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The Colorado Field Ornithologist is a semiannual journal devoted to the field study of birds. Articles and notes of scientific or general interest, and reports of unusual observations, are solicited. Send manuscripts, with photos and drawings, to R. H. Hamre, Editor, 3801 Royal Drive, Fort Collins, Colorado 80521. Membership and subscription fees: Full Member, \$3.00; Library subscription fees, \$1.50. Submit payments to Robbie Wright, Executive Secretary, The Colorado Field Ornithologist, 1895 Alpine, Apt. 16D, Boulder, Colorado 80301.

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ON THE COVER: Reverse print of an immature Great Horned Owl photographed in Poudre Canyon by Carl Marti.



RAISING CHUKARS FOR FUN

Berene Sullivan, Boulder

Raising a few Chukars in a rural area is both enjoyable and beneficial. I wish more people could have a first-hand acquaintance with Chukars as we do. They have made themselves right at home here just east of Boulder.

We have fulfilled the requirements for, and keep, a park permit so we might save the eggs or young of the ducks and pheasants that choose the wrong place to nest and are disturbed during haying, and so we might raise Chukars. The Chukars do pay for themselves. Besides the enjoyment they bring us, they eat lots of insects and weed seeds. The young birds keep themselves busy, especially at night, catching any bug they might reach, and soon become expert jumpers. The whole family is always busy picking up weed seeds.

Chukars are the Himalayan subspecies of the Red-legged Rock Partridge of Europe. They are found throughout the Himalayas in India and a few in China from the foothills to 16,000 feet. Chukars were first introduced into the United States in 1893, when they were brought from India to Illinois. They have since been introduced in 49 of the 50 states.

Up to 1954, Nevada, Washington, and Idaho were the only states in which they were well enough established to support a hunting season. Now California, Hawaii, Montana,

New Mexico, Oregon, Utah, Wyoming, and Colorado have seasons. Chukar establishment has been really successful only in these states. The Colorado Game, Fish and Parks Commission considers them well established in western Colorado, but they do not expect them to succeed on the eastern slope. The first Chukar season in Colorado was held in November, 1958.

Chukars have been released in all counties in Colorado. The first were released in 1934. Up to 1945, 300 to 2,000 a year were released on the western slope; 52 counties were stocked during this part of the program. Game farms at Colorado Springs and Canon City furnished over 10,000 birds. From 1950 to 1952 a few birds were released at Fort Collins and Trinidad.

During the 1950's wild Chukars were trapped in the Delta area and distributed to new areas, and more game farm birds were released. Too, Colorado traded Utah 45 wild turkeys for 3,000 Chukars.

In 1956 the Colorado Springs game farm was moved to Rocky Ford where it operated from 1958 until 1965. The Department also released a few Chukars from their new game farm near Fort Collins in 1966 and released the rest of their Chukars stocked there in 1967.

Since 1958, 34 areas where Chukars were planted have been surveyed annually between July 20 and August 7. The average count is 1,100 to 2,000 birds, but in 1961 the estimated population was 5,000. In 1966 only four to five hundred were found. The maximum population counted was 50 per square mile.

Establishment of the Chukars has been most successful in 12 counties: Delta, Eagle, Fremont, Garfield, Mesa, Moffat, Montezuma, Montrose, Rio Blanco, Rio Grand, San Miguel and Saguache.

In India Chukars are found in open country in both rocky, dry and grassy areas, and in open areas surrounded by evergreens. In the summer they move up to the snow. At the lower elevations they start nesting in March and eggs are found as late as August in the higher country.

In Colorado the birds have been most successful in the drier areas where they like rocks and canyons. The amount of rainfall and the time of the snows make quite a difference to Chukars. They like areas below 6,500 feet where the rainfall is not more than 10 inches annually.

The kind of spring we have determines how early they start nesting. When we have weeks of warm weather in February and March, they think it's nesting time, but

usually learn it isn't. We have found nests from early April to early August, much the same as in India. A wet late spring and summer following a few weeks of nice early spring weather just aren't for these birds. During the warm weeks they spread out to their chosen nesting area and everything is fine. Then the rains come to soak their nests, which might contain 15 to 20 eggs. The birds run around all humped up, but as soon as it warms up again they choose another nesting site and start over. Chukar eggs are pale yellow to gray stone colored, splattered with reddish freckles.

The nests are most times no more than an indenture in grass or leaves or among the stones, and too many times are not well hidden. We have found nests in leaves under the junipers, on ditch banks and in the ditches in the dry grass, in stacks of baled hay, under piles of logs or brush, and very near the house and barn in leaves which had piled up under a piece of metal or under the bushes. Twice the birds successfully nested where we and our three dogs walked within six or eight feet of them several times a day, near where the welder howled and the horses tramped.

Since the hen comes off the nest to feed each day, her eggs are easily found by magpies and grackles, which seem to be their worst enemies when they nest near buildings. Grackles are even worse than Magpies. Usually, two or three approach a nest, each from a different direction. Stray cats are probably the next worst enemy when the Chukars nest away from the buildings. Then there are boys, predatory animals and hawks. It seems a wonder that the Chukars are ever successful in nesting.

In the wild, females average 9.8 young in a good year and 5.7 per hen in a poor year. At Boulder, the hens come off the nest with a good-sized family when they are successful in hatching--usually 8 to 14--but they are not very careful where they take them when they are small. They lose several the first few days. After hatching 12, one hen got to the house with six tiny chicks. She was a good mother and raised all six, including one which had hurt a leg when he was about two weeks old. She left him by the house during the day while she and her family, Dad too, toured the farm. Each evening she returned to the wounded chick and all roosted near until he was again able to travel. This pair kept their young with them all winter and raised an orphan besides their own, which was larger than theirs when they adopted him.

One mother hatched 14 of her 17 eggs, and all the chicks were very strong when they came off the nest. When they were into their third day she took them into the alfalfa field. About three weeks later she and her mate returned with only one chick, and they would have nothing to do with him. He ran along behind them, and they seemed to deliberately roost where he couldn't fly, so in a few days he was on his own.

One mother expected her youngsters to roost on top of a two-story house when they were not quite three weeks old, but that first step was just too long. After many tries and much coaxing, the young ones roosted on the window sill until they were able to fly to the top. We put a ladder up for them but they wouldn't use it.

The Chukars will obey the herding of our border collie for several minutes, but when they are tired of such nonsense they just fly over his head and go about their business. If we send him after one, he will attempt to bring the same one back, taking it right through the flock. The rest of the birds just step out of the way. Sometimes a bird will play this game for 10 to 15 minutes, then we call the dog to end it. During the mating season the male will often try to head off a female much like the dog does.

Chukars are funny during the mating season! Besides the herding, the male will tear around the female, dragging one wing which sometimes stirs up clouds of dust. Usually Chukars run with their heads in the air and body almost straight, but during the mating season the male chases the female with his head near the ground and bill straight out. Occasionally one gets into a habit of running this way, especially during a rainy summer when nesting is difficult, and doesn't get his head up until winter.

Chukars are very pugnacious during the breeding season, especially the female. She'll fight her reflection in a car's hub cap for two or three hours at a time, pecking at it several times, then running around behind the wheel trying to get at it. When two pairs were rained out and returned to the house to stay, a pair that was nesting near the house was upset. The three males fought for several hours the first evening they were all together again.

When the birds are little they can't be bothered to walk around each other--they go over--and when they are able to fly, they often fly over the house.

They are quite the creatures of habit. During fall and winter they come past the house about the same time



every day. When there is need to feed them, we put feed under the bushes (if we put it out in the open, the black-birds have it cleaned up before the Chukars have a chance). During the day they go some distance from the house and occasionally they roost at the neighbors.

While they are roosting at night we can pick them off the roost without disturbing the rest very much. They don't like the light from the flashlight and will close their eyes if it shines on them.

When they are banded together during fall and winter and perch on top of the house, they will leave their roosting place about the same time each morning. They all fly at once with a great racket of wings and voice.

One year we kept three roosters and nine hens penned up through the winter, and in the spring the nine hens laid about 225 eggs. We hatched these eggs in the incubator. Since then we have purchased day-old chicks which do very well.

The baby chicks are kept in an enclosed pen with a heat lamp 18 inches above their heads. A 3 x 3 foot pen will handle 100 chicks. The floor of the pen is half-inch hardware cloth, which is almost covered with tar paper. An air space around the tar paper allows for ventilation from below, and ventilation is also provided from the top. The

birds must be in no draft for the first week. After that they are allowed to go in and out, but still are kept out of strong drafts until they are well feathered.

Feed is kept before the birds all the time, and an antibiotic is used in the water. A high-protein medicated feed to which ground oats, barley, wheat, corn, and proso has been added is used until they are nearly grown, when cracked feed is sufficient. At first it is necessary to spread the feed on the floor of the pen besides having the feeder of grain in the pen. It is necessary to keep fine sand before them all the time, too. Young birds we receive by August 1st are completely feathered and all ready for winter by the time it arrives. After the birds are feathered they each require about two square feet of floor space. The birds are kept away from other poultry, and no other poultry is ever allowed in the Chukar house. There does not seem to be any problem with disease when the birds are given medicated water and feed. When hens are kept penned to lay, they are fed a medicated laying mash.

It usually is necessary to lightly debeak the young birds to keep them from picking each other until they are old enough to release. Unless it is rainy we release the birds as soon as they are completely feathered. The door of the pen is opened so they can come and go as they please, but feed is kept in the pen until they are full grown. The sooner they are released the better, as it is important that they stay as wild as is possible. Dogs should be kept away from the pens so the birds will have a fear of such animals.

Young which hatch in the fields never become as tame as those which hatch near the house or are raised in pens, even though they do stay near the house during the winter.

On the Eastern Slope, Chukars can sometimes be found at the Douglas Lake area north of Fort Collins, Look Out and Golden Gate areas in Jefferson County, and in the Colorado Springs area, plus in areas where individuals have released them for one reason or another--usually for field trials.

In the spring when "Charlie" sits on top of the house or barn and talks to us all the while "Mother" is laying, then rushes to join her when she comes from the nest, or when he sits chattering away with his series of "chucks" on top of the haystack while she sits on the nest in a nearby ditch, when we watch their graceful flight or see their ruffled head, or watch them run as nothing else runs, we know we can never eat a Chukar. We'll just take the word of our neighbors, who say Chukars are really very tasty.



DOUBLE BROODS OF THE BARN OWL IN COLORADO

Carl D. Marti
Graduate Student, Colorado State University

In late April, 1967, and on subsequent occasions a Barn Owl (*Tyto alba*) was observed apparently brooding eggs within a small cavity in the side of an irrigation canal six miles northeast of Fort Collins. On July 31 one adult and three fledged young flushed from the cavity when I climbed to it. At this time a clean white egg was in the nest. By August 19 five eggs were visible when the adult flushed. On September 8 both adults were in the cavity but only four eggs could be seen. The male had roosted in a nearby crevice until this time. Returning again on September 27, I was unable to find either adult. The second clutch evidently was not fertile as the incubation period of 30 days (Wallace, 1948) had been long exceeded.

Robert Allison (personal communication) observed a double brood of Barn Owls near Livermore, Larimer County, in 1966. At this site in a natural rock cavity three eggs of the second clutch were laid when the three young of the first brood were almost fledged. I know of no other records for Colorado of this type. Bailey and Niedrach (1965) listed no double broods among their nesting records for the Barn Owl.

Ames (1967) observed nesting Barn Owls in Connecticut and found a second clutch of four eggs presumably laid by the same bird when the first brood had been reduced to two almost fledged young. This second clutch disappeared during incubation. Morejohn (1955) noted overlapping broods in California, very like the situation Ames reported, where a second clutch of four eggs was laid after the first brood was reduced to one nearly fledged young. A female Barn Owl was banded in New York with five young, and recaptured three months later in the same nest with three young (Stewart, 1952). In Michigan a pair of Barn Owls raised three successive broods and started a fourth (Wallace, 1948). C. R. Watts (personal communication) wrote that many Barn Owls breed more than once a year on the Welder Wildlife Refuge, Texas.

Several reasons have been proposed as to why the Barn Owl is capable of multiple broods, a characteristic unusual among raptors. Some of the population is in breeding condition at all times of the year, as indicated by banding records of nestling Barn Owls for every month of the year in the northern United States (Stewart, 1952). This would facilitate second broods despite the long period from egg laying to fledging (three months). Ames (1967) suggested that if a first brood were reduced by mortality to a small number, and if sufficient food were available, a second clutch might be started. Wallace (1948) thought that Barn Owls may nest almost continuously during high prey populations, and greatly slow down or cease nesting during low prey populations.

These observations were made in connection with a study of owl feeding niches made possible in part by a National Science Foundation Traineeship and a Chapman Memorial Grant.

LITERATURE CITED

- Ames, P. L. 1967. Overlapping nestings by a pair of barn owls. *Wilson Bull.* 79:451-452.
- Bailey, A. M. and R. J. Niedrach. 1965. *Birds of Colorado*. Vol. 1. Denver Mus. Nat. Hist. pp. 410-412.
- Morejohn, G. V. 1955. Barn owls with two broods of young. *Auk.* 72:298.
- Stewart, P. A. 1952. Dispersal, breeding behavior and longevity of banded barn owls. *Auk.* 69:227-245.
- Wallace, G. J. 1948. The barn owl in Michigan. *Mich. Agr. Exp. Sta. Tech. Bull.* 208. 61 pp.

SUMMARY OF COLORADO'S 1967 CHRISTMAS COUNTS

Species	BtFo	Bldr	CoSp	Dnvr	Drqo	FtCo	GrJn	IdSp	Lqmt	Nunn	PiPk	RMNP	Weld
Pied-billed Grebe		5		4									
Great Blue Heron				8		1	1		4				
Mute Swan				4 ^a									
Canada Goose		900	6	2278		12100			2513				
White-fronted Goose				2		1							
Snow Goose		3		2		3			1				
Mallard		11500	491	2928	7	2690	4505		4643			1	3600
Gadwall		7	6	21		31			15				
Pintail		46	5	22		5	2						
Green-winged Teal		9	9	9		115	7		8				
Blue-winged Teal			25 ^b										
American Widgeon		37	47	265		155			32				
Shoveler			3	36		2			1				
Wood Duck			2	33									
Redhead				121		2			10				
Ring-necked Duck			8	131					8				
Canvasback				3									
Lesser Scaup			8	31			4		2				
Greater Scaup				5									
Common Goldeneye		7	5	84	68	25	26						13
Barrow's Goldeneye													4
Bufflehead			1	1		2							
White-winged Scoter			1 ^b										
Hooded Merganser				4									
Common Merganser		31		80	4	2	5		6				13
Goshawk				1				2					
Sharp-shinned Hawk			2		1						1		2
Cooper's Hawk		1		1		1	1						
Red-tailed Hawk	1	2	5	9		4	9	1	19		1		
Harlan's Hawk				1					2				
Swinson's Hawk		1 ^b											
Rough-legged Hawk	6	4	3	3		7			11	13	1	1	12
Ferruginous Hawk			3							1			
Golden Eagle	4		4	2		4		1		5	3		1
Bald Eagle	1				5	2	1				1		
Marsh Hawk		2	12	14	1	3	8		10	11	1		8
Prairie Falcon				1		3			1				1
Peregrine Falcon		1											
Pigeon Hawk	2	1				1			1				
Sparrow Hawk		5	5	15	1	4	28		13				3
White-tailed Ptarmigan												28	
Bobwhite													20
Scaled Quail			117										
Gambel's Quail							57						
Ring-necked Pheasant		31	5	27		35	29		57				1
Chukar		30					23						
Virginia Rail		1							3				
American Coot		2	16	150		10							
Killdeer	1	3	42	21	3	24	4		29				1
Common Snipe		2	41	12	1	19	5		15				2
Herring Gull		11		3									
Ring-billed Gull		100		139		3			2				
Mourning Dove			1	1			211		22				
Barn Owl		1											1
Screech Owl		1		1					1				1
Great-horned Owl		2	1	4					4				2
Pygmy Owl							1 ^c						
Long-eared Owl		11		2					1				5
Short-eared Owl	1					1				1			
Belted Kingfisher		3	3	5	3	2			17			1	2
Yellow-shafted Flicker			1										
Red-shafted Flicker	3	59	65	78	2	85	52	1	158		17	3	10
Red-headed Woodpecker			1										
Lewis' Woodpecker						5			17				
Yellow-bellied Sapsucker									1				
Hairy Woodpecker	3	6	5	14		4		3	3		6	1	
Downy Woodpecker		6	12	14	1	7		2	10		6	1	
Northern 3-toed Woodpecker								1			1	3	
Horned Lark	148	200	754	138	27	35	830		1888	1330	37		88

SUMMARY OF COLORADO'S 1967 CHRISTMAS COUNTS

Species	BlFo	BlDr	CoSp	Dnvr	Drgo	FtCo	GrJn	IdSp	Lgmt	Nunn	PIPK	RMWP	WeId
Gray Jay								14				20	
Blue Jay		1	2	6		31			18				4
Steller's Jay	10	100	52	129	8	8		98	24		174	37	
Scrub Jay	1		93	15	54				3		12		
Black-billed Magpie	59	151	399	384	77	140	191	57	350	25	45	49	41
Common Raven		2	3	2	1	3	9	10			9	12	
Common Crow	4	14	119	94	21	871		68	5		66		
Pinon Jay			5	4	35		3						
Clark's Nutcracker		2		1				16			13	5	
Black-capped Chickadee		24	37	81	7	28	2	5	29		8	1	3
Mountain Chickadee	14	24	31	273		3		44	5		258	40	
Common Bushtit					10				6				
White-breasted Nuthatch	2	10	4	34							2	2	
Red-breasted Nuthatch		2		10									
Pygmy Nuthatch	20	22	5	213							32	36	
Brown Creeper		3	1	5							5		
Dipper		6	3	17	19	11		3	43		1	39	
Winter Wren													
Bewick's Wren							3						
Long-billed Marsh Wren													1
Canon Wren		4		7									
Rock Wren						1							
Mockingbird		1								3			
Brown Thrasher		^{1b}											
Robin		21	111	30	57	87	40	636	74		47	7	4
Western Bluebird			31	6									
Mountain Bluebird			14				4						
Townsend's Solitaire		3	10	56	6	2	2	21	12		27	4	
Golden-crowned Kinglet		6	6	11							15	6	
Ruby-crowned Kinglet		1	3				2				1		
Water Pipit			1	5				16			32		
Cedar Waxwing		16		6	30	30	2	46					
Northern Shrike	1	4	1	17		2		2	21	2	3		
Loggerhead Shrike			1		1		24						
Starling	35	516	661	642	140	526	2700	12	3385	47	31	1	90
Myrtle Warbler			^{2b}										
Myrtle Warbler				176	50	368	260	58	752	13			85
Western Meadowlark		66	58	65	5	131	198		421	14			36
Red-winged Blackbird		700	125	816		55	15875		1905			11	22
Rusty Blackbird									14 ^b				
Brewer's Blackbird				12		12	515		67		^{2b}		
Common Grackle													
Brown-headed Cowbird			1						1				
Evening Grosbeak									17				
Cassin's Finch			41	6		2	37	10			40		
House Finch	8	103	867	198	2	32	265		183		57		8
Pine Grosbeak											1	7	
Gray-crowned Rosy Finch ^d				35				41			376	40	
Black Rosy Finch				25							10		
Brown-capped Rosy Finch				1				24			12	60	
Common Redpoll									2		10		
Pine Siskin		4	134	1185		46	15	159		60	57	41	17
American Goldfinch	21	6	176	434		55	21		365				12
Lesser Goldfinch		15							3				
Red Crossbill		8		21				6				5	
Green-tailed Towhee							1		1				
Rufous-sided Towhee	1	6	29	7				2	4			10	
Vesper Sparrow		2	10	56								10	
White-winged Junco		21	25	158		6	38	3	23	115	30	8	
Slate-colored Junco	6												
Oregon Junco	137	133	1016	523	480	361	437	143	1283	2	496	172	1
Gray-headed Junco	13	99	384	166	71	19	12	92	281	1	210	46	
Tree Sparrow	82	30	295	186		132	1	1	635	115		6	106
Harris' Sparrow		1		2		3			6				
White-crowned Sparrow		15	94	71	60	4	325		190		2		9
Golden-crowned Sparrow				1									
White-throated Sparrow		1		2									
Fox Sparrow							1		1				
Song Sparrow		12	59	106	2	51	33		83		3		19
Total: 139 Species	27	76	75	92	36	64	51	32	78	15	46	34	32

B1Fo = Black Forest (Colorado Springs) - 6 observers
BlDr = Boulder Bird Club - 30 observers
CoSp = Colorado Springs (Aiken Ornithological Society) - 25 observers
Dnvr = Denver Field Ornithologists - 39 observers
Drgo = Durango - 4 observers
Ft Co = Fort Collins Bird Club - 20 observers
GrJn = Grand Junction - 8 observers
IdSp = Idaho Springs (Denver Field Ornithologists) - 12 observers
Lgmt = Longmont Bird Club - 19 observers
Nunn = Nunn - 5 observers
PiPk = Pikes Peak (Colorado Mountain Club) - 28 observers
RMNP = Rocky Mountain National Park (Fort Collins Bird Club) - 12 observers
Weld = Weldona (Denver Field Ornithologists) - 4 observers

^aAccepted as wild by Bailey and Niedrach by virtue of their free-flying and breeding status at the Tule Lakes. All unusual sightings by the Denver Field Ornithologists supported by detailed observations.

^bNo details given; questionable.

^cObserved within 20 feet by 8 persons.

^dPiPk and RMNP reported flocks of 200+ unidentified rosy finches.

The CFO Editorial Committee has felt obligated to be very critical of unusual Christmas Count observations submitted for publication without detailed supporting information. The report of a Black Brant questioned in the table above was found to be in error after the table had been composed. A report of 500 Gadwall's "feeding in fields with Mallards" was rejected. Similarly, a report of 4 Turkeys based on fresh tracks in the snow was not accepted. Several other unusual observations were footnoted as "questionable" because there was no supporting data to indicate the observers even realized their reports were unusual. Compilers must take the responsibility of requiring such supporting information if our Christmas Counts are to be of real ornithological value. --Ed.

MOUNTAIN PLOVER SURVEY

Lois Webster, Aurora

Recent sight records of the Mountain Plover in Colorado have been localized within very limited areas: north and east of Nunn, east of Colorado Springs, and South Park. After comparing these records with the early Colorado bird records, we have become concerned for its future in Colorado.

During the summer of 1967, a concerted effort was made to establish the present range and relative abundance of the Mountain Plover. The greatest concentration seems to be within, and in the area surrounding, the Pawnee National Grassland; they have been observed as far south and east as Springfield.

This survey will be continued during the spring and summer months of 1968. We solicit your help!

(1) Join the Mountain Plover survey of the Pawnee National Grassland, June 12-16, and/or (2) survey an area which has not yet been covered. Contact Lois Webster, 1949 Paris, Aurora, Colorado, 80010 for further details.

A HISTORY OF THE FIRST RECORDS OF ALL THE
BIRDS REPORTED TO HAVE BEEN SEEN WITHIN THE PRESENT
BOUNDARIES OF THE STATE OF COLORADO
PRIOR TO SETTLEMENT

Thompson G. Marsh
First President, Colorado Field Ornithologists

A comparison of the 60 first records here presented, with those now published in works on Colorado Ornithology, will show that 21 of the records are the same and that one is of a subspecies more recently recognized. The remaining 38 average more than 30 years earlier than the published dates. The differences range from 7 to 70 years.

The history of Colorado begins with a slave-catching expedition by Juan de Archuleta in the middle of the seventeenth century, but the first journal here available is the account of a more pious march by two Franciscan friars, Silvestre Velez de Escalente and Francisco Atanasic Dominquez. In their attempt to discover a route from Santa Fe to the new colonies in Alta, California, they traversed almost the full width of Western Colorado in 1776, converting the Utes, and recording the consumption of the first bird reported from Colorado, a [Dusky] (Blue) Grouse, taken between the San Miguel and Uncompahgre Rivers on August 26. It was "exceedingly palatable".

Zebulon Montgomery Pike, 30 years later, came up the Arkansas Valley on a mysterious military journey which he pretended to be a search for the headwaters of the Red River. Near Lamar, a [Merriam] Turkey was killed, and for two weeks no other sort of bird is mentioned. Then on November 27, after the brave but futile effort to reach the top of Pike's Peak, the four hungry and exhausted soldiers returned to their camp at the foot of Cheyenne to find that of all their provisions, the [American] (Common) Ravens had taken everything but "a piece of deer's ribs". This small expedition to what was then called "Highest Peak" returned to the main camp on the Arkansas, and on December 1 camped

[This report was prepared in 1931 in partial fulfillment of the requirements for the degree of Master of Arts of the University of Denver. Deletions [] and additions () have been made as indicated to bring nomenclature in accordance with the Fifth Edition of the A.O.U. Check List.

----Editor]

in a very deep snow at the mouth of Turkey Creek. The [American] (Black-billed) Magpies, made bold by hunger, took food from the hands of the men, and tortured the horses by pecking at their sore backs.

After a trip through South Park the company again returned to the Arkansas, and Christmas Day was spent in camp near Brown Canyon. A Road runner was trapped and this curious meat-eating bird, which looked like a pheasant, afforded a bit of diversion. When a companion was put into the same cage they fought until the intruder was killed.

Across the Sangre de Cristo range in mid-winter Pike made his way at the cost of terrible suffering, and reached the San Luis Valley, far within the territory of Mexico. On the Conejos, a tributary of the Rio Grande, he built a fort and waited, apparently, for the Spaniards to come and capture him. This they politely did, and on February 26, 1807, he entertained the two officers from Santa Fe at a breakfast of Canada Goose.

Through the valley of the South Platte, Major Long's expedition from Pittsburg entered this region. They proceeded up the river, and on the Fourth of July, near the mouth of the St. Vrain, found the nests of the [Western] Mockingbird. On July 5, while camped at the mouth of Clear Creek, then called Canon Ball because of the size and shape of the boulders in its bed, some of the men essayed a short walk to the mountains. They had the experience common to those who are deceived as to distance by the clear atmosphere and so had to make a meal, away from camp, on a couple of Long-billed Curlews. The sandstone banks of the stream at this place were covered with the nests of Cliff Swallows, and at the main camp on the Platte, near Denver, [Western] Robins were numerous.

Thomas Say, a trained ornithologist, was a member of this party, and the next day, at the mouth of Platte Canyon, he described the Rock Wren as a hitherto unknown species, as was also the case with the Band-tailed Pigeon, taken near Sedalia on July 9.

South along the front of the range and over the divide on to the waters of the Arkansas brought them to the vicinity of Colorado Springs, where, on July 12, the [Arkansas] (Lesser) Goldfinch and the House Finch were collected. Pike's Peak, dominating this region, had not yet been climbed by any man, and while others remained in camp, the ascent was attempted by Dr. Edwin James and two unnamed companions. The top was reached on July 14 and they had time to get back down to timberline that night.

The next day, while returning to camp, a great number of birds were noted along Fountain Creek: [Desert] Sparrow Hawk, Red-headed Woodpecker, [Western] Mourning Dove, Winter Wren, [Spurred] (Rufous-sided) Towhee, and [Long-tailed] (Yellow-breasted) Chat, and on the same day Mr. Say added a description of the Burrowing Owl.

The Arkansas River was the next stopping place. Two days were spent near Turkey Creek while Captain Bell and Dr. James took a side-trip up to the Royal Gorge. A Lazuli Bunting was seen on July 18, and on the 20th, while the company was passing down the Arkansas opposite the mouth of the Huerfano, the [Arkansas] (Western) Kingbird was added to the species theretofore unknown to science.

While some of the party continued to follow the river to the States, another group turned south to the Canadian River. Just before crossing the Colorado-New Mexico line they saw some [Desert] Horned Larks and some (Brown-headed) Cowbirds, one of which followed them for five or six miles, standing by at times, to watch the procession go past.

Beaver hats were the fashion in those days, and among the many trapping expeditions was one led by Jacob Fowler, up the Arkansas, over Sangre de Cristo pass to Taos, and then up to the headwaters of the Rio Grande, where the late winter of 1821-1822 was spent in catching beaver. When spring came, geese were added to the daily fare, and on March 30, in addition to five geese, a Sandhill Crane was killed.

Prior to 1826 C. L. Bonaparte had somehow obtained a specimen of Say's Phoebe from Colorado; but the next journal of a traveler who added new birds to the list is that of Thomas Jefferson Farnham. At Peoria, Illinois he formed a group which set out for "Oregon or the Grave". A poor route was chosen--up the Arkansas, through South Park, and over the Continental Divide to the Blue River. On July 29, 1839 they crossed the Colorado River, and Farnham took time to mention the birds of the region. The new species were: [Rocky Mountain] (Gray) Jay, [Columbian] Sharp-tailed Grouse, Turkey Vulture, Bald Eagle, and Western Meadowlark.

Thus far the visitors to Colorado seem all to have had some rather definite purpose, but Rufus B. Sage merely was hunting game for food and adventures for a book. Out near the sources of the Arikaree the [American] (Common) Crows nested in huge colonies, and for several days in June 1843, Sage feasted on their eggs, boiled, fried, and roasted. He gathered them six and ten dozen at a time. By November 10, he was in the region of the North St. Vrain, and came

upon the old camp of some Indians who had been catching Golden Eagles for their highly valued feathers. It had been a successful hunt, for 36 birds were found piled up on the ground.

John Charles Fremont crossed the State many times on the various expeditions which won for him the name of "Pathfinder". (Which, after all, is a very good name, for most of the "paths" were well worn many years before he "found" them.) On returning from his first trip to California, he crossed southward through North, Middle, and South Parks, and on June 20, 1844, while in Middle Park, saw Sage Grouse near the Blue River.

Fremont's third exploration really started from Bent's Fort on the Arkansas River, between La Junta and Las Animas, in August, 1845. A survey of the country south of that point was ordered to be made by Lieutenant J. W. Abert, who crossed the Raton Pass to the Canadian River, but before leaving Colorado he reported the [Northern] (Yellow-shafted) Flicker and [Long-crested] (Steller's) Jay on August 22.

War with Mexico came in 1846, and while following the mountain division of the Santa Fe trail to that town, which was occupied very easily, Lieutenant W. H. Emory noted near the head of Timpas Creek the (Eastern) Kingbird and the Lark Bunting, now the State Bird of Colorado.

At this same time Francis Parkman, the historian, was traveling along the eastern base of the mountains and on August 12 added some [Western] (Common) Crows to his picture of the desolation along the dry tributary of the South Platte.

Lieutenant Abert had come out with the army which General Kearny led to Santa Fe and California, but illness had detained him at Bent's Fort. While there, on August 26, 1846, he was brought a specimen of Killdeer, and on September 13, when he had recovered and was on the way to Santa Fe, he saw Red-shafted Flickers and large flocks of Yellow-headed Blackbirds along the Purgatory River.

From Mexico, George Frederick Ruxton came north into Colorado by way of the San Luis Valley and Sangre de Cristo Pass, and spent the winter of 1846-1847 hunting along Fountain Creek and in South Park. The ice went out of the Arkansas on March 24, and soon thereafter came the Mountain Bluebirds, and toward the end of the month, Prairie Chickens were booming as he rode north up the Fountain.

A railroad to the Pacific Ocean was projected in 1853, and many surveying parties were sent into the field to

determine a route. One of them, under Captain J. W. Gunnison, crossed the Colorado, up the Arkansas, over Sangre de Cristo Pass, through the San Luis Valley, over Cochetopa Pass, and down the Gunnison and the Colorado Rivers into Utah, where Captain Gunnison was killed by Indians. Mr. F. Kreutzfeldt accompanied this expedition and collected specimens of the Swainson's Hawk, [Western Red-tail] (Red-tailed Hawk), Marsh Hawk, [American] Long-eared Owl, [Western] Nighthawk, and Redhead, which were sent to the Smithsonian Institution, and reported upon by Spencer F. Baird.

Northeastern Colorado was traversed in the summer of 1856 by a party under Lieutenant Francis T. Bryan, returning to Fort Riley from Fort Bridger by way of the Cache la Poudre, South Platte, and North Fork of the Republican. W. S. Wood was with them, and shot a Ferruginous [Rough-leg] Hawk and a White-crowned Sparrow. They were sent to the Smithsonian Institution.

That same institution, in 1857, received the collection of specimens which Dr. D. W. C. Peters had made in the vicinity of Fort Massachusetts on Ute Creek in Costilla County. It included the [American] Rough-legged Hawk, [Rocky Mountain] Hairy Woodpecker, Dipper, [Long-tailed] (Black-capped) Chickadee, and Pinon Jay.

The strenuous march in mid-winter, made by Captain R. B. Marcy from Fort Bridger to Fort Massachusetts for supplies, is noteworthy for its heroism and for the fact that W. W. Anderson, who was with Marcy, collected near Cochetopa Pass the first specimens of the [Southern] White-tailed Ptarmigan found within the United States. The pass was crossed on January 2, 1858.

In this year "settlement" began at Cherry Creek and the South Platte, though there were, in the San Luis Valley, towns founded by the New Mexicans at earlier dates in the same decade.

No new birds were added by the accounts of the following persons who were in this region during the period. They were: 1811, Ezekiel Williams; 1821, Thomas Becknell; 1824, James Ohio Pattie, M. M. Marmaduke, William H. Ashley; 1831, Zenas Leonard; 1835, Lieutenant Kingsbury, Captain Ford, Hugh Evans; 1839, F. A. Wislizenus; 1842, A. Lawrence Lovejoy; 1845, S. W. Kearny; 1846, John T. Hughes, Lewis Garrard; 1847, William Gilpin, Susan Shelby Magoffin (1846); 1848, Micajah McGhee; 1853, Gwinn Harris Heap, S. N. Carvalho; 1856, Francis T. Bryan.

CHRONOLOGICAL LIST OF FIRST RECORDS OF
BIRDS SEEN IN COLORADO PRIOR TO SETTLEMENT

Florence Merriam Bailey's nomenclature has been followed, and the numbers of the Check List of the American Ornithologists' Union (Fourth Edition) have been placed in parentheses after the scientific names.

1. *Dendragapus obscurus obscurus* (A.O.U. 297.) [Dusky] (Blue) Grouse - August 26, 1776 - Dominguez and Escalante.
2. *Meleagris gallopavo merriami* (A.O.U. 310.) [Merriam] Turkey - November 13, 1806 - Zebulon Montgomery Pike.
3. *Corvus corax sinatus* (A.O.U. 486.) [American] (Common) Raven - November 27, 1806 - Zebulon Montgomery Pike.
4. *Pica pica hudsonia* (A.O.U. 475.) [American] (Black-billed) Magpie - December 1, 1806 - Zebulon Montgomery Pike.
5. *Geococcyx californianus* (A.O.U. 385.) Road runner - December 25, 1806 - Zebulon Montgomery Pike.
6. *Branta canadensis canadensis* (A.O.U. 172.) Canada Goose - February 26, 1807 - Zebulon Montgomery Pike.
7. *Mimus polyglottos leucopterus* (A.O.U. 703a.) [Western] Mockingbird - July 4, 1820 - Edwin James and Thomas Say.
8. *Numenius americanus americanus* (A.O.U. 264.) Long-billed Curlew - July 5, 1820 - Edwin James.
9. *Petrochelidon [albifrons albifrons]* (Pyrrhonota) (A.O.U. 612.) Cliff Swallow - July 5, 1820 - Edwin James.
10. *Salpinctes obsoletus obsoletus* (A.O.U. 715.) Rock Wren - July 6, 1820 - Edwin James and Thomas Say.

FIRST RECORDS -- Marsh

11. [Chloroenas] (Columba) fasciata fasciata (A.O.U. 312.)
Band-tailed Pigeon - July 9, 1820 - Edwin James and
Thomas Say.
12. [Astragalinus] (Spinus) psaltria psaltria (A.O.U.
530.) [Arkansas] (Lesser) Goldfinch - July 12, 1820 -
Edwin James and Thomas Say.
13. Carpodacus mexicanus frontalis (A.O.U. 519.)
House Finch - July 12, 1820 - Edwin James and
Thomas Say.
14. [Cerchenis spavaria phalaena] (Falco sparverius)
(A.O.U. 360a.) [Desert] Sparrow Hawk - July 15,
1820 - Edwin James.
15. Melanerpes erythrocephalus erythrocephalus
(A.O.U. 406.) Red-headed Woodpecker - July 15, 1820 -
Edwin James.
16. Asyndesmus lewis (A.O.U. 408.) Lewis' Woodpecker -
July 15, 1820 - Edwin James.
17. Zenaidura macroura marginella (A.O.U. 316a.)
[Western] Mourning Dove - July 15, 1820 - Edwin James.
18. [Nannus] Troglodytes troglodytes hiemalis (A.O.U. 722.)
Winter Wren - July 15, 1820 - Edwin James.
19. Pipilo [maculatus] (erythrophthalmus) montanus
(A.O.U. 588a.) [Spurred] (Rufous-sided) Towhee -
July 15, 1820 - Edwin James.
20. Icteria virens [longicauda] (auricollis) (A.O.U.
683a.) [Long-tailed] (Yellow-breasted) Chat -
July 15, 1820 - Edwin James.
21. Speotyto cunicularia hypugaea (A.O.U. 378.) Burrowing
Owl - July 15, 1820 - Edwin James and Thomas Say.
22. Passerina amoena (A.O.U. 599.) Lazuli Bunting -
July 18, 1820 - Edwin James and Thomas Say.
23. Tyrannus verticalis (A.O.U. 447.) [Arkansas] (Western)
Kingbird - July 20, 1820 - Edwin James and Thomas Say.

24. [*Otocoris*] (*Eremophila*) *alpestris leucolaema* (A.O.U. 474c.) - [Desert] Horned Lark - July 28, 1820 - Edwin James.
25. *Molothrus ater ater* (A.O.U. 495.) (Brown-headed) Cowbird - July 28, 1820 - Edwin James.
26. *Grus canadensis [mexicanus] (tabida)* (A.O.U. 206.) Sandhill Crane - March 30, 1822 - Jacob Fowler.
27. *Sayornis saya* (*Saya*) (A.O.U. 457.) Say's Phoebe - Prior to 1826 - C. L. Bonaparte.
28. *Perisoreus canadensis capitalis* (A.O.U. 484a.) [Rocky Mountain] (Gray) Jay - July 29, 1839 - Thomas Jefferson Farnham.
29. *Pedioecetes phasianellus columbianus* (A.O.U. 308a.) [Columbian] Sharp-tailed Grouse - July 29, 1839 - Thomas Jefferson Farnham.
30. *Cathartes aura septentripnalis* (A.O.U. 325.) Turkey Vulture - July 29, 1839 - Thomas Jefferson Farnham.
31. *Haliaeetus leucocephalus leucocephalus* (A.O.U. 352.) Bald Eagle - July 29, 1839 - Thomas Jefferson Farnham.
32. *Sturnella neglecta neglecta* (A.O.U. 501.1.) Western Meadowlark - July 29, 1839 - Thomas Jefferson Farnham.
33. *Corvus brachyrhynchos brachyrhynchos* (A.O.U. 488.) [American] (Common) Crow - "the middle of June", 1843 - Rufus B. Sage.
34. *Aquila chrysaetos (canadensis)* (A.O.U. 349.) Golden Eagle - Between November 10, 1843 and January 1, 1844 - Rufus B. Sage.
35. *Centrocercus urophasianus (urophasianus)* (A.O.U. 309.) Sage Grouse - June 20, 1844 - John Charles Fremont.
36. *Colaptes auratus luteus* (A.O.U. 412a.) [Northern] (Yellow-shafted) Flicker - August 22, 1845 - J. W. Abert.

37. *Cyanocitta stelleri* [diademata] (maculophya) (A.O.U. 478b.) [Long-crested] (Steller's) Jay - August 22, 1845 - J. W. Abert.
38. *Tyrannus tyrannus* (A.O.U. 444.) (Eastern) Kingbird - August 4, 1846 - W. H. Emery.
39. *Calamospiza melanocorys* (A.O.U. 605.) Lark Bunting - August 4, 1846 - W. H. Emery.
40. *Corvus brachyrhynchos hesperis* (A.O.U. 488b.) [Western] (Common) Crow - August 12, 1846 - Francis Parkman.
41. [*Oxyechus*] (*Choradrius*) *vociferus vociferus* (A.O.U. 273.) Killdeer - August 26, 1846 - J. W. Abert.
42. *Colaptes cafer collaris* (A.O.U. 413.) Red-shafted Flicker - September 13, 1846 - J. W. Abert.
43. *Xanthocephalus xanthocephalus* (A.O.U. 497.) Yellow-headed Blackbird - September 13, 1846 - J. W. Abert.
44. *Sialia currucoides* (A.O.U. 768.) Mountain Bluebird - Between March 24 and March 31, 1847 - George Frederick Ruxton.
45. *Tympanuchus* [*americanus americanus*] (*cupido pinnatus*) (A.O.U. 305.) (Greater) Prairie Chicken - "Towards the latter end of March", 1847 - George Frederick Ruxton.
46. *Buteo* [*borealis*] (*jamaicensis*) *calurus* (A.O.U. 337b.) [Western Red-tail] (Red-tailed Hawk) - From about August 9 to August 13, 1853 - F. Kreutzfeldt.
47. *Buteo swainsoni* (A.O.U. 342.) Swainson's Hawk - Between August 13 and September 2, 1853 - F. Kreutzfeldt.
48. *Asio otus wilsonianus* (A.O.U. 366.) [American] Long-eared Owl - Between August 13, and September 2, 1853 - F. Kreutzfeldt.

49. *Chordeiles minor henryi* (A.O.U. 420a.) [Western] Nighthawk - Between August 13 and September 2, 1853 - F. Kreutzfeldt.
50. [Marila] (*Aythya*) *americana* (A.O.U. 146.) Redhead - September 16, 1853 - F. Kreutzfeldt.
51. *Circus cyaneus hudsonius* (A.O.U. 331.) Marsh Hawk - From about August 9 to September 22, 1853 - F. Kreutzfeldt.
52. *Phalaenoptilus nuttallii nuttallii* (A.O.U. 418.) Poor-will - Prior to 1856 - Max Greene.
53. *Cinclus mexicanus unicolor* (A.O.U. 701.) Dipper - March 27, 1856 - D. W. C. Peters.
54. [Cyanocephalus] (*Gymnorhinus*) *cyanocephalus* (A.O.U. 492.) Pinon Jay - March 28, 1853 - D. W. C. Peters.
55. *Buteo* [ferrugineus] (*regalis*) (A.O.U. 348.) Ferruginous [Rough-leg] (Hawk) - September 16, 1856 - D. W. C. Peters.
56. *Zonotrichia leucophrys leucophrys* (A.O.U. 554.) White-crowned Sparrow - September 20, 1856 - W. S. Wood.
57. *Buteo lagopus* s. *johannis* (A.O.U. 347.) [American] Rough-legged Hawk - From 1852 to 1857 - D. W. C. Peters.
58. [Penthestes] (*Parus*) *atricapillus septentrionalis* (A.O.U. 735a.) [Long-tailed] (Black-capped) Chickadee - From 1852 to 1857 - D. W. C. Peters.
59. [Dryobates] (*Dendrocopos*) *villosus monticola* (A.O.U. 393e.) [Rocky Mountain] Hairy Woodpecker - From 1852 to 1857 - D. W. C. Peters.
60. *Lagopus leucurus altipetens* (A.O.U. 304c.) [Southern] White-tailed Ptarmigan - About January 2, 1858 - W. W. Anderson.

Return to:

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