

A REVISION OF THE NORTH AMERICAN HOUSE WRENS.

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One of the most interesting and surprising developments of recent ornithological activity in Ohio is the discovery of a new subspecies of the house wren, *Troglodytes domesticus* (= *Troglodytes aedon*). We had so consistently taken for granted that the Ohio house wrens were identical with those from the Atlantic coast of the United States that until recently we had made no comparisons of pertinent material.

The intensive investigations that Dr. S. Prentiss Baldwin and his associates have for several years been conducting near Cleveland in northern Ohio made it desirable, a short time ago, to determine definitely the subspecific status of the northern Ohio house wrens. It was then that we discovered that there was no material in any museum that would settle this question. Not until a good series of breeding birds was collected under the direction of Dr. Baldwin near Gates Mills, in Cuyahoga County, Ohio, where the Baldwin Bird Research Laboratory is situated, was it possible to make the necessary comparisons. An even superficial examination reveals that the Ohio bird is readily distinguishable from both the Atlantic Coast bird and that of the western United States.

The present study has been based primarily on the collections of the Cleveland Museum of Natural History and the United States National Museum; but in the gathering of the specimens necessary to work out the characters and distribution of this hitherto unknown subspecies we have been greatly helped by the authorities of several museums and by individuals as well. These include the American Museum of Natural History, the Philadelphia Academy of Natural Sciences, the Museum of Comparative Zoölogy, the Ohio State Museum, the Zoological Museum of the University of Michigan, the National Museum of Canada, and the Royal Ontario Museum; S. Prentiss Baldwin, J. H. Fleming, P. A. Taverner, L. S. Snyder, J. VanTyne, A. W. Butler, Gus. Langelier, John S. Campbell, S. E. Perkins III, and C. A. Stockbridge.

The following synopsis sets forth the characters and distribution of the North American house wrens. Measurements have been taken as recommended in the recently published manual of the measurements of birds.¹

Troglodytes domesticus domesticus (Wilson)

Eastern House Wren

Sylvia domestica WILSON, Amer. Ornith., Vol. I, 1808 [after Sept. 1], p. v (description on p. 129), pl. VIII, fig. 3 ([Eastern] "Pennsylvania;" we designate Philadelphia as the type locality).

Troglodytes aedon VIEILLOT, Ois. Amér. Septen., Vol. II, "1807" [May, 1809], p. 52, pl. CVII (no locality, except "l'Amérique Septentrionale" in title of book; restricted to "Eastern United States," in American Ornithologists' Union Check-List North Amer. Birds, Fourth Ed., October 1, 1931, p. 242; we now designate New York City as type locality, whence Vieillot is known to have obtained ornithological material).

Troglodytes fulvus NUTTALL, Man. Ornith. U. S. and Can. [Vol. I] Land Birds, 1832, p. 422, (Bonaparte MS.) (based on the breeding bird of the "Middle States" of the United States; we designate Philadelphia as the type locality).

Troglodytes americana AUDUBON, Birds Amer., folio, Vol. II, 1833 [about December], Pl. CLXXIX; Ornith. Biog., Vol. II, 1834 [after December 1], p. 452 ("Dennisville" [Maine]; type apparently lost) (nec *Troglodytes americana* Lesson, which, however, is a nomen nudum).

Troglodytes sylvestris GAMBEL, Proc. Acad. Nat. Sci. Phila., Vol. III, for October [about Nov. 20], 1846, p. 113 (nom. nov. pro *Troglodytes americana* Audubon).

SUBSPECIFIC CHARACTERS.—Colors, especially on the upper parts, sides, and flanks, rufescent and moderately dark; middle of lower surface usually washed with dull buff.

MEASUREMENTS.—Male: Total length,² 117.5–133.5; extent of wings,² 165–177.5; wing, 49.5–53.5 (average, 51.3) mm.; tail, 42–45.5 (44.2); exposed culmen, 11.5–13.5 (12.4); tarsus, 16.5–17.5 (17); middle toe without claw, 11–13 (12.2).

Female: Total length,² 108–117; extent of wings,² 155–171.5; exposed culmen, 11–12.7; tarsus, 16–18 (16.8); middle toe without claw, 11–13 (12.1) mm.

TYPE LOCALITY.—Philadelphia, Pennsylvania.

GEOGRAPHIC DISTRIBUTION.—Eastern United States and parts of southeastern Canada. Breeds north to northern New Brunswick, northern Maine, central New Hampshire, Vermont, and central New York; west to central New York, central Pennsylvania, western Virginia and western North Carolina; south to central South Carolina; and east to central South Carolina, central North Carolina, eastern Virginia, Northeastern West Virginia and the Atlantic Coast region north to Nova Scotia. Winters from Georgia, southern Louisiana, and southeastern Texas, south to southern Florida, and to southern Tamulipas in Mexico. In migration occurs west to western Michigan.

REMARKS.—This, the typical form of the species, is the most rufescent of the races. By the separation of the bird from Ohio and surrounding

¹Measurements of Birds, by S. Prentiss Baldwin, Harry C. Oberholser, and Leonard G. Worley; Scientific Publications of the Cleveland Museum of Natural History, Vol. II, October 14, 1931.

²Measured in the flesh by the collector.

areas as a distinct subspecies, the range of *Troglodytes domesticus domesticus* is in summer restricted chiefly to the Atlantic portions of the Eastern United States.

The specific name, *Troglodytes aedon* Vieillot,³ by which this species has long been known, seems to be antedated by *Sylvia domestica* Wilson,⁴ which was based on the breeding bird of eastern Pennsylvania. The former name occurs in the second volume of Vieillot's 'Oiseaux d'Amérique Septentrionale,' which has commonly been cited as published in 1807, the date of the title page. This work, however, it is now known, was published in monthly parts of six plates each, with accompanying text, and the first part appeared in December, 1807. Since *Troglodytes aedon* occurs in the second volume in the text to plate 107 (there are only 124 in the whole work) it could hardly have appeared before May, 1809. Therefore, as Wilson's *Sylvia domestica* was published late in 1808, Vieillot's name ought apparently to be replaced by Wilson's, and the species be called *Troglodytes domesticus*.

The name *Troglodytes americana* Audubon⁵ was based on the breeding bird of Eastern Maine, which is the Eastern house wren. A specimen in the United States National Museum has been considered the type, and as such has appeared in print. It bears on its label the following inscription in Baird's handwriting: "Troglodytes americanus? Aud. 2951." On the back of the label in Robert Ridgway's writing are the words "Type of T. americanus Aud." An examination of this bird reveals that while it was a specimen given by J. J. Audubon to Spencer F. Baird, it is not a summer bird such as was the bird from which Audubon made his drawing, but is in fresh autumn or winter plumage, and apparently was one of the specimens later obtained by Audubon at Charleston, South Carolina.⁶ A careful comparison of this supposed type with the plate of *Troglodytes americana* in the folio edition of Audubon's Birds of America, clearly shows that it is not the same, but is really an example of the Ohio house wren hereinafter described! Baird evidently did not consider it the type; in fact, he even questioned on the label its identification as Audubon's *Troglodytes americana*. This specimen is thus evidently *not* the type of *Troglodytes americana* Audubon.

Details of the distribution of *Troglodytes domesticus domesticus* at all times of the year may be gathered from the following list of localities from which specimens have in the present connection been examined.

Connecticut.—New Haven (May 9, 1888; May 21, 1878; Sept. 29, 1892); Litchfield (June 4, 1891); Stamford (July 3, 1890); North Milford (July 3, 1892); Sales Ferry (June 28, 1899); East Hartford (May 2, 1891); Windham (May 12, 1902; Sept. 16 and 17, 1891); Newtown (Sept. 23, 1880; Oct. 14, 1881); Fairfield Co. (May 28, 1904).

District of Columbia.—Washington (April 28, 1883; April 28 and 30, 1890; April 20, 1860; May 7, 1889; May 8 and 10, 1891; May 2, 1869; May 1, 1860; June 12, 1858; June 19, 1874; June 19, 1889; July 17,

³Ois. Amér. Septen., Vol. II, "1807" [May, 1809], p. 52, pl. CVII.

⁴Amer. Ornith., Vol. I, 1808 [after Sept. 1], p. v, pl. VIII, fig. 3.

⁵Birds Amer., Vol. II, 1833 [about December], pl. CLXXIX.

⁶Ornith. Biog., Vol. II, 1834, p. 452.

1858; July 26, 1888; July 28, 1889; Aug. 19, 1889; Aug. 31, 1896; Aug. 12, 1887; Sept. 9, 1893; Sept. 23, 1889; Sept. 14 and 30, 1894).

Florida.—Gainesville (March —, 1882; Feb. 7, 1890); Miami (Jan. 7 and 18, 1871); East Peninsula opposite Micco (March 5, 1889); Manake, Miakka Co. (Jan. 22 and 23, 1900); San Sebastian (April 7, 1892); Kissimmee (March 4, 1895; Jan. 21, 1901); Cape Sable (Feb. 15, 1918); Trafford (Feb. 5, 1898); Royal Palm Hammock (Jan. 24, 1918); Cape Florida (Oct. 23, 1857); Hibernia (Feb. —, 1870); Brevard Co. (Feb. 25, 1905).

Georgia.—McIntosh Co. (Jan. 7, 1890).

Indiana.—Wheatland (April 27, 1883).

Louisiana.—Pecan Grove (March 9, 1890); Hammond (Nov. 21, 1875); New Orleans (Nov. 2, 1882).

Maine.—No further locality (Spring, 1839).

Maryland.—Marshall Hall (June 6, 1892); Cornfield Harbor (July 24, 1894); Silver Spring (April 29, 1889); Kensington (Sept. 15, 1894; Sept. 15, 1895).

Massachusetts.—Middlesex Co. (May 3 and 18, 1883); Belmont, Middlesex Co. (May 6, 1875; May 6, 1879); Cambridge (June 2, 1892; June —, 1868); near Cambridge (April 23, 1880; May 17 and 31, 1889; June 1, 1892); Brookline (May —, 1857; June 5, 1897); Quincy (June 5, 1879); Medford (June 3, 1890); Watertown (June 16, 1869); Cohasset (no date); Springfield (May 25, 1863); Waltham (June 3, 1874; June 4, 1887).

Michigan.—Kalamazoo (May 27, 1875).

New Jersey.—Duck Island (June 26, 1895); near New York City (June 7, 1890); Crosswicks (Aug. 26, 1895); West Orange (Jan. 13, 1894); Summit (May 13, 1898); Lakehurst (June 6, 1907); Plainfield (April 26, 1871; May 9 and 31, 1871); Pocantico (May 22, 1891).

New York.—Oyster Bay, Long Island (June 24, 1878; May 24, 1874); Glen Cove, Queens Co. (Sept. 8, 1895); Shelter Island (May 18, 1892; Sept. 16, 1887); Staten Island (Aug. 1, 1907); Kiskatom (Aug. 28, 1889); Sea Cliff (July 4, 1904); New York (May 3, 1887; May 14, 1884; Aug. 12, 1890; Sept. 8, 1898; Oct. 1, 1896); Schroon Lake (Sept. 9, 1882); Highland Falls (May 4, 1883; Aug. 9, 1878); Lewis Co. (June 2, 1884); Pearsalls (Nov. 3, 1891).

Ohio.—Cleveland (May 19, 1933).

Pennsylvania.—Gallitzin (June 20, 1890); Altoona (June 19, 1890); Carlisle (June 12 and 24, 1843; July 23, 1844; Sept. 16, 1842); Saltillo (July 9, 1895); Mercersburg (June 20, 1895); Bainbridge (no date).

Rhode Island.—Near Providence (May 14, 1897).

Texas.—Brownsville (Jan. 14, 1911; Feb. 12, 1909); Alice (Oct. 5, 1891); Santa Rosa (Sept. 27, 1891).

Virginia.—Fauquier Co. (Aug. 27, 1901); Short Run, Alexandria Co. (July 29, 1888); Ballston (Aug. 14, 1892); Four Mile Run (April 22, 1894; April 13, 1884); Fairfax Co. (May 10, —; Sept. 6, 1879); Smiths Island (May 19, 1898); Brighton (May 18, 1898); Essex Co. (July 15, 1884); Dunn Loring (April 19, 1891; May 3, 1891); Rosslyn (March 5, 1885; July 15, 1876); Arlington (April 30, 1878; Aug. 8, 1889); Gainesville (May 7, 1887); Barnesville (May 17, 1887).

West Virginia.—Charlestown (July 30, 1898).

Tamaulipas.—Alta Mira (April 8, 1898); Matamoras (Feb. 4, 1902).

***Troglodytes domesticus baldwini*,⁷ subsp. nov.**

• Ohio House Wren

SUBSPECIFIC CHARACTERS.—Similar to *Troglodytes domesticus domesticus*, but upper parts darker, much less rufescent (more sooty or grayish); the sides and flanks less rufescent (more grayish); rest of lower surface more grayish (less buffy).

MEASUREMENTS.—Male: Total length,⁸ 111–133.5 mm.; extent of wings,⁸ 160–177; wing, 46–52 (average, 49.6); tail, 38–44.5 (41.6); exposed culmen, 10.8–13.2 (11.8); tarsus, 16–18 (17); middle toe without claw, 11.5–13 (12).

Female: Total length,⁸ 108–127 mm.; extent of wings,⁸ 157–175; wing, 46.5–50 (48.7); tail, 38–42 (40.6); exposed culmen, 10.5–12 (11.6); tarsus, 16.5–18 (17); middle toe without claw, 11.5–12.5 (12).

The following additional measurements, taken from birds in the flesh, have been furnished by Dr. S. Prentiss Baldwin:

Adult male:⁹ Width of bill at base, 3.7–6.4 (average, 4.9); height of bill at base, 3.–4.4 (3.8); width of bill at gape, 6.4–10.5 (7.9); length of head, 18.7–21.7 (19.8); greatest width of head, 13.1–14.8 (14); height of head, 11.1–13.2 (12); length of neck, 18.1–27.8 (23.7); length of sternum, 11.5–14.5 (13); length of body, 23.8–36 (30.3); dorso-ventral diameter of body, 15.1–18.6 (17); breadth of wing, 25.9–42.6 (34.2); length of humerus, 12.7–16.2 (14.4); length of radius-ulna, 14.4–16.8 (15.7); manus, 10.2–14.5 (12.7); femur, 13.4–18 (15.4); tibia, 22.4–25.2 (23.6); inner toe, 5.7–9.2 (7.1); outer toe, 6.2–9.4 (7.3); hind toe, 7.3–9.5 (8.4); claw of hind toe, 4.2–5.8 (5.1); claw of middle toe, 3–4.3 (3.7); length of first (outermost) primary, 15.2–21.8 (18.6); second primary, 28.2–36 (33.2); third primary, 36–41.6 (38.9); fifth primary, 36.7–42.6 (39.8); ninth primary, 42.1–36.7 (39.1); tenth primary, 37–41 (39.1).

Adult female:¹⁰ width of bill at base, 3.5–5.8 (4.7); height of bill at base, 3.2–4.5 (3.8); width of bill at gape, 6.1–10.1 (7.9); length of head, 18.5–20.8 (19.6); greatest width of head, 13.3–14.8 (13.9); height of head, 10.5–13 (11.9); length of neck, 17.5–29.2 (24.3); length of sternum, 8.5–15.8 (12.6); length of body, 26.1–34.3 (30.8); dorso-ventral diameter of body, 11.2–19.8 (16.8); breadth of wing, 27.2–36.6 (33.3); length of humerus, 11.8–16.8 (14.2); length of radius-ulna, 14–16.3 (15.3); manus, 10–13.8 (12.2); femur, 13.1–18 (15.6); tibia, 22–26 (23.5); inner toe, 5.8–8.8 (7.2); outer toe, 5.6–9.2 (7.4); hind toe, 7.1–9.2 (8.4); claw of hind toe, 4.5–6 (5.3); claw of middle toe, 3–4.4 (3.8); length of first (outermost) primary, 16.3–22.7 (18.7); second primary, 30.2–36 (32.5); third primary, 35.3–40.6 (37.5); fifth primary, 35.9–41.3 (38.5); ninth primary, 35.2–40.2 (37.9); tenth primary, 35.5–40.2 (37.4).

⁷Named for Dr. Samuel Prentiss Baldwin, of Cleveland, Ohio.

⁸Measured in the flesh by the collector.

⁹Thirty-three birds.

The weights given below have been sent also by Doctor Baldwin:

Male:¹¹ Total weight, 8.6–12.2 (average, 10.8) grams; all feathers alone,¹² 0.502–0.620 grams.

Female:¹³ Total weight, 9.6–13.7 (11.5) grams; all feathers alone,¹² 0.517–0.730 grams.

TYPE.—Adult male, No. 27823, Cleveland Museum of Natural History; Gates Mills, 15 miles east of Cleveland, in Cuyahoga County, Ohio, July 29, 1932; S. Prentiss Baldwin.

GEOGRAPHIC DISTRIBUTION.—Central northern United States and adjoining parts of southeastern Canada. Breeds north to central southern Quebec, southeastern Ontario, and central Michigan; west to western Michigan, central northern Indiana, and western Ohio; south to central southern Kentucky; and east to central eastern West Virginia, western Pennsylvania, northwestern and northern New York, and central southern Quebec. Winters from eastern South Carolina, southern Georgia, southern Alabama, southern Louisiana, and central Texas, south to central southern Texas and southern Florida. In migration occurs east to Connecticut, Delaware, District of Columbia, and eastern Virginia; and west to Illinois and Arkansas.

REMARKS.—This is the darkest of the forms of *Troglodytes domesticus*. It is always less rufescent than *Troglodytes domesticus domesticus*, but it has not only a dark sooty phase of plumage but also a lighter, more grayish phase that more approaches *Troglodytes domesticus parkmani*. This latter phase is apparently not to be regarded merely as the manifestation of intergradation, since it appears in all parts of the range of *Troglodytes domesticus baldwini*.

It is a pleasure to dedicate this new subspecies to Dr. S. Prentiss Baldwin, whose remarkable investigations of the life history of the house wren of Ohio are well known.

The localities and dates of the specimens of *Troglodytes domesticus baldwini* examined are given below.

Alabama.—Orange Beach (Jan. 23, 1911).

Arkansas.—Delight (Sept. 23, 1911).

Connecticut.—New Haven (Oct. 13, 1906).

Delaware.—No further locality (April 23, 1932).

District of Columbia.—Washington (May 5, 1889; Oct. 2, 1889; April 15 and 19, 1891).

Florida.—Wilson (April 7, 1923); Gainesville (Jan. 31, 1887); Istokpoga Lake (March 20, 1923); St. Marks (Dec. 31, 1919); Miami (Nov. 28, 1904); Pensacola (Oct. 30, 1927); Blue Spring (Jan. 17, 1882); Palatka (Jan. 27, 1886); Aucilla River (Jan. 20, 1920); Kissimmee (Jan. 28, 1901); 5 miles southeast of Everglades City, Collier County (Feb. 12, 1932); Amelia Island (Dec. 26, 1905); Eau Gallie (Jan. 31, 1910); Long Pine Key, Royal Palm State Park (Jan. 15, 1924).

Georgia.—Athens (Sept. 24 and 28, 1930; Oct. 7, 1933); Minis Tract, 2½ miles southwest of Savannah (Nov. 5, 1931); Savannah (Feb. 26, 1933); Tifton (Oct. 14, 1931).

¹⁰Thirty-five birds.

¹¹Ninety-five birds.

¹²Less than ten individuals.

¹³Fifty-eight birds.

Illinois.—Rock Island Arsenal (May 16, 1892); Olney (May 8, 1917); Cook Co. (April 29, 1878).

Indiana.—Culver (June 18, 1933); Fort Wayne (about 1873).

Louisiana.—New Orleans (Feb. 24, 1898); Marrero, near New Orleans (Nov. 15, 1932).

Michigan.—Putnam (June 23, 1933); Hartland (May 30, 1933); 7 miles south of South Haven, Van Buren Co. (Sept. 19, 1931); Luzerne (Aug. 12, 1914); Waterloo (Oct. 7, 1922); 7 miles southeast of Jackson (June 27, 1933; July 4, 1933); Brown Lake, Dickinson Co. (July 21, 1909; Aug. 9 and 21, 1909); Charity Island (Sept. 9, 1910); Lovells (Aug. 5, 1931); Vermilion (June 25, 1914); Kalamazoo (April 30, 1906); Ann Arbor (May 10, 1922; June 29, 1933; June 30, 1909; Aug. 8, 1926); Steere's Swamp, Ann Arbor (May 18, 1904); Portage Lake, Washtenaw Co. (May 23, 1933); south of Silver Lake, Washtenaw County (July 4, 1933); Connors Creek, Wayne Co. (Sept. 22, 1906); Greenfield Township, Wayne Co. (May 3 and 23, 1905); Greenfield, Wayne Co. (Aug. 18, 1906; May 5, 1907); Monquagon, Wayne Co. (May 28, 1908); Cadillac (May 9, 10, 14, and 15, 1888); Rush Lake, Huron Co. (July 31, 1908); Sandpoint, Huron Co. (June 11, 1933; June 16, 1908; July 1, 3, and 21, 1908); Birchwood Beach, Berrien Co. (April 29, 1918; May 4 and 9, 1918); Warren Dune, Berrien Co. (May 3 and 28, 1926; June 10, 1926); Harbert (July 9, 1919; Aug. 27, 28, and 29, 1917).

New York.—Staten Island (May 10, 1906); Jamaica (Sept. 14, 1898); Mexico (May 20, —); Wawbeek, Franklin Co. (Aug. 7, 1907; Oct. 1, 1907); Mt. Sinai (Sept. 16, 1907).

North Carolina.—Bent Creek, Pisgah National Forest (April 22 and 23, 1930; May 3 and 6, 1930; April 29 and May 1, 1931; April 21, 23, 27, 28, and 30, May 2 and 5, and Sept. 14, 1932; April 20, 1933); Asheville (Oct. 4 and 9, 1930); Beaufort (May 28, 1932); Beaver Lake, near Asheville (April 24, 1930); Montford Hills, near Asheville (April 24, 1930); Mills River (Oct. 8, 1931); Swannanoa (May 3, 1932; Oct. 6, 1933); Pisgah National Forest (Sept. 19 and 29, 1930).

Ohio.—Gates Mills, Cuyahoga Co. (July 15, 16, 19, 22, 27, 28, and 29, 1932; Aug. 1 and 5, 1932; Sept. 5, 1932; Sept. 8, 1931; June 7, 1925; June 30, 1926); Cincinnati (July 11 and June 29, 1933); Mayfield, Cuyahoga Co. (June 7, 1933); Solon Bog, Summit Co. (June 29, 1933); North Olmstead (May 5, 1924); 4 miles southwest of Toledo (June 28, 1933); 8 miles west of Toledo (June 25, 1933); $3\frac{3}{4}$ miles southwest of Toledo (June 23, 1933); Buckeye Lake, Licking Co. (May 11, 1928); New Bremen (May 25, 1917; July 2, 1915; July 19, 1916); Pymatuning Swamp, Ashtabula Co. (May 6, 1930; July 22, 1931); Geauga Lake (May 7, 1923).

Pennsylvania.—Calvin (June 7, 1897); Linesville (June 16, 1897); Tionesta (July 7, 1893); Erie (Aug. 1, 1888; Aug. 13, 1877).

South Carolina.—Charleston (Jan. 10, 1891); l'On Swamp, Christ-church Parish (April 22, 1911).

Texas.—Lomita Ranch (Jan. 11, 1881); Sour Lake (March 26, 1905); San Antonio (Jan. 15, 1887).

Virginia.—Smiths Island (May 13 and 14, 1910); Dyke, Fairfax Co. (Sept. 21, 1920); Fauquier Co. (April 18, 1902); Four Mile Run (May 1, 1898).

West Virginia.—Petroleum (April 30, 1874); Davis (June 12, 1897).

Ontario.—Red Bay, Bruce Co. (May 29, 1930); Tobermory, Bruce Co. (Aug. 5 and 13, 1930); Long Point, Norfolk Co. (July 21, 1927; June 8, 29 and 30, 1927); Walker's Pond, near London (Oct. 11, 1887); London (May 11, 1883); Beaumans, Muskoka Lake (Aug. 29, 1904); Streetsville (July 28, 1907); Trenton, Hastings Co. (June 5, 1890); Coldstream (May 17, 1914; May 5, 1913; May 9, 1926; May 11, 1927); Eugenia, Grey Co. (Aug. 22, 1894); Sand Banks, Prince Edward Co. (June 25, 1930); Barrie, Little Lake (June 2, 1932); Point Traverse, Prince Edward Co. (June 30, 1930); Sarnia (Aug. 12, 1899); Orillia (May 12, 1888); Killean, Wellington Co. (Oct. 3, 1904); Hamilton (May 8, 1885; May 8 and 17, 1890; May 11, 1891); Port Sydney, Muskoka Co. (July 5, 1902; Jan. 25, 1898; Sept. 26, 1907); Pottageville, York Co. (June 29, 1933; June 3, 1926; July 12, 1926; Aug. 3, 1926); Point Pelee, Essex Co. (Sept. 8, 1905; Sept. 16, 17, and 24, 1909; Sept. 19, 1906; Oct. 4, 1909; Feb. 10, 1915); Ottawa (Aug. 4, 1919; Aug. 10, 1922; July 27 and 29, 1933); Moose Creek, Ottawa (Sept. 14, 1929); Toronto (June 4, 1890; Oct. 7, 1907; May 26, 1893); Cedarvale Ravine, Toronto (July 18, 1933; Sept. 27, 1929); Fishermans Island, Toronto (May 7, 1928); Agincourt, Toronto (Sept. 23, 1923).

Quebec.—Isle au Canot, Isle aux Grues, near Montmagny (July 19, 1932); Isle aux Grues (Aug. 27, 1929; June 15, 1922).

***Troglodytes domesticus parkmanii* Audubon**

Western House Wren

Troglodytes parkmanii AUDUBON, Ornith. Biog., Vol. V, 1839 [after May 1], p. 310 ("Columbia River"), (type in United States National Museum).

Troglodytes aedon var. *aztecus* BAIRD, Review Amer. Birds, September, 1864, p. 138, 139 ("Eastern Mexico, from Rio Grande southward.") (Type from Jalapa, Vera Cruz, Mexico, in United States National Museum).

Troglodytes aedon marianae SCOTT, The Auk, Vol. II, No. 4, October 20, 1885, p. 351 ("Las Sierras de Santa Catalina, Pima County, Arizona" [in introduction to article]) (type in American Museum of Natural History).

SUBSPECIFIC CHARACTERS.—Similar to *Troglodytes domesticus baldwini*, but much paler, and sometimes more grayish above; sides and flanks paler, rather more rufescent; remainder of lower surface lighter, more buffy.

MEASUREMENTS.—Male: Total length,¹⁴ 117.5–133; extent of wings,¹⁴ 162–177.5; wing, 49.5–53.5 (average, 51.3) mm.; tail, 42–45.5 (44.2); exposed culmen, 11.5–13.5 (12.4); tarsus, 16.5–17.5 (17); middle toe without claw, 11–13 (12.2).

Female: Total length,¹⁴ 104–119; extent of wings,¹⁴ 152–162.5; wing, 49–52.3 (51); tail, 42–47 (44.8); exposed culmen, 11–12.7 (11.7); tarsus, 16–18 (16.8); middle toe without claw, 11–13 (12.1).

Weight of adult: 7.2–12.5 grams.

TYPE LOCALITY.—Lower Columbia River near Fort Vancouver (Vancouver) Washington.

¹⁴Measured in the flesh by the collector.

GEOGRAPHIC DISTRIBUTION.—Central southern and southwestern Canada, central and western United States, and Mexico. Breeds north to central Ontario, southern Manitoba, central Alberta, and central British Columbia; west to southwestern British Columbia, western Washington, western Oregon, and western California; south to northwestern Lower California, southern Arizona, southern New Mexico, central western Texas, central western Tamaulipas, central northern Texas, southern Missouri, southwestern Kentucky, and southern Indiana; and east to southeastern Indiana, eastern Illinois, eastern Wisconsin, northern Michigan and central eastern Ontario. Winters from Arkansas, northeastern Texas, southern Arizona, and central California, south to southern Lower California, Michoacan, Guerrero, Oaxaca, southern Louisiana, and casually to southern Florida.

REMARKS.—This subspecies is even more different from *Troglodytes domesticus domesticus* than from *Troglodytes domesticus baldwini*, since it is so much paler, both above and below, and usually so much more grayish. There are, however, as in *Troglodytes domesticus baldwini*, two color phases, one which represents the extreme of grayness, and another that is much more rufescent brownish above and dull buffy below, sometimes more so than is the gray phase of *Troglodytes domesticus baldwini*. Between these two extremes there is a wide range of variation with many kinds of individual intermediates. In fact, the most grayish examples look different enough from the most buffy and brownish birds to be of a different species. An occasional specimen of the buff-breasted phase strongly resembles *Troglodytes brunneicollis* but without actually bridging the gap between the two species. In any plumage the present subspecies lacks the very rufescent cast of *Troglodytes domesticus domesticus*.

Birds from Brookville and Connersville in southeastern Indiana verge toward *Troglodytes domesticus baldwini*, but are nearer the present form. Those from northern Michigan as far south as Cheboygan County are likewise more or less intermediate but apparently belong here. The considerable series that we have seen from central eastern Ontario indicates that *Troglodytes domesticus parkmanii* ranges east in that region as far as Lake Abitibi and the Algoma District.

Rather surprisingly the house wrens from the Mississippi Valley do not seem to be separable from those of British Columbia and other parts of the Pacific coast region, nor from the birds that breed in Arizona. A re-examination of all our present material thus confirms Robert Ridgway's conclusions regarding this matter.

The localities of the specimens of this race that we have examined are listed below.

Arizona.—Chiricahua Mts. (Sept. 4, 10, and 16, 1932); Fairbank (May 20, 1893); Fort Whipple (May 15, 1865; Sept. 15, 1914); Graham Mts. (May 20 and 22, 1914); Huachuca Mts. (May 19, July 23, 27, and 30, 1932; Aug. 4 and Sept. 29, 1929); Lakeside (July 5, 1915); Laka-chukai Mts. (June 19, 1927); Mt. Turnbull (June 10, 1916); Quito-vaquito (Jan. 30, 1894); Santa Rita Mts. (July 5, 1884); Topock (Sept. 27, 1917).

California.—Laguna, San Diego Co. (June 21, 1894); Los Angeles (Jan. 16, 1891); Mona Lake (Sept. 16, 1901); New Richmond (Jan. 21, 1923); Panamint Mts (April 11, 1891); San Bernardino (Dec. 28, 1890); San Jacinto Mts. (Aug. 2, 1905); Sierra Nevada Mts. (Aug. 21, 1891); South Yollo Bolly Mt. (July 28, 1905).

Florida.—One and one-half miles west of Everglades City (Feb. 11, 1932).

Idaho.—Albion (Aug. 3, 1910); Blackfoot (July 14, 1890); Edna (June 22, 1910); Florida Mt., Owyhee Co. (June 1, 1932); Malad (July 19, 1911); Shelley (July 30, 1911).

Illinois.—Champaign (April 29, 1933); Hamilton (April 29, 1909); Peoria (no date); Richland Co. (May 25 and 29, 1883; June 2 and 6, 1890); Warsaw (May 6, 1909).

Indiana.—Brookville (April 30, 1887); Connersville (no date); Wheatland (April 20, 1883; May 2, 1885).

Iowa.—Fairfield (May 17, 1890); National, 14 miles west of McGregor (no date).

Louisiana.—Bienville (April 18, 1932).

Michigan.—Bruce Crossing, Ontonagon Co. (Aug. 24, 1931); Burt Lake, Cheboygan Co. (July 6, 1932); 12 miles northeast of Ironwood (July 11, 15, 17, 23, 25 and 26, 1932); McCargo Cove, Isle Royale (May 29, 1930); Montreal River, Gogebic Co. (Aug. 26, 1931); Porcupine Mts., Ontonagon Co. (July 24 and 25, 1904).

Minnesota.—Carlton Co. (July 9, —); Fort Snelling (May 15, 1890; May 9, 16 and 27, 1891; June 3, 1903); Minneapolis (no date).

Mississippi.—Bay St. Louis (Oct. 8, 1898).

Missouri.—Willow Springs (Oct. 4, 1892).

Montana.—Thompson Falls (July 26, 1895).

New Mexico.—Magdalena Mts. (Aug. 30, 1909); Riley (Sept. 22, 1905); Rio Puesco (Sept. 6, 1905).

North Dakota.—Larimore (June 28, 1915); Sweetwater (May 17, 1902).

Oregon.—Portland (June 23, 1897).

South Carolina.—Port Royal (Jan. 29, 1891).

Texas.—Atascosa County (April 24, 1933); Cameron County (April 20, 1890); Corpus Christi (Jan. 22, 1887); Guadalupe Mts. (Aug. 21, 1901); Hempstead (no date); Kerrville (May 2, 1889); Nueces Bay (Dec. 1, 1891); 10 miles east of Pleasanton (Jan. 8, 1933); Rice, Navarro Co. (Sept. —, 1880); San Antonio (April 11, 1889; April 15, 17, and 18, 1890; Feb. 5 and 6, 1890).

Washington.—Port Angeles (July 23, 1921); Vancouver (June —, 1835).

Wisconsin.—Bridgeport (May 27 and 29, 1912); Danbury (May 27, 1919); Mather (May 25, 1918); Mamekagon Lake (May 31, 1919); Orienta (June 14, 1919); Mellen (June 10, 1919); Outer Island (July 9, 1919); Potosi (June 5 and 6, 1912); Rib Hill (July 3 and 9, 1918); Solon Springs (Aug. 1, 1919).

Alberta.—Eight miles northwest of Red Deer (July 13, 1896).

British Columbia.—Comox (June 1, 1895); Cranbrook (May 10, 1914); Lund (July 16, 1897).

Manitoba.—Gypsumville (May 26 and 28, 1931; June 8, 1931).

Ontario.—Echo Bay, Algoma Dist. (July 15, 1931); Laird (June 9, and 15, 1931); Big Fork, Rainy River (July 16, 1929; Aug. 3, 1929); Emo, Rainy River (June 8, 12, 17, 20, and 27, 1929); Clearwater, Rainy River (July 5 and 8, 1929); Lake Abitibi (July 7, 8, and 10, 1925); MacLennan (July 4, 6, 7, and 22, 1931); Weatherbee, Lake Nipigon (June 27, 1924).

Chihuahua.—Batopilas (Oct. 4 and 5, 1898).

Hidalgo.—Tula (Mar. 9, 1893).

Michoacan.—Zamora (Jan. 24, 1903).

Nuevo Leon.—Monterey (Feb. 7, 1891).

Puebla.—Metlatoyuca (Jan. 19 and Feb. 19, 1898); Tehuacan (May 4, 1893).

Sonora.—Alamos (Jan. 4, 1899).

Tamaulipas.—Alta Mira (April 12, 1898); Camargo (Jan. 9, 1902).

Vera Cruz.—Orizaba (no date).
