

A NEW SUBSPECIES OF THE PINNATED BITTERN

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THE Pinnated Bittern (*Botaurus pinnatus*) was first reported from Mexico from Laguna Chacanbacab, Quintana Roo by Paynter (1955). He observed at least ten bitterns each day spent in the field in that vicinity and collected two. These bitterns are apparently common on the coastal plain of Tabasco. I observed at least 15 in the marshes along the rivers in the region of Cantemo on 9 May 1955. One was collected that date, and two more were collected near Villahermosa on 17 May. Delwyn G. Berrett of Louisiana State University collected a juvenile on 9 April 1959, 18 miles northeast of Teapa. He reported (in litt.) that he saw several others. At a marsh four miles northwest of Tecolutla, in northern Veracruz (cf. Dickerman and Warner, p. 336) on 1 June 1959, I flushed a bittern. It was light-colored, and realizing the late date for a migrant, I collected the bird and immediately recognized that it was the same species as the Tabasco specimens. The seven specimens from Mexico prove to be an unnamed form which may be known as:

Botaurus pinnatus caribaeus, new subspecies.

Type: adult female, No. 34984, University of Kansas Museum of Natural History; Cantemo, Tabasco, Mexico; collected 9 May 1955 by Robert W. Dickerman (original No. 5906).

Characters: Differs from the nominate race in being lighter in color; streakings on the throat and flanks somewhat reduced; general tone of underparts creamy white in contrast to the buffy tan of *pinnatus*; undertail coverts and inside of thighs nearer white; dorsally, feather edges and barrings lighter, more buffy to cream, less deeply tan and ochraceous. There is a tendency for the black areas of the feathers to be somewhat reduced compared to *pinnatus*. The culmen averages longer. (For measurements see Table 1.)

SPECIMENS EXAMINED

Botaurus pinnatus caribaeus—Quintana Roo: Laguna Chacanbacab (2). Tabasco: Cantemo (1); 3 mi S of Villahermosa (2); 18 mi NE of Teapa (1). Veracruz: 5 mi NW of Tecolutla (1).

Botaurus pinnatus pinnatus—Nicaragua: Greytown (1). Colombia: Jamundi (1); Bogotá region (1); Guabinas, Río Cauca (1). Venezuela: Aragua, Lake Valencia (1); Mérida, Capaz (1); Mt. Auyan-tepui (1). Trinidad: Caroni Swamp (3). British Guiana: Annai (2), Buxton (2). Brazil: Primeri Cruz (1); Tanary, Rio Tapajoz (1). Paraguay: 195–200 km W of Pto. C'do. (Puerto Casado, 85 mi NNW of Concepción) (1); Orloff (1). Argentina: Barrancas al Sud (Prov. B. Aires) (1), Concepción, Tucuman (1); Mocovi (1).



PINNATED BITTERN (*Botaurus pinnatus*) and male ALTAMIRA YELLOWTHROAT (*Geothlypis flavovelata*). Watercolor by Walter J. Breckenridge.

TABLE 1
MEASUREMENTS OF *BOTAURUS PINNATUS* IN MILLIMETERS

	No. of specimens	Wing		Culmen		Tarsus		Tail	
		Range	Mean	Range	Mean	Range	Mean	Range	Mean
<i>caribaeus</i>									
♂	2	291-301		94-95		103-108		106-107	
♀	4	272-281	276.5	84-89	86.4	97-104	100.5	96-102	99.0
Trinidad									
♂	3	301-309	306.3	90-92	90.6	101-105	103.7	107-117	113.7
<i>pinnatus</i>									
♂	8	267-336 ¹	306.3	68-93	86.1	83-108	103.1	97-118	108.2
♀	8	275-350 ²	289.6	78-87	82.8	90-117	98.5	99-132	108.3

¹ Wing measurements of *pinnatus* include only six individuals of each sex.

² The upper measurements in each character are for a bird taken at Tucuman, Argentina. The next largest individual measurements for wing, tarsus, and tail are respectively 291, 105, and 108.

Remarks

The seven specimens of *caribaeus* show considerable variation. The darkest specimen, a female (KU 34983) from Tabasco, approaches a male of the nominate race from Brazil (MCZ 173069) in dorsal coloration, although it is differentiated by the racial characters given above. Ventrally this Tabasco specimen is pale, characteristic of *caribaeus*, although the lower neck and upper breast streakings are darker and more chestnut than any other specimen of this race. The palest *caribaeus* is a somewhat worn-plumaged female from Tabasco (KU 34984), although the specimen from Tecolutla, Veracruz (MNH 14152), a female in nearly fresh plumage, is almost as pale. Feather wear greatly affects the over-all dorsal coloration; in advanced stages of wear, the light borders of feathers may be entirely eroded away, leaving only the blackish central areas.

The specimen taken by Berrett is a juvenile. Its outer primaries are sheathed, and it is in body molt. The juvenal plumage is similar in pattern, but is slightly more buffy than the adult plumage. There may be heavier barring in the auricular region of adults than in immatures or juveniles. It appears that the characters attributed to adults and immatures by Sharpe and Ogilvie-Grant (1898: 263) might be reversed, the younger birds being lighter in coloration.

There is a slight size difference between the sexes of *Botaurus pinnatus* which is apparently not mentioned in the literature. (See Table 1 for measurements.) A second sexual character is a distinct banding or mottling throughout the central rectrices in the female. The mottlings are buffy to ochraceous in contrast to the nearly unicolor slaty-black central rectrices of the male, in which only the edges of the feathers may be clouded with the lighter color.

Three specimens, all males from the island of Trinidad, may represent an

undescribed race. They differ from all of the other specimens at hand by having much heavier barring of the neck frills, the black bars usually being wider than the light bars. Unfortunately, two of the three specimens are soiled and grease burned, so over-all comparisons cannot be made. The culmen and tail measurements of these specimens average larger.

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LITERATURE CITED

DICKERMAN, R. W., AND D. W. WARNER

1961 Distribution records from Veracruz, with the first record of *Porzana flaviventer* for Mexico. *Wilson Bull.*, 73:336-340.

PAYNTER, R. A., JR.

1955 The ornithogeography of the Yucatan Peninsula. *Peabody Mus. of Nat. Hist. Yale Univ. Bull.*, 9.

SHARPE, R. B., AND W. R. OCLIVIE-GRANT

1898 Catalogue of the Birds in the British Museum, Vol. 26.

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