BPr). There are 5 Colorado records.

Surf Scoter-1 female/immature at Goodrich, Morgan Co. 30 May (GM,RR). There is only one previous spring record (and one early summer record) from Colorado.

Mississippi Kite-1 adult Denver area 25 May (B&BA,JR). There are only about 5 records from northeastern Colorado, all but one of which are spring records.

American Woodcock(*)-1 Jefferson Co. 15 May (MJS). This species is very rare in Colorado, with 13 records.

Dunlin-1 Eagle 11 May (JM) is very unusual; it may represent the first record from western Colorado.

White-rumped Sandpiper-2 Barr Lake area 22 May (HH). This species is very rarely reported from the Colorado piedmont.

Hudsonian Godwit(*)-1 MHDC 5 May (HH,BP). There are only two previous Denver area records, and about 10 total from Colorado.

Mew Gull(*)-1 first year immature Denver 7-19 March (RA,MH,m.ob.). Possible first Colorado record. Details will be published elsewhere.

Least Tern(*)-1 Delta Co. 11-20 May (MJ). There is evidently only one previous West Slope record.

White-winged Dove(*)-1 Englewood 29 March (JR). There are about 10 Colorado records.

Boreal Owl(*)- More information was accumulated on the small population of this species in the northern Colorado mountains. Upto 8 individuals were seen or (mostly) heard from the Cameron Pass region 5 April - 3 June (m.ob.), and 1 or 2 at Bear Lake in Rocky Mountain National Park 18 April (WR).

Chimney Swift(*)-2 Ridgway 11-12 May (DG). There are few records of Chaetura swifts on the West Slope, and their identity appears to remain unsubstantiated.

Rufous Hummingbird-1 Estes Park 30 May (WR). Spring records of this species are very scarce.

Red-bellied Woodpecker-1 for two months upto 8 April in Boulder Co. (GE,PH,NS). This species is very rare away from the extreme eastern edge of the state.

Scissor-tailed Flycatcher-1 Julesburg Reservoir area 25 May (CFO). One of only a few records from northeastern Colorado.

Gray Flycatcher-1 Boulder 30 April (CB,BW) probably represents the first record from Boulder Co., and perhaps from northeastern Colorado.

Blue Jay-1 Gunnison 21 May (DR). Still very few West Slope records.

Steller's X Blue Jay hybrid-1 Grand Co. 23 March (DJ).

Winter Wren-1 Boulder 10 March (CB), 1 Barr Lake 26 April (WB). This scarce bird is recorded principally in the fall.

Bewick's Wren-1 Boulder Co. 28 April (JH). Very seldom reported in northeastern Colorado.

Short-billed Marsh Wren(*)-1 El Paso Co. 21 April (PA). There are 12 Colorado records.

Gray-cheeked Thrush(*)-1 Pueblo Co. 24 May (DS). There are 17 Colorado records.

Brewster's Warbler(*)-1 El Paso Co. 30 April (PA). This Golden-winged X Blue-winged Warbler hybrid has only been reported once before from Colorado.

Blue-winged Warbler(*)-1 Pueblo 1 May (CG), 1 Pueblo 28 May (DS). There are 9 Colorado records.

Hermit Warbler(*)-1 male Ridgway 16 May (DG), 1 female Boulder 16-17 May (CB,m.ob.). There are 3 state records; the species was only first confirmed in 1975. Curiously, all records have been in spring, although the Townsend's Warbler, which has similar breeding and wintering ranges and migration route, is much commoner in Colorado in the fall than in the spring.

Prairie Warbler(*)-1 Pueblo 7 May (CG), 1 Lake Meredith, Crowley Co. 18 May (CG). There are 4 Colorado records.

Pine Warbler(*)-1 Colorado Springs 9 March (EW,M&MS,B&LH). There are 10 Colorado records; most are from fall.

Mourning Warbler(*)-1 Ft. Collins 31 May (J&GF), There are only 2 state records.

Eastern Meadowlark(*)-1 El Paso/Elbert Cos. 10 May (AAS). Identified by song. This species has not been confirmed outside of Logan and Sedgwick Counties.

Hooded Oriole(*)-1 Boulder 13 May (RVZ). Possible first Colorado record.

Baltimore Oriole-1 Buena Vista 21-26 May (HM). Very few records of this form away from the far eastern plains.

Scott's Oriole(*)-Reported from Rangley, Rio Blanco Co. (BG,AJ). There are 12 state records.

Baird's Sparrow(*)-3 El Paso/Elbert Cos. 10 May (AAS), 1 FASA 17 May (FAC). There are very few valid records of this scarce and elusive species; reports of multiple sightings are particularly curious since this is a solitary bird.

LeConte's Sparrow(*)-2 Estes Park 17 May (WR). There are 3 Colorado records.

Sage Sparrow-1 Fraser, Grand Co. 20 March (PE), 1 Grand Lake, Grand Co. 6 April (DJ), 2 Ft. Collins 1 June (ABS,RW) were all unusual observations for the time and/or location.

Field Sparrow-2 Boulder 17 May (BBC). Although quite regular in extreme eastern Colorado, there are few reports from along the Front Range.

(*) Indicates records that are being reviewed by the CFO Records Committee.

Initialed Observers, Organizations and Locations:

Peggy Abbott (PA), Bob and Bruce Albrecht (B&BA), Robert Andrews (RA), Chip Blake (CB), Anna Brandenberg-Schroeder (ABS), William Brockner (WB), Kevin Cook (KC), Patty Echelmeyer (PE), Gary Emerson (GE), Jean and Gilbert Findley (J&GF), Billy Green (BG), Carolyn Griffiths (CG), Dick Guadagno (DG), Larry Halsey (LH), Paula Hansley (PH), Jim Holitza (JH), Mark Holmgren (MH), Harold Holt (HH), Bill and Lucy Hurd (B&LH), Mark Janos (MJ), David Jasper (DJ), Austin Johnson (AJ), Helen Mackensen (HM), Jack Merchant (JM), Gary Miller (GM), William Plackner (WP), Julie Porrata (JP) Brian Post (BP), Bill Prather (BPr), Don Radovich (DR), Jack Reddall (JR), Warner Reeser (WR), Ronald Ryder (RR), Mary Jane Schock (MJS), Dave Silverman (DS), Mahlon and Marie Speers (M&MS), Natalie Steinberg (NS) Ridi Van Zandt (RVZ), Bruce Webb (BW), Elinor Wills (EW), Richard Wright (RW).

Aiken Audubon Society (AAS), Boulder Bird Club (BBC), Colorado Field Ornithologists (CFO), Foothills Audubon Club (FAC).

Foothills Audubon Statistical Area (FASA), Mile High Duck Club (MHDC).

many observers (m.ob.)

HYBRIDIZATION OF THE BLUE AND STELLER'S JAYS

by Pat Wheat
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INTRODUCTION

Records of corvid hybridization are rare. Amongst the jays, only five species crosses, involving one or more matings of each pair, are known. Three of these crosses occurred with captive jays deprived of mates of their own species. Of the total number of hybrids produced by these three pairs, only two survived. Of non-captive hybrid jays, a single specimen was collected in the state of Chiapas, Mexico (Pitelka, et al., 1956). The birds discussed in this paper are the only case of living, non-captive hybrid jays to have been studied in detail, photographed, and tape-recorded throughout the period of their known lifetime (1969-1978).

Hybridization of Captive Jays

1. Nelson San Blas Jay (Cissilopha sanblasiana nelsoni) X Yucatan Jay (C. yucatanicas). J.W. Hardy (unpublished notes) experimentally induced hybridization between these two species in an aviary at Moore Zoological Laboratory, Occidental College, Los Angeles, in 1971. Two hybrid individuals were produced. One died almost immediately, the other lived only 26 days (Hardy, pers. comm.).

2. Blue Jay (Cyanocitta cristata) X Green Jay (Cyanocorax yncas). The mating of these two species, in the Fort Worth, Texas, Zoological Park aviary, produced a hybrid that survived for almost 13 years (1965-1978) (Pulich and Dellinger, in press, 1981).

3. Magpie Jay (Calocitta formosa) X Beechey's Jay (Cissilopha beecheii). A hybrid jay was produced in 1973 by the mating of a Magpie Jay with a Beechey's Jay in the Arizona-Sonora Desert Museum in Tucson, Arizona (Mayhew, 1973). In a telephone conversation on 27 February 1974, the author was told by Charles Hanson (pers. comm.), then Curator of Birds at the above museum, that the hybrid jay was "still alive and well, looks like a Beechey's Jay except for the color of the beak, which is like a Magpie Jay." The author visited the Museum in early May 1978 to see the bird and was told by Merritt S. Keasey, III, Curator of Animals, that "several matings" of the pair had occurred and had produced "several hybrid offspring." Only one survived, and no research was being done on it at that time (Merritt S. Keasey, III, Curator, pers. comm.).

Hybridization of Non-captive Jays

1. White-tipped Brown Jay (Psilorhinus mexicanus) X Magpie Jay (Calocitta formosa). A bird believed to be a hybrid of these two species was collected in western Chiapas, Mexico (Pitelka et al., 1956).

2. Blue Jay (Cyanocitta cristata) X Steller's Jay (C. stelleri). This hybridization occurred in the city of Boulder, Boulder County, Colorado, in 1969 (Williams and Wheat, 1971) and is the subject of this paper.

THE BLUE JAY X STELLER'S JAY HYBRIDS

In the fall of 1954, the author set up a bird-feeding station at her home in a residential section of the city of Boulder, Boulder County, Colorado. Steller's Jays (Cyanocitta stelleri) were in the area and soon began to visit the station. They were especially attracted to a pan of peanuts on the back porch. The porch was overhung by a russian olive tree. This gave the birds a good place to perch, and gave the author an excellent situation for viewing, photographing, and tape-recording from inside the house at a distance of 5 to 15 feet (1.5 to 4.6 meters). The jays continued to feed there, in increasing numbers throughout the ensuing years.

The author first sighted Blue Jays (C. cristata) at the feeding station on 16 October 1960. Two individuals appeared together over a period of 2-3 days, then disappeared. It was noted during their brief visit that the Blue Jays were dominant over the Steller's Jays, who invariably yielded their position at the peanut pan when a Blue Jay arrived. In the spring of 1961, two Blue Jays again appeared for a similar period. The brief fall and spring visits continued, and in 1968, a pair of Blue Jays nested nearby and brought their young to the peanut pan.

The first F_1 hybrid, still an immature bird, was observed on 3 September 1969; two hybrids were seen simultaneously on 26 September; a third was confirmed on 28 September, and the fourth on 2 October. On 30 September, one of the hybrids was trapped and banded (F/W band #682-03712, right leg) by John and Eleanor Hough, who maintained a banding station two city blocks distant from the Wheat station. The banded hybrid was photographed by the author (Fig. 1) and was then released. (This and subsequent photos of the hybrids, Blue Jays, and Steller's Jays are on file with the author and at Florida State Museum, Gainesville.) A Steller's Jay trapped at the same time provided an opportunity to measure and compare the two birds in detail. A Blue Jay, later killed by colliding with a window at the author's home, was measured, thus completing the figures for comparing a hybrid with each of the two parental species. The measurements were as follows:

	BLUE JAY	F_1 HYBRID	STELLER'S JAY
Tail	5 in 12.70 cm	5-1/2 in 14.00 cm	5-7/8 in 14.80 cm
Beak	1-1/8 in 2.80 cm	1 in* 2.50 cm	1-1/4 in 3.25 cm

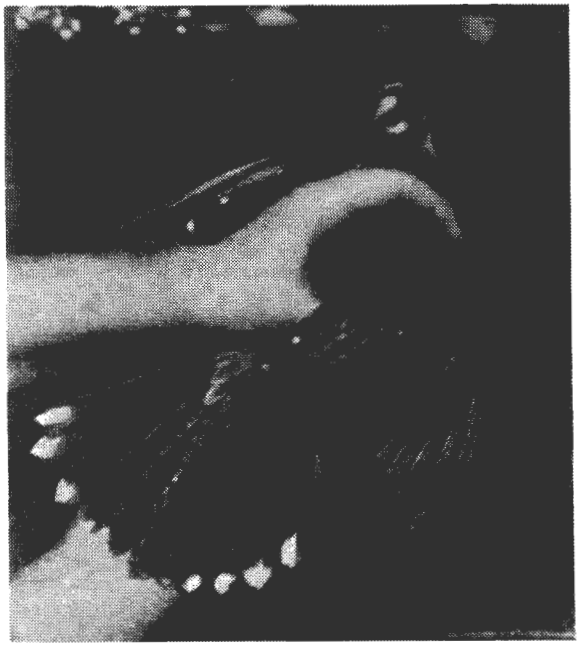

Figure 1. F_1 hybrid cristata x stelleri, Boulder, Co. 30 Sept 1969.

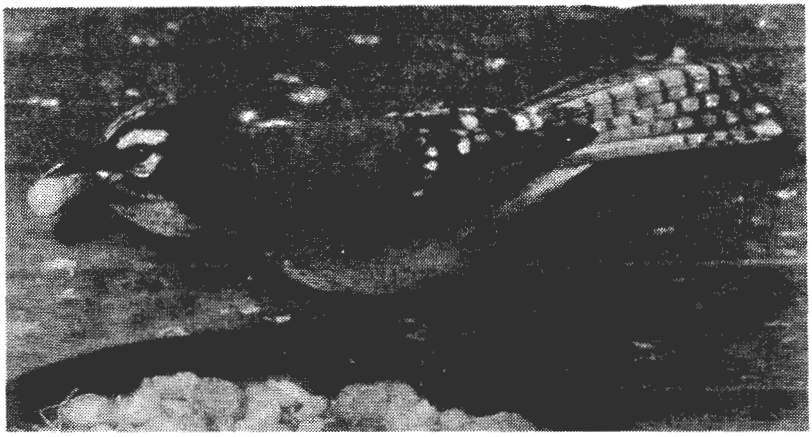

Figure 2. F_1 hybrid cristata x stelleri, Boulder, Co. 13 Sept 1975.

	BLUE JAY	F_1 HYBRID	STELLER'S JAY
Wing	5 in 12.70 cm	5-1/2 in 14.00 cm	6 in 15.30 cm
Crest (tip to culmen)	2 in 5.20 cm	2-3/8 in 6.00 cm	(not measured)

*These measurements indicate that the hybrid's beak was shorter than the beaks of cristata and stelleri, but this discrepancy could be due to the fact that the hybrid was still a very young bird when measured. Other than this, the hybrid measurements were greater than those of cristata, less than those of stelleri. Visually, the four hybrids appeared nearer the size of stelleri, and this impression is supported by the measurements.

The banded hybrid was seen at the feeding station three times within the week following its banding. It then disappeared at the same time that the Blue Jays left the area. This suggests that this hybrid individual may have inherited the migratory tendency of the Blue Jay. The other three hybrids remained with the local flock of Steller's Jays.

Description of the F_1 Hybrids

The F_1 hybrids were almost identical to each other in appearance. Their plumage was a blend of the colors and patterns inherited from the two parents (Figs. 1 and 2).

Crest. The hybrid crest was somewhat longer than the cristata crest but shorter than that of stelleri. In color, it was a mixture of white, blue, and black, with white predominating toward the front, pale and dark blue in the middle, and black toward the tip. The white forehead markings of stelleri were visible but were somewhat obscured by the presence of pale blue feathers as in cristata.

Nape. The hybrid nape was black, as in both of the parents.

Supraorbital and suborbital areas. The broad white supraorbital and suborbital areas of cristata were present in the hybrids but were surrounded by black as in stelleri.

Throat. The large white throat area of cristata was present in the hybrids but was lightly tinged with blue. As in cristata, it was surrounded by a black "collar" extending to the nape.

Back. The back was medium blue, darker than in cristata, lighter than in stelleri.

Breast, belly, sides, and flanks. Uniform medium-light blue.

Under tail coverts. White, as in cristata.

Greater wing coverts. All of the F_1 hybrids had some white-tipped feathers in the greater wing coverts. The white was of lesser extent than in Blue Jays, and the number of white-tipped feathers varied from one individual to another. This is the area in which the hybrids differed most from each other.

Primaries. Medium dark blue, as in Steller's Jay, no white-tipped feathers.

Secondaries. In the hybrids, the white-tipping of cristata was present, but reduced, in some but not all of the secondaries.

Upper tail coverts. Medium light blue, intermediate between cristata and stelleri.

Tail. The hybrid tail feathers were medium blue, darker than in cristata, lighter than in stelleri. As in cristata, but to a lesser extent, all of the rectrices except the two center ones were white-tipped. The amount of white was greatest on the outermost feathers, decreasing progressively toward the center.

Identification of the Individual F_1 Hybrids

The F_1 hybrids looked so much alike that it was often impossible to be sure which one we were seeing. The pattern of white-tipped feathers in the greater wing coverts was the only difference by which we could distinguish one from another; even then, it was necessary to see both wings, which was not always possible. The birds were designated as follows:

3-Spot: Three white-tipped feathers in the greater coverts of each wing, spaced alternately with dark blue feathers.

5-Spot: Five contiguous white-tipped feathers visible in the greater coverts of each wing.

3/5 Spot: Three white-tipped feathers, as in 3-Spot, in the left greater wing coverts; five, as in the 5-Spot, in the right.

The hybrid that was banded had less white in the greater wing coverts than any of the above (Fig. 1).

Vocalizations of the F_1 Hybrids

The F_1 hybrids gave the calls of both cristata and stelleri. A study of sonagrams made by J.W. Hardy from the author's tape recordings showed the hybrids' renditions of these calls to be indistinguishable from those of the parental species (Hardy and Wheat, 1981). No blending of a Blue Jay call with a Steller's Jay call was noted. Some birds, however, are able to utter two calls at the same time, and, on a few occasions, an F_1 hybrid was heard (and recorded) giving

the Steller's "wah" and the Blue Jay "jay" calls at the same time. In addition to this bilingual capability, the F_1 hybrids uttered a call not given by either of the parental species, nor by any other species, so far as is known. The author termed this call, discussed below, "the unique call."

The vocal repertoire of Steller's Jays is extremely wide. Whether or not the hybrids were capable of duplicating the entire repertoire is unknown. Hardy and Wheat determined that at least 17 Steller's Jay calls were given by the hybrids as a group. Of these, eight, being the most frequently used by Steller's Jays, were classified as principal calls; the other nine were considered secondary calls.

The very small number of Blue Jays visiting the feeding station may account for the limited vocal repertoire heard and recorded there. Only four calls given by Blue Jays were recorded. Two of these were considered principal calls; the other two, given less often by Blue Jays, were considered secondary calls. The hybrids, as a group, used the two principal calls frequently but were not known to have done the secondary calls.

The Unique Call of the F_1 Hybrids

This call was given only by the F_1 hybrids. In a study of sonograms (Hardy and Wheat, 1981) no component of the call was discernible in any Blue Jay or Steller's Jay call. Therefore, the hybrids could not have inherited or learned the call from their parents. Consultations with a geneticist and two ornithologists (Jeffrey B. Mitton, University of Colorado; J.W. Hardy, Florida State Museum; and Carl E. Bock, University of Colorado, all pers. comm.) yielded no explanation of the source of this call. Phonetically, it may be described as

cheé-koh cheé-koh cheé-koh CHEEEEEK!

The number of cheé-kohs varied, sometimes only one or two being given, and the final syllable was sometimes omitted, especially if the hybrid was interrupted or distracted during the utterance.

Throughout their first two-and-a-half years, the F_1 hybrids gave the unique call seemingly as often as any other, and gave it in various contexts, but especially in an agonistic situation. For example, an aggressive Steller's Jay, confronting a hybrid at a feeding tray, was undaunted by the hybrid's outburst of Steller's Jay calls followed by an outburst of Blue Jay calls, but yielded to the hybrid's unique call. For another example, a hybrid was seen courting a Steller's Jay and giving both Blue Jay and Steller's Jay calls in the process, ultimately resorting to the unique call.

Midway in the hybrids' third year, a decrease in the frequency of the unique call was noted, and it was last heard on 21 March 1972. The reason for the hybrids' abandonment of this call is as much a mystery as the call itself. However, simultaneous appearances of two or

more hybrids at the feeding station had become very infrequent. Since Blue Jays and Steller's Jays did not give the call, perhaps the stimulus for the hybrids' use of it was diminished. During the week of 6-12 June 1971 two hybrids often appeared at the same time, and on these occasions, they gave the unique call back and forth to each other many times. This seemed to indicate that they recognized each other.

Other Characteristics of the F_1 Hybrids

In addition to the bilateral plumage and vocal characteristics mentioned above, the F_1 hybrids showed certain behavioral characteristics clearly inherited from their Blue Jay parent.

1. Bobbing. This is a physical movement described by Conant (1972) as "a flexion of the knee joints." It is performed by Blue Jays, in conjunction with various calls, but is not done by Steller's Jays. The F_1 hybrids performed this bobbing motion with Blue Jay calls but also with Steller's Jay calls.

2. Molting pattern. The opportunity to observe Blue Jays, Steller's Jays, and their hybrid progeny, all in the same place at the same time, permitted a comparison of their molting patterns. It was noted that Blue Jays molted their head and neck feathers to the point of being almost totally bald before new feathers emerged. The F_1 hybrids inherited this molting pattern. Steller's Jays molted and replaced their head and neck feathers gradually, so that they never appeared totally bald.

3. Food preference. At the author's feeding station, Steller's Jays were accustomed to a diet of whole, roasted-in-the-shell peanuts and showed little interest in sunflower seeds, wild birdseed, and whole or cracked corn, all of which the Blue Jays took readily. The F_1 hybrids also accepted these latter foodstuffs, and one was seen feeding whole corn to its Steller's Jay mate in June 1971.

Dominance of the F_1 Hybrids

Throughout the association of cristata and stelleri at the author's feeding station, Blue Jays were dominant over Steller's Jays. The F_1 hybrids were dominant over both. In confrontations with either species, they gave a Blue Jay "pump-handle" call (termed "peedely-enk" by the author), the call most often given by Blue Jays in agonistic situations. It rarely failed to subdue the adversary. When it did, the hybrids resorted to the unique call, which never failed.

Decline of the F_1 Hybrids

Beginning in 1975, the F_1 hybrids' sixth year, gradual changes in their behavior were noted. They became less and less vocal. Along with this decrease in vocalizations, the hybrids seemed to lose social status--they no longer challenged and subdued every aggressor, although they sometimes assumed an aggressive attitude and made pecking

motions toward the adversary. This decline continued as long as they were observed (until 1978).

Other Possible F_1 Hybrids

The continuing presence of Blue Jays in the area after 1969 provided opportunity for subsequent hybridizations with Steller's Jays. Although no such case is firmly documented, there is some evidence that one or more cristata X stelleri hybridizations did occur after 1969. On 15 September 1972, while the author was on an extended absence, John and Eleanor Hough (pers. comm.) banded a hybrid jay (F/W band #682-03832, right leg) which they believed to be "a bird of the year." They described it as looking "like the original 1969 hybrids." Unfortunately, they did not photograph it nor measure it. The bird was not seen again, and its identity as an F_1 cristata X stelleri hybrid could not be further verified.

On 17 August 1973, two jays that looked like F_1 cristata X stelleri hybrids appeared at the author's feeding station. Neither was wearing a band. They were almost identical to the 1969 hybrids, but slight differences from those birds were noted:

1. they seemed to be slightly larger,

2. the crests were a bit longer and were more extensively suffused with pale blue,

3. the supraorbital and suborbital white areas were somewhat larger and more irregular around the edges,

4. the white throat area was larger and whiter than in the F_1 hybrids of 1969,

5. the greater wing coverts showed patterns of white-tipped feathers different from those of the 1969 birds.

Like the earlier hybrids, these birds gave calls of both cristata and stelleri, but did not do the unique call of the 1969 F_1 hybrids. The author's notes continue to mention appearances of these two birds at the feeding area through 15 June 1974.

BACKCROSS HYBRIDS

Backcross hybrids were observed in 1970, 1973, 1974, 1975, and 1977. In the spring of 1971, courtship activities involving F_1 hybrid 3/5-Spot and a Blue Jay, and an unidentified F_1 hybrid and a Steller's Jay, were observed, but no backcross progeny were seen. In the spring of 1972, from 23 February through 2 June, courtship and close association of an unidentified F_1 hybrid and a Steller's Jay were observed, but again, no backcross hybrids were seen. Of the 15 backcross hybrids seen in the years listed above, all except one individual in 1974 soon disappeared from the feeding area and were not available to be observed as mature birds.

1970 Backcross Hybrids (F_1 Hybrid X Steller's Jay)

The appearance of four young backcross hybrids in early August of 1970, in association with a mature Steller's Jay from which they solicited food, indicates that an F_1 hybrid (still less than a year old) mated successfully with a Steller's Jay. The author's brief periods at home limited observations of these first backcross hybrids to one afternoon and the following morning (5-6 August) and one very brief sighting on 16 August. They were not seen again. Vocalizations of both cristata and stelleri were given by these young birds and were tape recorded by the author. No photographs were obtained.

The 1970 backcross hybrids were described as follows (Williams and Wheat, 1971):

> "Unlike young Steller's Jays which have sooty heads and crests unmarked with white, these new birds possessed gray-blue heads with a faint blackish band across the throat. Backs, rumps, and underparts were also gray-blue. A few of their greater wing coverts were barely tipped with white; variable amounts of white showed in their secondaries. All but their central rectrices were tipped with white but less extensively so than in the hybrids of the previous season. By mid-August these birds were showing large, crescent-shaped patches of white above their eyes, but the feathers of their chins and throats were deep blue with no suggestion of the nuchal band clearly evident in the old hybrids."

1973 Backcross Hybrids

Two distinct groups of backcross hybrids were observed--two individuals in Group 1, four in Group 2. Within each group, the individuals looked alike, but the groups were quite distinct from each other.

Group 1 (Fig. 3). Two backcross hybrids in postjuvenal molt were first seen at the feeding station on 27 August 1973. They visited the feeding station frequently until mid-September, after which time they were not seen again. They were described as follows:

Crest. Similar to the F_1 crest but more heavily suffused with the pale blue of cristata.

Supraorbital and suborbital areas. The large, white supraorbital area of cristata was present, but smaller; the suborbital area was black as in stelleri.

Throat. The white throat area of cristata was greatly reduced in size. It was enclosed by a narrow black "collar."

Back. Medium blue-gray.

Figure 3. 1973 Backcross hybrid, Group 1, Boulder, Co. 14 Sept 1973.

Figure 4. 1974 Backcross hybrid, "74 B.C.," Boulder, Co. mid-October 1974.

Breast, belly, sides, flanks. All of these areas were medium blue-gray, somewhat darker anteriorly and lighter posteriorly.

Under tail coverts. White lightly tinged with blue-gray.

Greater wing coverts. Minute white tips visible in two feathers on each side.

Primaries. No white tips.

Secondaries. Rather large white tips were present in some, possibly all, of the secondaries.

Upper tail coverts. Light blue-gray.

Tail. Reduced white tips in outer feathers, none in the center.

Vocalizations. Both Blue Jay and Steller's Jay calls were given by these birds and were tape recorded by the author.

Group 2 (not illustrated). Four backcross hybrids in postjuvenal molt were first seen on 4 September 1973. Like the birds of Group 1, they visited the feeding station frequenty until mid-September but left the area at that time and were not seen again.

These birds looked very much like young Steller's Jays but were identifiable as backcross hybrids by their mixed crests, similar to the F_1 crests, and their bilingual vocalizations, which were tape recorded. The backs were grayish blue, the underparts medium blue, somewhat lighter than in stelleri. The large, white supraorbital and suborbital areas of cristata were absent, as were the white throat and black collar of that species. There appeared to be no white tipping in wing coverts, secondaries, and rectrices.

1974 Backcross Hybrids

On 13 August 1974, two young backcross hybrids were seen at the feeding station. One of them looked like a Blue Jay and gave Blue Jay calls but also gave Steller's Jay calls. The other likewise gave calls of both species, and was further identifiable as a backcross hybrid by a slightly longer, darker crest than cristata and the large, white supraorbital and suborbital areas of cristata surrounded by the black face of stelleri. These birds were believed to be the progeny of an F_1 hybrid X Blue Jay mating. They were not positively identified at the feeding station after 13 August.

The author's absence from home, 1-20 September, interrupted observations for three weeks, during which time the postjuvenal molt was completed. When observations were resumed, 22 September, two backcross hybrids, also believed to be F_1 X Blue Jay, were seen at the feeding station. These may have been the same two birds that were seen on 13 August but, in their new plumage, they could not be positively identified as such. They were described as follows:

1. Looks much like F_1 hybrids except: white tips in greater wing coverts scarcely visible, just two or three very small tips toward lower edge of wing; light to medium blue in crest is more extensive; general body color is more blue-grayish. (Secondaries were not described.)

2. Looks much like F_1 hybrids except: no white tips visible in greater wing coverts; less white in tips of secondaries.

Both birds gave calls of cristata and stelleri.

On 5 October, a bird believed to be a third backcross hybrid appeared at the feeding station. This bird had the large, white supraorbital and suborbital areas of cristata surrounded by the black face of stelleri, and the crest was more extensively suffused with pale and medium blue, as in Group 1 of the 1973 backcrosses. It gave both Blue Jay and Steller's Jay calls. It did not appear often in the feeding area, possibly because it was repeatedly attacked and driven out by an F_1 hybrid.

These three birds, all visiting the feeding area during the same period of time, were designated, in the order given above, as Backcross Hybrid #1, #2, and #3. The bird designated #3 was last seen on 17 October, and #2 on 22 October. Backcross #1, believed to be of F_1 hybrid and Blue Jay parentage, remained throughout the winter of 1974-1975, and was referred to as "74 B.C." (Fig. 4). This bird was the only backcross that remained with the local flock of Steller's Jays and F_1 hybrids (Blue Jays visited the feeding area intermittently but did not seem to belong to the flock), and the only backcross hybrid to be available for observation as a mature bird.

Description of "74 B.C." (Fig. 4)

Crest. Heavily suffused with pale blue from forehead to tip. Vertical white forehead markings of stelleri present. Crest of intermediate length.

Nape. Black.

Supraorbital and suborbital areas. Extensive white areas above and below the eye, as in cristata and F_1 hybrids, surrounded by the black face of stelleri.

Throat. Large white throat area enclosed by black band, as in cristata.

Back. Medium blue.

Breast, belly, sides, flanks. Medium light blue-gray.

Under tail coverts. White, as in cristata.

Greater wing coverts. Medium blue. No white tips.

Primaries. No white tips.

Secondaries. White tips present but of lesser extent than in F_1.

In mature plumage, the head of this bird appeared identical to that of the F_1 hybrids, but the body color was noticeably lighter blue; white tipping was absent in the greater wing coverts and reduced in the secondaries and rectrices.

"74 B.C." was extremely vocal, in both Blue Jay and Steller's Jay repertoires. The "rasp" (or "rattle") of stelleri was given most often, with the "peedely-enk" (or "pump handle") and "jay" calls of cristata rating second and third in the order of frequency given. On 28 February 1975, "74 B.C.," alone in the olive tree above the porch, performed a remarkable bilingual monologue, alternating back and forth between Blue Jay and Steller's Jay calls, over a period of about 10 minutes. The monologue included the Blue Jay "peedely-enk" ("pump handle") and two versions of the "jay" call, and the Steller's Jay "rasp" ("rattle"), "wah," "machine gun" ("shook"), and "soft song" ("subsong"). It ended with a Steller's Jay "wah" sliding imperceptibly into a Blue Jay "jay."

In the social peck order, the F_1 hybrids were dominant over "74 B.C.," but, like the F_1s, "74 B.C." was dominant over both Blue Jays and Steller's Jays. In April 1975, "74 B.C.," still less than a year old, was frequently seen courting a Steller's Jay, in both languages. The outcome of this courtship is unknown--"74 B.C." was not seen again after 14 July, and no identifiable backcross hybrids were seen.

1975 Backcross Hybrid

One backcross hybrid was seen and photographed on 15 September, at which time it was still a very young bird. One white-tipped feather was visible in the greater wing coverts, and some of the outer rectrices had small white tips. The bird soon disappeared from the area. No vocalizations were heard. Except for the minimally white-tipped feathers, the bird looked like a young Steller's Jay.

1977 Backcross Hybrid

On 24 September, a backcross hybrid in postjuvenal molt was seen at the feeding station. It might have been mistaken for a Steller's Jay, but close observation revealed hybrid characteristics: (1) a few pale blue feathers were visible in the crest; (2) unlike young Steller's Jays, the bird had a broad white supraorbital area; the sides and flanks were medium light blue, the under tail coverts almost white; (3) some of the rectrices had very small white tips. These diagnostic features are visible in photographs taken by the author on 18 October, after the postjuvenal molt was completed. This bird visited the feeding station until 18 December, after which time it was not noticed again. No vocalizations definitely attributable to this individual were heard.

1978 Courting Activities

From 13 February through 30 May, courtship activities of the jays visiting the feeding area were closely observed. An unidentified F_1 hybrid courted a Blue Jay throughout this period. Presumably a different F_1 hybrid was seen courting a Steller's Jay 22-28 March. Courtship involving a Blue Jay and a Steller's Jay was also noted. Thus, the possibility of a full range of F_1 and backcross hybrids was present. Whether or not it materialized is unknown. Observations were interrupted by the author's absence from home during the summer, and no hybrid of any mix was seen at the feeding station thereafter.

Other Backcross Hybrids Reported

In 1978, David Jasper (pers. comm.) reported seeing a hybrid jay of cristata and stelleri ancestry in the vicinity of his home near Grand Lake, Colorado, at an elevation of around 8,000 ft (2,438 m). It appeared to be a backcross rather than an F_1, but its age and parentage were not known. Hugh Kingery of Denver reported to the author on 25 January 1981 (pers. comm.) that Jasper had seen the bird on 6 November 1980, and that a nearby neighbor had reported to Jasper that he had seen one, and possibly two, such birds on 7 September 1980.

CONCLUSION

The author established a feeding station at her home in the city of Boulder, Boulder County, Colorado, in the fall of 1954. Steller's Jays (Cyanocitta stelleri) soon found the station and continued to feed there throughout the ensuing years. Blue Jays (C. cristata) were first seen at the station in October 1960. They stayed only 2-3 days. The species appeared again in the spring of 1961 and continued to appear intermittently thereafter. Nesting of Blue Jays in the area was observed in 1968, and the parents, with their young, visited the feeding station in the late summer of that year.

The first known hybridization of Blue Jays and Steller's Jays (C. cristata X C. stelleri) occurred in Boulder in 1969 and produced four hybrid young, one of which was banded and left the area soon thereafter. The other three stayed and associated with a local flock of Steller's Jays, all visiting the author's station regularly. In color and pattern, their plumage was a blend of characteristics inherited from the parents. They gave the calls of both species but did not blend them. They also gave a call (termed "unique" by the author) not given by the parental species or any other species, so far as is known. They were socially dominant over both cristata and stelleri. Their body size was intermediate between the two species.

The F_1 hybrids, in due course, mated with Steller's Jays and Blue Jays and, through the years, produced bilingual backcross hybrids, of which 15 were photographed and their vocalizations tape recorded by the author. Excepting one, all of the young backcross hybrids left the area after a month or so and were not seen again. The one that

stayed was a 1974 backcross-to-Blue Jay. It, too, was bilingual and was dominant over the parental species, but, itself, was dominated by the F_1 hybrids. It engaged in courtship with a Steller's Jay in the spring of 1975, but disappeared in July of that year, leaving no known progeny. F_1 hybrids continued to visit the feeding station until they were last seen in June 1978.

There was some evidence that one or more subsequent hybridizations of cristata and stelleri produced additional F_1 hybrids, but the evidence could not be positively verified. One, possibly two, backcross hybrids of cristata X stelleri ancestry have been reported since 1978 in the vicinity of Grand Lake, Colorado, and were still being seen there in November 1980.

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COLORADO FIELD ORNITHOLOGISTS RECORDS COMMITTEE REPORT 1977-1980--Part 1.

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This report contains the results of records reviewed by the Colorado Field Ornithologists Records Committee (R.C.) from 1977, 1978, 1979, and 1980. Activities of the R.C. from its inception in May 1972 through 1977 have been reportd by Reddall (1973a,b,c; 1974a,b; 1975; 1976a,b) and Andrews (1978, 1979). The list of Colorado birds as recognized by the R.C. stands at 429 species as of 1 January 1981.

The R.C. currently consists of nine members: Robert Andrews (Denver), Charles Chase (Longmont-Chairman), David Griffiths (Pueblo), Edward Hollowed (Meeker), Harold Holt (Denver), Tim Manolis (Boulder), Peter Moulton (Niwot), Ronald Ryder (Ft. Collins), and Richard Stransky (Durango). All R.C. records are deposited in the Department of Zoological Collections, Denver Museum of Natural History.

All records received are reviewed by the committee and rated according to an A-B-C-D system. A is a record for which the submitted documentation supports the stated or claimed identification. B indicates that the submitted documentation indicates a misidentification was probably made. C indicates that the submitted documentation is too brief or incomplete to allow its inclusion in either of the two previous categories. D is used when a member is reviewing his/her own record or is unfamiliar with the species in question and can give no opinion. A record, once completed will be resubmitted through the Committee only if an error was made initially or if new information regarding the identification of the species in general is brought forward. Since all records are stored at the Museum and are open to the public, anyone may use these records as they wish.

The following is the list of species for which the R.C. desires documentation (in addition to any species unrecorded from Colorado):

Red-throated Loon, Red-necked Grebe, Brown Pelican, Olivaceous Cormorant, Anhinga, Little Blue Heron, Reddish Egret, Louisiana Heron, Wood Stork, Glossy Ibis, Roseate Spoonbill, Trumpeter Swan, Brant, European Wigeon, Harlequin Duck, Black Scoter, Swallow-tailed Kite, Red-shouldered Hawk, Gyrfalcon, Whooping Crane (except W. slope), King Rail, Yellow Rail, Purple Gallinule, Common Gallinule, American Woodcock, Eskimo Curlew, Sharp-tailed Sandpiper, Hudsonian Godwit, Ruff, Red Phalarope, all Jaegers, Great Black-backed Gull, Lesser Black-backed Gull, Thayer's Gull, Laughing Gull, Little Gull, Ivory Gull, Black-legged Kittiwake, Arctic Tern, Caspian Tern, Ancient Murrelet, White-winged Dove, Groove-billed Ani, Barred Owl, Spotted Owl, Boreal Owl, Whip-poor-will, Lesser Nighthawk, Anna's, Rivoli's, and Blue-throated Hummingbirds, Olivaceous Flycatcher, Black Phoebe, Alder Flycatcher, Eastern Wood Pewee, Vermilion

Flycatcher, Purple Martin (E. slope only), Short-billed Marsh Wren, Long-billed and Bendire's Thrashers, Gray-cheeked Thrush, Sprague's Pipit, Phainopepla, White-eyed Vireo, Yellow-throated Vireo, Swainson's, Blue-winged, Lucy's, Cape May, Hermit, Cerulean, Yellow-throated, Pine, and Prairie Warblers, Louisiana Waterthrush, Kentucky, Connecticut, Mourning, and Canada Warblers, Painted Redstart, Eastern Meadowlark (except at Red Lion State Wildlife area), Scott's Oriole, Great-tailed Grackle (except San Luis Valley), Hepatic Tanager, Painted Bunting, LeConte's, Sharp-tailed, Baird's, and Golden-crowned Sparrows.

Part I -- Species added to the Colorado list

PURPLE GALLINULE (Porphyrula martinica). One adult (17-78-55) approximately 8 mi. south of Durango, La Plata Co., 6 and 7 Aug 1978. The R.C. has received reports from Dr. Howard Winkler and Elva Fox, who also provided an exceptionally sharp and clear photograph of this bird. While the possibility of this bird being an escape cannot be totally eliminated, the date of observation and location in southwestern Colorado make it very likely that this bird is a post-breeding wanderer from Arizona. Gallinules as well as most other members of the Rallidae are renowned for their post-breeding wanderings. The white upper frontal shield, reddish bill with a yellow tip, as well as the purple coloration are well described in the reports in addition to being very obvious in the photo.

GREAT BLACK-BACKED GULL (Larus marinus). One immature (23-80-14) Centennial Park, Arapahoe Co., 1 Jan - 30 Jan or possibly into the first week of Feb 1980. This bird was first reported by Jack Reddall and J.V. Remsen on 1 Jan and was subsequently seen by more than 25 observers. Reports have been received by the R.C. from only three observers: Tim Manolis, Bruce Webb, and Charles Chase with photos from the latter two. This is an extremely poor reporting rate that could have resulted in the species not being added to the state list had the few reports and photos received not adequately documented this occurrence. The R.C. would still appreciate any additional reports on this or any other species.

The extremely large size (though smaller than many observers had thought), the tail with a white background and extensive mottling and heavy flight characteristics eliminate all other immmature gulls. A photograph of the tail while the bird is in flight is on file with the R.C., courtesy of Bruce Webb.

ALDER FLYCATCHER (Empidonax alnorum). An earlier specimen, DMNH 36457, than has been previously reported was located at the Denver Museum of Natural History. One male taken 28 May 1904 on Clear Creek, Arvada, Jefferson Co., by H.G. Smith. The bird was identified by Dr. A.R. Phillips, who will provide a short article to the C.F.O. Journal, in the near future, on how to identify and separate alder and willow flyctchers.

MOURNING WARBLER (Oporornis philadelphia). One immature (DMNH

34586) Sedalia, Douglas Co., 18 Oct 1964. Mist netted and collected by Mildred Snyder.

Part II--Reported species not added to the Colorado list

Reports of the following species not currently on the Colorado list of birds were received and reviewed by the R.C.. For the reasons stated, none of these species was added to the Colorado list.

BLACK-BELLIED WHISTLING DUCK (Dendrocygna autumnalis). One (8-78-74) observed near Silt, Garfield Co., on 27 May 1978. The basis of this identification seems to be that since the duck appeared to land in a tree and was dark colored (?) it was a tree duck. Since mallards and other ducks are known to land in trees and with the acute lack of details accompanying this report, this species was not added to the Colorado list.

RUDDY SHELDUCK (Tadorna ferriginea). Two (8-79-21) at Cherry Creek Res., Arapahoe Co., 16 Oct 1978. Both this and the next report are considered to be escapes from one of the many waterfowl breeders in the area, especially since neither of these is ever expected to turn up in Colorado. If local breeders would either band or pinion their birds it would make it easier to distinguish between wild and escaped captive birds.

RED-CRESTED POCHARD (Netta rufina). One male (8-78-67) at Chatfield Res., Douglas Co., 17 Sept 1978. Noted above.

BLACK VULTURE (Coragyps atratus). One bird (9-78-75) was sitting on a roof in Boulder, Boulder Co.,, 10 Sept 1978. While the details of this bird while perching (large, all black bird with a shiny black, bald head and short tail) tend to support this identification, the lack of flight details, extremely abnormal flight behavior, and no other reports force the R.C. not to add this species to the state list. Reporters should be aware that immature turkey vultures have very dark heads and possibly partially grown tails that could give the appearance of a black vulture. Since this bird is reported as flying with difficulty it is quite possibly a very young turkey vulture.

BLACK VULTURE (Coragyps atratus). One (9-78-54) at Pawnee National Grasslands, Weld Co., 6 June 1978. While this report contains very good details and undoubtedly describes a black vulture, the fact that only a single observer is involved precludes it from being added to the state list. It will be added to the hypothetical list based on this and other single observer reports over the years.

ZONE-TAILED HAWK (Buteo albonotatus). One (10-80-3) near mile marker "7" on Hwy. 101 south of Las Animas, Bent Co., 2 Nov 1979. This single observer report does not adequately eliminate the rough-legged hawk, which is the common hawk in this area in November. The banded tail does occur occasionally in rough-legs as well as in immature Harlan's type redtails which are also to be found in SE Colorado.

WESTERN GULL (Larus occidentalis). One adult (23-79-6) at Cherry Creek State Recreation Area, Arapahoe Co., 23 May 1978. This report contains very few details especially for comparing with similar species. A report of a new state bird has to show adequate details to at least describe the bird, its situation, other birds present, etc., even if the species is relatively easy to identify.

MEW GULL (Larus canus). One (23-80-37) Centennial Park, Arapahoe Co., 27 Jan 1980. The details of this single observer report do not adequately eliminate ring-billed gull though it is a strong possibility that this was a mew gull.

RUBY-THROATED HUMMINGBIRD (Archilochus colubris). One adult male (31-80-1) Beulah, Pueblo Co., 31 Aug 1979. This report is another case of an observation that is probably correct but similar species are not adequately eliminated, in this case the broad-tailed hummingbird is a significant possibility. At this date (31 Aug) broad-tails should be undergoing molt which could easily result in a forked tail and reduced or non-existent sound from the primaries, which is the source of the buzzing sound.

MEXICAN JAY (Aphelocoma ultramarina). One (37-78-68) Colorado Springs, El Paso Co., 6 Sept 1978. This report distinguishes Mexican from scrub jays on the basis of "no white throat." Since both immature and Woodhouse's type scrub jays have dingy gray throats and are present in this area in early September, it seems quite likely that this bird is not a Mexican jay. Mexican jays have no history of wandering anywhere near Colorado.

WHEATEAR (Oenanthe oenanthe). Twenty (44-79-3) Mount Evans, Clear Creek Co., 4 Sept 1978. This flock was observed while facing the sun and while the flock was flying into the sun. There are very scanty details and no other observers. The description given fits female and immature mountain bluebirds much closer than it does wheatears. Due to the apparent misidentification this species was not added to the state list.

BLACK-TAILED GNATCATCHER (Polioptila melanura). One pair (N-45-80) 2 mi. north of Ridgway, Ouray Co., 12-14 May 1977. This species is quite restricted to desert scrub of the Southwest and is not known to wander. No calls were noted, and the birds were found in riparian habitat. The description is not nearly exhaustive enough for a new state species let alone one that is as difficult to differentiate from the blue-gray gnatcatcher as this species is.

BLACK-TAILED GNATCATCHER (Polioptila melanura). One (48-78-7) Browns Park NWR, Moffat Co., 30 June 1977. This single observer report provides very few details except that the bird appeared to have a black cap. Since blue-gray gnatcatchers can actually have a darker contrasting cap than pictured in field guides and are common in this area, it is felt by the R.C. that there are not enough details to add this species to either the state or hypothetical lists.

Part III -- Species deleted from the Colorado list

COMMON EIDER (Somateria mollissima). The single report from 25 Feb 1932 contains no details except a location of Marston Res., Jefferson Co., observed by Bergtold. The R.C. feels that with no details or a specimen there is no justification for the common eider to be on the state list.

SMITH'S LONGSPUR (Calcarius pictus). This species is being removed for two reasons. The first is that one of the major characters used to identify Smith's in the past has been the white shoulder patches. Lately it has been discovered that chestnut-collared longspurs also have this character. Second, most reports are from September and often have large numbers of birds involved (5-75). According to records in northern states and Canada, Smith's should not arrive in Colorado until mid-October. After looking over the reports on file, the R.C. has decided to remove this bird from the state list. The extreme difficulty in identifying this species and its congeners will necessitate an exhaustive report, a photograph, and/or a specimen.

Part IV -- Reports of Rare Species

The following is a summary of the class B and C records recieved and processed by the R.C. in 1977-1980 (records in which the submitted documentation indicates a misidentification was probably made or in which details are incomplete). The class A records will be summarized in Part 2, which will be in the next issue of the CFO Journal.

LITTLE BLUE HERON (Florida caerulea). One (5-79-12) Salida, Chaffee Co., 16 Jan 1979. Details are barely adequate to determine that this was a heron at all; no details presented to distinguish species.

TRUMPETER SWAN (Cygnus buccinator). Two (8-78-73) Shadow Mountain - Grand Lake Channel, Grand Co., 16 Jan - 9 Mar 1978. The R.C. felt that this observation had insufficient details.

BLACK SCOTER (Melanitta nigra). Four females (8-77-66) Boulder Res., Boulder Co., 24 July 1977. The R.C. felt that this observation had insufficient details.

GYRFALCON (Falco rusticolus). One (12-80-23) 2 mi. W. Ft. Collins (Horsetooth Lake area), Larimer Co., 25 Dec 1979. One (12-80-36) 2 mi. N. Ridgway, Ouray Co., 3 Mar 1980. Both of these reports had insufficient details to eliminate similar species.

YELLOW RAIL (Coturnicops noveboracensis). One (17-78-43) one mi. W. Colo. 125, North Park, Jackson Co., Labor Day 1976. Photo clearly demonstrates an immature sora.

AMERICAN WOODCOCK (Philohela minor). One (19-80-30) Loveland, Larimer Co., 17 May 1980. Insufficient details to eliminate common snipe.

THAYER'S GULL (Larus thayeri). One (23-80-7) Loveland Lake, Loveland, Larimer Co., 24 Dec 1979. The R.C. felt that this observation had insufficient details.

LESSER NIGHTHAWK (Chordeiles acutipennis). Fifteen (29-80-41) 2 mi. N. Ridgway, Ouray Co., 15 July 1980. Time of year, details of the report, and comments of other observers in same area and at the same time combine to suggest that the birds were immature common nighthawks.

SCISSOR-TAILED FLYCATCHER (Muscivora forfic). One (34-78-10) Brown's Park NWR, Moffat Co., 3 July 1968. No details submitted to substantiate this report of a species normally occurring only in SE Colorado.

EASTERN WOOD PEWEE (Contopus virens). One (34-78-61) Animas River, near Durango, La Plata Co., 24 Aug 1978. The R.C. felt that this observation had insufficient details.

GRAY-CHEEKED THRUSH (Catharus minimus). One male (44-80-42) top of Genesee Mountain, 17 mi. SW. Colo. State Capitol in Denver, Denver Co., 18 and 28 June and 6 July 1980. Based on song notes and description this bird seems to be a dark hermit thrush, specimens of which are available with dark tail and dark eye-ring.

PHAINOPEPLA (Phainopepla nitens). Six to 10 (48-80-33) Eldorado Springs Canyon, S. of Boulder, Boulder Co., 27 May 1979. The R.C. felt that the details on this report of such an unusual number of this very rare (in Colorado) bird were not exhaustive enough.

GRAY VIREO (Vireo vicinior). One (51-80-55) W. of Horsetooth Res. W. of Ft. Collins, Larimer Co., 2 and 6 Apr 1980. The R.C. felt that this observation did not eliminate the warbling or solitary vireos both of which can be variable in plumage characters and easily mistaken for gray vireo.

PHILADELPHIA VIREO (Vireo philadelphicus). One (51-78-11) one mi. S. Fort Morgan, Morgan Co., 12 May 1977. One (51-78-70) Wheatridge, Jefferson Co., 6 Oct 1978. Both of these reports provide fairly good details but seem unaware that warbling vireos in the west can be quite yellow on the breast with similar head markings. One character field observers should look for is whether or not the band across the breast is broken or solid. If solid then possibly a Philadelphia, if broken than the bird is most likely a warbling vireo. The R.C. felt that these observations lacked adequate details.

PINE WARBLER (Dendroica pinus). One (52-79-1) 2 mi. N Ridgway, Ouray Co., 19, 26, 28, 29 Oct 1978. The R.C. felt that the details submitted did not eliminate similar species.

MOURNING WARBLER (Oporornis philadelphia). One spring male (52-80-27) Pueblo, Pueblo Co., 13 May 1975. One male (52-78-66) Barr Lake State Park, Adams Co., 20 May 1978. One male (52-78-78) Lakewood,

Jefferson Co., 20 May 1978. These reports seem to rely on the absence of an eye-ring as the key to this species. It has been shown from specimens that MacGillivray's warbler does not always have an eye-ring. Phillips delt with this question quite thoroughly in the 1979 Taxonomy Clinic at the Denver Museum of Natural History; the transcript of which appeared in the C.F.O. Journal 13: 92-100. While the presence or absence of an eye-ring is a 98% sure character, attention must also be paid to the color and degree of black on the dark hood, the facial features, and the length of the tail which should give the MacGillivray's a stubbier appearance.

SHARP-TAILED SPARROW (Ammospiza caudacuta). One (56-78-44) Middle Park, Grand Co., 29 May 1978. The photograph submitted with this report clearly shows a savannah sparrow.

References

Andrews, R., 1978: C.F.O. Official Records Committee Report 1976 and 1977. C.F.O. Journal 12: No.4:4-21.

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_____, 1974a: Reports from the CFO Official Records Committee. Colorado Field Ornithologist 19: 11-41.

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_____, 1975: Reports from the CFO Official Records Committee. Colorado Field Ornithologist 23: 17-34.

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_____, 1976b: Colorado Field Ornithologists Official Records Committee Report 1972 through 1975. Western Birds 7: 81-97.

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ANNUAL CONVENTION

The nineteenth CFO Annual Convention will be a joint meeting with the Western Field Ornithologists. It will be held at the YMCA of the Rockies in Estes Park during the weekend of 26-28 June 1981. Further details and a registration form will be in the next issue of the CFO Journal.

ANNOUNCING THE FIRST ANNUAL COLORADO FIELD ORNITHOLOGISTS' PHOTOGRAPHY CONTEST

The CFO will be offering a 1st, 2nd, and 3rd prize award for the best photo entries of living, free birds taken in Colorado--sorry no captives or hand-held shots. Each contestant will be limited to six (6) entries; entries will be judged on the basis of technical excellence, artistic merit, difficulty, and ornithological value. Please identify each print or transparency with your name, and furnish an addressed, stamped return envelope. Winning entries will be displayed at the 1981 Joint CFO-WFO Annual Convention to be held 26-28 June in Estes Park, Colorado. Deadline for entries--1 June 1981.
Send entries to:

David L. Alles
1520 Belmont Drive
Longmont, CO 80501

C.F.O. FIELD TRIPS

Saturday, March 7. Welcome New Birders! Leader Mark Holmgren (H) 449-6892. Meet at 7:45 a.m. in the King Soopers' parking lot (Crossroads Shopping Center, 30th and Arapahoe, Boulder). While birding north and east of Boulder, field identification techniques for people new to birding will be stressed. CFO members are asked to encourage anyone interested to attend. Everyone is welcome for up to a full day of birding.

Saturday, April 11. Hawk Watch at Chautauqua Park, Boulder (half-day trip). Leader Freeman Hall (H) 444-1543. Meet at 9:00 a.m. at the Bluebell Canyon Shelter. (Go west on Baseline to Chautauqua Park, then left up Bluebell Canyon.)

Saturday, April 18. Boreal Owl, Cameron Pass Area. Leader Ronald Ryder (H) 482-8089. Meet at 8:00 p.m. in the Cameron Pass Summit parking area. Bring flashlights and tapes if possible. This is a joint CFO-Ft. Collins Audubon trip.

April, date not yet fixed. Sage Grouse of North Park. Leader Ken Giesen (W) 484-2836. Details to be arranged. For information and confirmation contact: Timms Fowler (W) 484-2836 or (H) 221-2318. Space may be limited. Ken has worked extensively on Sage Grouse in this area.

Saturday and Sunday, May 16 and 17. Investigation of the Craig (No. 2) and Steamboat Springs (No. 3) Latilong Blocks. For a meeting place, accommodations, and other information, call Charlie Chase (W) 575-3911. This is the second CFO latilong trip and should be as successful as the first one to the Limon latilong.

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