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A NEW SUBSPECIES OF BITTERN FROM WESTERN NORTH AMERICA

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DIRECT comparison of a series of the American bittern, *Botaurus lentiginosus* (Montagu), from both sides of the continent indicates that the species is divisible into two geographical races.

Since Ardea lentiginosa Montagu¹ was described from a bird of accidental occurrence in England, the name might conceivably apply to either form. Knowing that I was interested in this problem, Dr. Max M. Peet kindly took the trouble last summer to compare the type, which is still preserved in the British Museum, and found that it belongs unmistakably to the eastern race.

As all the other names² in the synonymy of the species also ¹ Suppl. Orn. Dict., 1813: unpaginated, see under Heron, Freckled, and plate (Piddletown, Dorsetshire).

² Ardea minor Wilson, Amer. Orn., 8, 1814: 35, Pl. 65, Fig. 3. Ardea Mohoko Vieillot, Nouv. Dict. d'Hist. Nat., 14, 1817: 440. Ardea hudsonicus Merrem, in Ersch. and Grub., Encycl., 5, 1820: 175. [Butor] Americana Swainson, Nat. Hist. Class. Birds, 2, 1837: 354 (new name for Ardea minor Wilson). Botaurus adspersus Lichtenstein, Nomencl. Av. Mus. Berol., 1854: 89. Botaurus mugitans Coues, Proc. Acad. Nat. Sci. Phila., 1875: 353 (ex Bartram, Travels, 1791: 293). Sharpe (Cat. Birds Brit. Mus., 26, 1898: 261) quotes this last name from Cabanis (in Schomburgk, Reisen in Britisch-Guiana, 3, 1848: 754), but I have been unable to discover it in that work.

seem certainly to apply to the eastern form, I propose to provide a name for the bird of western North America. In view of his constant efforts to secure material pertinent to problems engaged upon by members of the Museum staff, and in recognition of his thirty years of service in the field of ornithology, it gives me pleasure to dedicate this bird to Dr. Max Minor Peet, Professor of Surgery in the University of Michigan, as

Botaurus lentiginosus peeti, subsp. nov.

Type.—University of Michigan Museum of Zoology, No. 90010; male, with "testes fully developed"; Black Point Cutoff, Sonoma County, California; 9 April, 1922; James Moffitt, original number 266.

Top of head, postorbital mark, and malar stripe hazel with more or less concealed blackish markings; hindneck citrine drab, the feathers slightly tipped and margined with creambuff; back and scapulars mottled black, hazel, warm buff, and cartridge buff; rump and upper tail coverts cinnamon-buff, finely vermiculated with dusky; tail cinnamon, freekled with dusky; wing coverts cream-buff, finely vermiculated with blackish, and becoming cinnamomeous on inner portion; remiges blackish slate, cartridge buff at extreme tip, the inner primaries edged subterminally with vinaceous-cinnamon, this color increasing in width and deepening in tone until the secondaries have a broad subterminal band of orange-cinnamon freckled with black; inner secondaries entirely mottled black and ochraceous-cinnamon; tertials irregularly barred with cinnamon and black; supraoccipital stripe and auricular region warm buff, extending in a paler stripe down sides of neck; below this a black stripe, continuing from malar stripe down sides of neck; chin and throat white, with a median line of tawny-olive sparsely mixed with dusky; pectoral tufts dusky, the feathers mottled apically with ochraceous-tawny and broadly margined with light buff; feathers of lower neck and breast light buff, each with a large median black-bordered mark of tawny-olive; abdomen immaculate light buff; thighs, flanks, under tail coverts, axillars, and under wing coverts warm buff mottled with dusky; bill (in dried skin) yellowish, dusky along culmen and mandibular tomium; feet dull greenish.

Wing 282, tail 83, exposed culmen 77, tarsus 98, middle toe 86 mm.

CHARACTERS.—Similar to Botaurus lentiginosus lentiginosus (Montagu), of eastern North America, but top of head and malar stripe more reddish brown and with less blackish; sides of head brighter golden yellow; buffy markings of remaining upperparts lighter and brighter; brownish markings of remiges orange-cinnamon (rather than hazel); tail averaging paler; lower neck and breast with tawny (instead of clay color) stripes; posterior underparts usually warmer buff; size (especially the tarsus) somewhat greater.

MEASUREMENTS (in mm.).—Nine adult males: wing 282–296 (290.1), tail 83–95 (89.9), exposed culmen 72–82 (78.0), tarsus 94.5–103 (97.7), middle toe 82–88.5 (84.3).

Four adult females: wing 262–267 (266.5), tail 77–90 (83.9), exposed culmen 67–72 (70.3), tarsus 85–89 (87.5), middle toe 76–85 (79.3).

Botaurus lentiginosus lentiginosus measures as follows—fourteen adult males: wing 267-291 (279.8), tail 82-96 (88.9), exposed culmen 70-80 (74.0), tarsus 86.5-95.5 (91.0), middle toe 74.5-84 (79.8).

Seventeen adult females: wing 238-255 (247.2), tail 70.5-85.5 (77.7), exposed culmen 63-72 (68.6), tarsus 78-86 (82.7), middle toe 68-79 (73.5).

RANGE.—Western North America (British Columbia to California), east to the Great Basin. Great Basin birds are not typical, being more or less intermediate toward the eastern form.

MATERIAL EXAMINED.—Seventeen specimens from the following localities: British Columbia (Edgewood District, 1; Fort. Steele, 1), Oregon (Harney County, 1), Idaho (Bear Lake Outlet, 1), Nevada (State Penitentiary, Ormsby County, 1), and California (Bay Farm Island, Alameda County, 1; Black Point Cut-off, Sonoma County, 1; Corona, 1; Los Banos, 6; Merced County, 2; Newark, 1).

In addition a total number of 111 specimens of Botaurus lentiginosus lentiginosus has been examined in connection with this study from localities as follows: Maine (New Vineyard, 2), Massachusetts (West Yarmouth, 2), Connecticut (East Hartford, 2: Lyme, 2), Pennsylvania (Oreland, 1), Florida Indian Pass, 1; Wilson, 1), Ontario (Arden, 6; Bobcaygeon, 1; Flesherton, 1; Gravenhurst, 1; Jeanettes Creek, 1; Kilworth, 1; Kingston, 1; Kingsville, 1; Lake Abitibi, 1; Lake Muskoka, 1; Lake Nipigon, 4; Little Lake, Simcoe County, 1; Long Point, Norfolk County, 4; Moose Factory, 1; Pottageville, 1; Toronto, 9), Michigan (Ann Arbor, 7; Azalia, 1; Birchwood Beach, Berrien County, 1; Chelsea, 1; Cranberry Lake, Barry County, 1; Erie, 1; Fish Point, Tuscola County, 2; Mount Pleasant, 1; Norvell, 2; Pinckney, 1; Platt, 1; Portage Lake, Jackson County, 2; Portage Lake, Washtenaw County, 3; River Rouge, Wayne County, 1; Saint Clair County, 1; Sand Point, Huron County, 3; Strawberry Island, St. Clair County, 2), Indiana (Bluffton, 1), Illinois (Beach, Lake County, 1; Chicago, 8; Lake Forest, 1; Worth, 2), Wisconsin (Beaver Dam, 8), Iowa (Clay County, 1; Palo Alto County, 1; Ruthven, 1; not further specified, 1), Minnesota (Elk River, 2), Manitoba (Fort Churchill, 1), Alberta (Didsbury, 1), North Dakota (Devils Lake, 1; Grafton, 2), Nebraska (Hackberry Lake, 1), and Kansas (Franklin County, 1).

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