

CATTLE EGRET IN COLORADO

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The ancestral breeding range of Cattle Egrets (*Bubulcus ibis*) probably was Africa where the species evolved to exploit a foraging niche in the terrestrial-aquatic ecotone, later entering into its well known association with large ungulates (Siegfried 1978). The species' ability to colonize new areas and its range extension through the western hemisphere have been well documented (Blaker 1971, Browder 1973, Crosby 1972, Davis 1960, Hancock and Elliott 1978, Lint 1962, Meyerriecks 1960, Siegfried 1978). Cattle Egrets were first noted in the continental United States in the 1940s (Palmer 1962) and generally have extended their range inland from coastal regions (Ogden 1978). Our observations plus those of others who have reported sightings of Cattle Egrets in Colorado to the Colorado Field Ornithologists have allowed us to summarize, on a smaller scale, the range extension of this species along the four major river drainages of the state, from the first reported sighting to its present status as a breeding bird (Kingery and Graul 1978). The Arkansas, Colorado, Platte (South Platte), and Rio Grande rivers have at least a large part of their origins within Colorado.

EARLY RECORDS

As shown in Table 1, the first recorded sighting of a Cattle Egret in Colorado took place in 1964 near the South Platte River at Denver (Bailey and Niedrach 1965). The next record confirmed by the Colorado Field Ornithologists Official Records Committee was from the Animas River, a tributary of the Colorado, in April 1968. Cattle Egrets were first confirmed on the Arkansas River drainage in 1968 also, seen on different parts of the river in April and May. In May 1973 the first record from the Rio Grande drainage occurred (Reddall 1976). Nearly 9 years had elapsed between the first sighting and confirmed sightings on all of Colorado's major river systems.

Of 43 Cattle Egrets seen prior to 1977 (26 records), only 8 (3 records) occurred between 1 June and 1 September when nesting residents would be expected, and no evidence of nesting was found. Two nesting season records were of single individuals seen on one occasion each. The third was of a group numbering as many as 6, seen on several occasions between mid-August and late September 1975 at Lower Latham Reservoir on the South Platte drainage. Herman J. Griese studied that site intensively in 1975-76 and found no evidence of Cattle Egrets nesting. Thirty-one of 43 egrets seen prior to 1977 (16 of 26 records) were on the South Platte drainage, but that drainage was probably more intensively observed than the others.

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Table 1. Number of Cattle Egrets (*Bubulcus ibis*) recorded in Colorado, 1964-1978, listed by drainage and year. Superscript indicates observations not reported to Colorado Field Ornithologists Official Records Committee.

Drainage	Year														Total
	1964	65-67	68	69	70	71	72	73	74	75	76	77	78		
Arkansas			2		1		3		1		1	1	10 ^b	19	
Colorado			2							1 ^a			2	2 ^c	7
Rio Grande								1					1	4	6
South Platte	1					2	4		9	8	7	8	29 ^d	68	
Total	1	0	4	0	1	2	7	1	10	9	8	12	45	100	

^aBy Gustav A. Swanson, 21 May 1975 near Craig, Moffat County.

^bBy Bryant Will, 27 April 1978, about 15 km southwest of Campo, Baca County.

^cBy Warner P. Gorenzel, 23 May 1978, Brown's Park, Moffat County.

^dIncludes sighting of 23 by Warner P. Gorenzel, 18 August 1975, Weld County.

NESTING AND RECENT RECORDS

In 1977 the first known nesting of a pair of Cattle Egrets in Colorado was observed at Pelican Island (40°20'N, 104°16'W, elevation 1472 m), Riverside Reservoir, near the South Platte River in Weld County (Miller 1978). The area, which received little human use and was nearly surrounded by cattle grazing lands, had been studied intensively by Miller in 1976, and visited yearly since 1962 by Ryder and Colorado Division of Wildlife personnel (Ryder and Torres 1974), and Cattle Egrets had not been seen before. Ranchers of the area expressed interest in the egrets and readily noticed them in 1977, but stated they had not seen them before. We believe, therefore, that 1977 was the first year in which Cattle Egrets nested at Riverside Reservoir.

As shown in Table 1, Cattle Egrets were seen in all drainages in 1977. Those sightings on the Arkansas and Colorado were made prior to 1 June, and might be considered migrants. On 6 June Miller saw six in alternate plumage at Milton Reservoir (South Platte drainage), about 30 km southwest of Riverside Reservoir. On 25 June Ryder and Mark Strong captured and banded an individual in basic plumage at Adams Lake on the Rio Grande drainage. This was the first Cattle Egret banded in the state.

Cattle Egrets nested on the Rio Grande drainage of Colorado in 1977, but the fact was not revealed until 1978. In 1977 a nestling egret was banded and identified as a Snowy Egret (*Egretta thula*) during the annual banding of young in a large colony of Snowy Egrets and Black-crowned Night Herons (*Nycticorax nycticorax*) at Russell Lakes, Saguache County. The bird, recovered in 1978, was a Cattle Egret (specimen in collections of the Department of Fishery and Wildlife Biology, Colorado State University, Fort Collins).

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In 1978 at least two pairs of Cattle Egrets nested at Riverside Reservoir. Miller saw two adults in alternate plumage in a stand of flooded willows (*Salix* sp.) on 29 May, and Ryder found two nests at the same site on 11 July 1978. On 26 July those nests contained seven young Cattle Egrets. One dead adult in alternate plumage was found near one nest.

Cattle Egrets may have nested in the Lower Latham or Milton Reservoir area of the South Platte in 1978. Records on 30 May and 2 July by Robert Andrews and others were from Lower Latham, and on 18 August Warner P. Gorenzel saw 23 Cattle Egrets, at least 6 of which were immatures, at a point between the two reservoirs. Lower Latham and Milton reservoirs are about 10 km apart, and both are 30 km from Riverside. Both reservoirs are fairly inaccessible to humans, contain colonies of ardeids, and are adjacent to cattle grazing areas.

As shown in Table 1, Cattle Egrets were seen on all drainages in 1978. In addition to the South Platte observations previously mentioned, egrets were seen on the Arkansas drainage (10 in late April), the Colorado drainage (2 in late May), and the Rio Grande drainage (1 in late April, 1 in early June). The nesting status of Cattle Egrets on the Rio Grande in 1978 was not verified although at least one adult was seen in a Snowy Egret nesting colony (Walter Gaul pers. comm.).

EXTENSION OF KNOWN BREEDING RANGE

Prior to nesting at Pelican Island in 1977, Cattle Egrets had not been known to nest along the 750 km of Platte River drainage between Riverside Reservoir and its confluence with the Missouri River. They have been seen fairly regularly as far west as Crescent Lake National Wildlife Refuge in Nebraska (Anonymous 1978) and have nested on the Missouri drainage as far west as J. Clark Salyer and Lone Lake National Wildlife Refuges in North Dakota (Rodney Schmitt pers. comm.).

Prior to nesting at Russell Lakes in 1977, the northernmost known limit of nesting Cattle Egrets on the Rio Grande drainage was Elephant Butte Lake, New Mexico, first noted in 1975 (Witzeman et al. 1975). The Russell Lakes record represents an inland range extension of 550 km.

Although still not known to nest on the Arkansas and Colorado drainages in Colorado, Cattle Egrets nest near these rivers outside the state. In 1974 they nested as far west on the Arkansas drainage as Cheyenne Bottoms, Kansas, 330 km downstream from the Colorado border (Martinez and Schwilling 1974). In the vicinity of the Colorado River drainage, they have nested as far inland as the north end of the Salton Sea in California (Kelso 1979).

SUMMARY

The first confirmed sighting of a Cattle Egret in Colorado occurred in 1964, but nearly 9 years elapsed before they were recorded on all of the

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major river systems of the state. In 1977, 12 nesting seasons after the initial sighting, they were first confirmed as nesting in the state, doing so on the South Platte and Rio Grande drainages. Cattle Egrets again nested on the South Platte in 1978, but their status on the Rio Grande was not ascertained, and Cattle Egrets were still not known to nest on the Arkansas and Colorado River drainages. Between September 1964 and September 1978, 100 Cattle Egrets were noted in 39 Colorado records.

The observation of nesting at Riverside Reservoir in 1977 was the first known for Cattle Egrets on the entire Platte River system from its confluence with the Missouri River and represents a known breeding range extension of 750 km inland. The Russell Lakes nesting represented a 550 km inland extension of known breeding range along the Rio Grande drainage. Cattle Egrets nest on the Arkansas River drainage in Kansas and near the Colorado River in California, and we may expect their breeding range extension to continue upstream to Colorado in the future.

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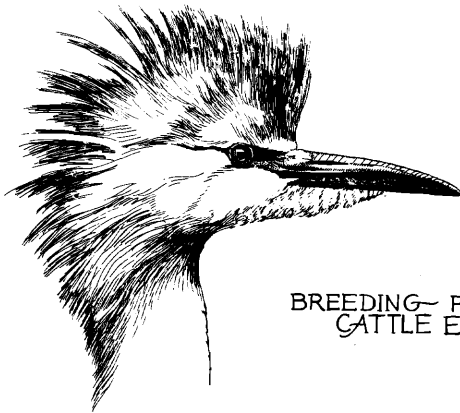
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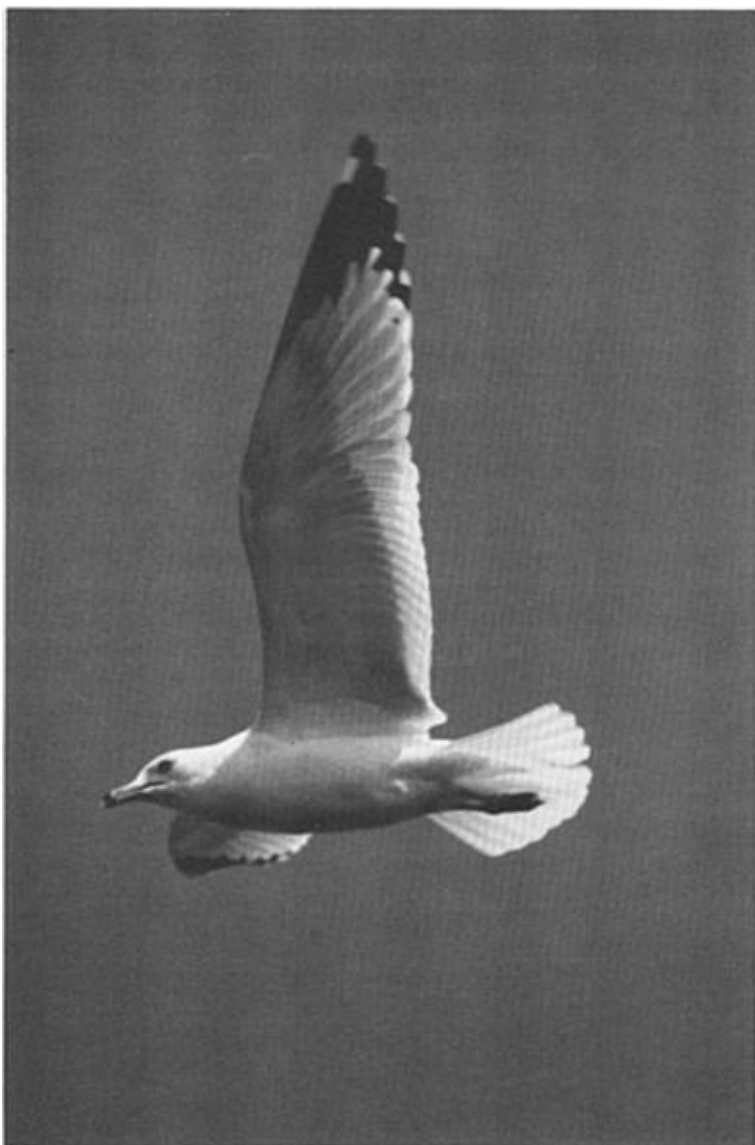
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BREEDING PLUMAGED
CATTLE EGRET

Sketch by Narca Moore



Ring-billed Gull · *Larus delawarensis*, San Diego, California, April 1979, Yashica T. L. Electro "X", Vivitar 70-150 Zoom, 1/500th sec. at f8.

Photo by Bill Millington