

utter it. The second bird of this class, to demand our attention, is the spurred towhee or chewink as we used to call him. Usually he is a very quiet fellow, uttering his call-note at odd times and more frequently when you pass near him but along in the early spring when the robins begin to tune up, a new note greets the ear on a sunny morning. It is a well-modulated trill, "cherwee ee e." It really is a trilling note and a modification of the call-note "chewink" at that. Still as it is heard commonly only during the mating season and is used by the male, it can be called the song of the species. The transition from the call-note to the real

song, in this instance, reminds me of the same change annually in the notes of the western robin. Before the mating season is really upon us there comes a bright morning when the robins begin congregating in the leafless oaks to practice up their songs. They begin with their call-note "kwee kwee kuk kuk kuk kuk" and after repeating it over again and again, the warblings and twitterings of the true song are gradually added and repeated over morning after morning, until finally out from the ordinary notes is developed the perfect song, which once heard is hard to forget.

The Downy Woodpeckers of California.

BY WALTER K. FISHER.

IT HAS been customary to refer the downy woodpeckers of California to *Dryobates pubescens gairdneri* and to *Dryobates pubescens homorus*, the latter being the rather uncommon form with pure white underparts. An examination of a large series of the so-called Gairdner woodpecker from California justifies its separation from the typical *gairdneri* of Oregon and Washington under the name *Dryobates pubescens turati*, founded on *Picus Turati* of Malherbe.¹

Dryobates pubescens turati (Malherbe) revived name.

WILLOW WOODPECKER.

Picus meridionalis Gambel (nec Swainson), *Journ. Acad. Nat. Science Philad.* I, 1847, 55, 105.

Picus Turati Malherbe, *Monographie des Picidees* I, 1861, 125, planche 28.

D [*ryobates*] *Turatii* Cabanis, *Museum Heineanum* IV, 1863, 65.

Dryobates pubescens Ridgway, *Bull. Nutt. Orn. Club* III, 1878, 67.

Dryobates pubescens gairdnerii Ridgway, and recent authors generally.

Type of diagnosis, ♂ ad., 4729 Coll. Joseph Grinnell; Pacific Grove, Monterey Co., Cal., June 15, 1901; collected by Joseph Grinnell. *Cotype of diag.* ♀ ad., 4782 coll. J. G.; Monterey, Cal., July 5, 1901; coll. by J. G.

Subspecific characters.—Smaller than *Dryobates pubescens gairdneri*, with smaller feet; under parts lighter; the elongated superciliary patch and rictal stripe extending over sides of neck, pure white, instead of smoky white of *gairdneri*; tertials always more or less spotted with white.

Distribution.—Upper Sonoran and Transition zones of California, *except*: desert ranges east of Sierra Nevada, including east slope of Sierras (?), coast region north of Mendocino County and region north of upper end of Sacramento Valley.

Coloration.—Adult male. Underparts and nasal tufts, smoky white; occipital patch, poppy red; extended superciliary patch, rictal stripe extending over sides of neck and median dorsal patch, pure white; wing coverts unspotted²; remiges marked with about five rows of white spots; tertials spotted with white; outer two tail feathers white, with two bars of black, the third feather with outer web white; rest of plumage including malar stripe, lores and auricular patch, black. Measurements: w. 89; t. 49; external (longest) hind toe without claw 12; same with claw 16. Adult female. Similar to male but greater wing coverts sparsely spotted with white and red occipital patch wanting. Measurements of Malherbe's type: w. 87; t. 50; ext. hind toe without claw 12.

Dryobates pubescens turati is a southern representative of *gairdneri*, which it

¹ Malherbe figures and adequately describes two specimens which, he says, were killed near Monterey. There can be no doubt that he indicated the form here redescribed.

² The greater coverts especially in southern birds are often spotted with white. The type is a trifle darker than the average.

resembles in the smoky under parts and restricted areas of white on the wings, and from which it differs in its smaller size, much smaller feet, and clearer white markings of head. The present form is near true *pubescens* of the Southern States, but differs from it in having much less white on the wings, the coverts and tertials of *pubescens* being conspicuously and often heavily marked with white. The following table of measurements demonstrates the difference in size between *turati* and *gairdneri*. In the measurement of the feet, the posterior external or longest toe is taken as an index.

turati:

		Wing.	Tail.	Longest Toe Less Claw.	Longest Toe With Claw.
Pasadena	♂	89.	52.	13.	17.
"	♂	92.	54.	12.	16.5
"	♂	88.	55.	12.5	17.5
Sta. Barbara	♂	86.	52.	12.5	17.
Pacific Grove	♂	89.	49.	12.	16.
Big Trees	♂	88.	54.	13.	17.
Palo Alto	♂	91.	54.	13.5	18.
Pasadena	♀	88.	50.	12.5	16.
"	♀	92.	54.	13.	16.5
Sta. Barbara	♀	88.	51.	13.	16.
Monterey	♀	89.	48.	12.5	16.
Pacific Grove	♀	89.	49.	12.	16.
Palo Alto	♀	92.	54.	13.	16.
"	♀	89.	55.	12.5	16.5
Average, 7 ♂♂ and 7 ♀♀		90.	52.1	12.64	16.57

gairdneri:

Average, 6 ♂♂ and 4 ♀♀		96.1	60.	14.25	19.55
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The willow woodpecker in a typical form breeds from Los Angeles and San Bernardino counties north in the coast ranges to San Francisco Bay, and along the west slope of the Sierra Nevada at least to Yuba County. Intergradation with *gairdneri* occurs over the coast region north of San Francisco Bay and in the mountains at the head of the Sacramento Valley. In California typical *gairdneri* has been taken at Crescent City, and at Hornbrook, Siskiyou Co. Specimens from Mt. Shasta, Ft. Crook and Horse Cr., Siskiyou Mts, while not typical are near *gairdneri*. In winter these northern intermediate forms are likely to be taken farther south.

In the National Museum collection are four birds from Quincy, Kernville and Ft. Tejon, which closely resemble the race of *pubescens* from the Rocky Mts. All are winter specimens and wanderers west of their breeding range. While they are close to the Batchelder woodpecker, they average smaller. On the other hand they differ from both *turati* and *gairdneri* in having pure white underparts. In 1863 Cabanis¹ described *Dryobates homorus* from "California," designating a bird with pure white underparts. Mr. Ridgway² had this fact in mind when he applied the name *homorus* to the Rocky Mt. race described by Mr. Batchelder³ as *oreacus*. In 1852, or eleven years before Cabanis described *homorus*, Hartlaub⁴ published a description of *Picus leucurus* from the Rocky Mountains saying that the form stood near *gairdneri* but had a wholly white tail. The white tail un-

¹ Mus. Hein. IV, 1863; 65—"D[ryobates] homorus Nob * * Grosser als der typische nordlicher *D. Gairdneri* (Audub.), mit grossern deutlichern weissen Flecken auf den Deckfedern und Tertiarschwingen und mit *rein weisslicher Unterseite* (italics mine). * * * (Californien)."

² Man. N. Am. Bds. 2d ed. 1896, 597. A. O. U. Comm., Auk XIV 1897, 126.

³ Auk VI 1889, 253.

⁴ Ueber einige neue oder wenige bekannte Vogel America's. Aus brieflichen Mittheilungen des Herzogs Paul Wilhelm von Wurttemberg mitgetheilt und mit Anmerkungen versehen von Dr. G. Hartlaub. Naumannia II, part 2, 1852, 55. "*Picus leucurus*, Herz. v. Wurttemb. Steht dem *Gairdneri* Audub. nahe. 6 Zoll lang mit ganz weissem Schwanz. Rocky Mountains. 1830' (Jedenfalls unbeschrieben, H.)"

doubtedly refers to the unmarked white outer tail feathers of a considerable per cent of the specimens from the northern Rocky Mts. (Montana). This character gives the under side of the tail a wholly white aspect. According to Malherbe the specimen was not seen by Hartlaub (he publishing Prince Paul of Wurtemberg's MS. description) but was then (1863) in Wurtemberg's collection at Morgentheim. Consequently it seems reasonable to call the Rocky Mt. race *Dryobates pubescens leucurus* (Hartlaub). As the meager material at hand does not justify the separation of the very closely related California birds on the strength of their slightly smaller size, the name will apply to them also. At some future time it may become expedient to separate the white-bellied California form under Cabanis's name *homorus*.

The following is a synopsis of our western races of the downy woodpecker.

a. Under parts pure white.

b. White markings more extended; remiges heavily spotted and tertials barred with white; wing coverts conspicuously spotted with same. *Geog. dist.* Alaska, northern British America, south along the mountains of British Columbia and Alberta to southern British America. *Dryobates pubescens nelsoni* Oberholser, Nelson Downy Woodpecker.

bb. Wings not heavily spotted, and tertials not barred; wing coverts rather sparsely spotted, the lesser not at all. *Geog. dist.* Rocky Mt. region from northern boundary of U. S. south into New Mexico and west through Great Basin to desert ranges of California, and east slope of middle and southern Sierra Nevada; west in migration to Fort Tejon, Cal.

Dryobates pubescens leucurus (Hartlaub), Batchelder Woodpecker.

Picus leucurus "Herz. v. Wurtemberg" Hartlaub, *Naumannia* II, pt. 2, 1852, 55.

D [*ryobates*] *homorus* Cabanis, *Museum Heineanum* IV, 1863, 65.

Dryobates pubescens oreæcus Batchelder, *Auk* VI, 1899, 253.

Dryobates pubescens homorus Ridgway, *Man. N. Am. Bds.* 2d ed. 1896, 597. A. O. U. Comm., *Auk* XIV, 1897, 126.

aa. Under parts smoky, not pure, white.

b. Larger and darker; breast brownish smoky, suffusing white of sides of head and back; tertials seldom spotted; *feet large*. *Geog. dist.* Coast region, from B. C. (lat. 55°) south through western Washington and Oregon to northwestern California. *Dryobates pubescens gairdneri* (Audubon), Gairdner Woodpecker.

bb. Smaller and lighter, the breast averaging lighter; white of rictal stripe, sides of neck, superciliary patch, and median stripe of back pure (except in intermediates); tertials always spotted with white; *feet small*. *Geog. dist.* California, *except*: desert ranges and eastern slope of Sierra Nevada, coast region north of Marin Co., and region north of upper end of Sacramento Valley. *Dryobates pubescens turati* (Malherbe) Nobis, Willow Woodpecker.

List of localities from which specimens have been examined; starred (*) localities are breeding records. *D. p. gairdneri*. CALIFORNIA: Crescent City*, Hornbrook*; OREGON: Columbia R., Fort Klamath*, McCoy, Polk Co., Newport. WASHINGTON: Shoalwater Bay, Seattle; B. C.: Babine, Victoria*. *D. p. turati*; CALIFORNIA: Big Trees*, Calaveras Co., El Monte, Marysville, Monterey*, Nevada City*, Pacific Grove*, Palo Alto*, Pasadena*, Red Bluff, Sacramento Valley, San Jose, Santa Barbara*, Saticoy, Yuba Co., Volcano.

Intermediates between turati and gairdneri. CALIFORNIA: Baird*, Ft. Crook, Mendocino Co.*, Mt. Lassen*, Mt. Shasta* (close to *gairdneri*), Nicasio*, Siskiyou Mts. (close to *gairdneri*), Mt. St. Helena*.

D. p. leucurus. CALIFORNIA: Ft. Tejon, Kernville, Quincy; NEVADA: Upper Humboldt Valley; COLORADO: Fort Gastland*; WYOMING: Ft. Bridger*, Laramie R.*, sources of Cheyenne; MONTANA: Bitter Root Valley, Ft. Keogh*, Ft. Custer, Hillsdale Gallatin Co.*, Mussel Shell*, Taylor Fork Gallatin Co.*

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