

## DESCRIPTION OF A NEW FORM OF NEW ZEALAND WREN

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The group of small passerine birds comprising the endemic New Zealand family Acanthisittidae has been recognised as divisible into two genera, of which *Acanthisitta* can be distinguished by bill characters from *Xenicus*. In the latter, two species, *X. longipes* and *X. gilviventris*, are recognized and some subdivision of *X. longipes*, the Bush Wren, has been proposed by Stead (T.R.S.N.Z., vol. 66, p. 313, 1936). No subdivision of *X. gilviventris*, the Rock Wren, has as yet been proposed. This species was recognized somewhat late in the history of ornithological discovery in New Zealand during the Canterbury explorations of Von Haast. He sent specimens from unspecified localities, but presumably from the headwaters of the Rakaia, to Von Pelzeln, in Vienna, and to Buller. As a name, *Xenicus gilviventris* Von Pelzeln (Vert. K.-k. Zool.-bot. Ges. Wien, 1867, p. 316) has priority over *Xenicus haasti* Buller (Ibis, 1869, p. 37), but both descriptions clearly apply to the same kind of bird. No subsequent worker has found occasion to extend published descriptions of the species nor to review it critically, and there has been very little addition to Haast's short account of its habits with the notable exception of an article by H. Guthrie-Smith (N.Z. Journ. Sci. Tech. 1925, p. 303-305) subsequently reprinted in his "Sorrows and Joys of a New Zealand Naturalist."

Recent field work carried out in the course of his official duties by Mr. T. Riney, of the Wild Life Division of the Department of Internal Affairs, indicates clearly the existence of a form of *Xenicus* not described in the literature. Knowing something of the field characters of both bush wrens and rock wrens, Mr. Riney noticed marked difference in habits and habitat of wrens which he found while engaged on biological survey with a field crew near the centre of the West Cape Peninsula (south of Dusky Sound) in April, 1953. He had seen the same bird two years before at Lake Roe, east of Dusky Sound.

Three specimens, two males and one not sexed, have been compared with series of *Xenicus longipes* and found to be clearly separable, having the distinctive hind toe and general proportions of *X. gilviventris*, but they agree neither with the type description of the latter, nor with a series of several specimens from Nelson in the Dominion Museum nor with two from Arthur's Pass in the Canterbury Museum (Stead Collection). I propose, therefore, on the basis of this comparison, new subspecific status as follows:

*Xenicus gilviventris rineyi* n. subsp. Type No. 2397 (Dominion Museum) male: Lake McArthur, Southland, New Zealand, April 13, 1953. Collected, T. Riney. Upper parts, including outer-webs of all wing feathers and tail, bright olive-green (Ridgway); tinged olive-brown on forehead and crown; lores and line below eye blackish; a pale cream stripe above the eye, more yellowish posteriorly, is bordered above by a blackish stripe; inner secondaries have apical spot of dull olive-yellow on outer webs. Bastard wing (alula) black, forming a conspicuous patch. Underwing coverts, axillaries, and flanks, yellow, shading to fawn on breast and belly; throat whitish (tinged yellow in another specimen). Colours of soft parts (from collector's field notes) eye brown, bill black, feet pinkish, toes olive.

The pattern is basically similar to *X. gilviventris gilviventris*, but the colours are more vivid. The green of the upper parts is brighter, extending further down the sides of the neck and upper breast. There is a strong suffusion of yellow on the underparts, this colour being confined to the flanks in *X. g. gilviventris*. None of the three specimens nor any others seen by the collector resemble the drab brown birds which predominate in any of the known populations of rock wrens. There is some indication in the series available of a cline in colour from Nelson, all available specimens from which district are brown, through Arthur's Pass, from which one of the two available specimens is greenish, to the extreme south-west represented by the three bright-green birds just described. Some dimensions tabulated below suggest also a cline of decreasing size from north to south,

but the series is too small for satisfactory dimensional analysis, and the Lake McArthur birds have barely completed a moult. The significant environmental factors associated with the apparent cline could well be humidity rather than latitude.

Measurements of Three Specimens (millimetres).

No.	Sex	Wing.	Tail.	Tarsus.	Hind toe.	Culmen
		47.5	17	24.5	18	11
		49.5	18	26	21	12
		49.0	20	24	20.5	11

Treating the small comparative series from Arthur's Pass and Nelson as typical *X. gilviventris gilviventris* and giving extreme and average measurements, the result is:—

*X. g. gilviventris* (9 specimens).—Wing 50-53.2 (51.5), Tarsus 23-28.5 (26.5), Hind toe 20-24 (21.6), Culmen 10-11.5 (10.75).

*X. g. rineyi* (3 spec).—Wing 47.5-49.5 (48.7), Tarsus 24-26 (24.8), Hind toe 18-21 (19.8), Culmen 11-12 (11.3.)

The collector has recorded useful over-all measurements in the flesh of his specimens, those of the type being—total length 81mm., wing-spread 140 mm.

Summary of diagnosis of the subspecies *rineyi*:—Differs from *X. g. gilviventris* in average smaller dimensions except bill, which is less stout and tapers to a finer point, and in having upper parts uniformly brighter olive-green extending conspicuously on sides of neck; also more yellow in under-parts.

It is likely that the status of this newly-described form will be better defined when rock wrens in general are better known. Meanwhile, notes on habits and habitat preference being published elsewhere by Mr. Riney, appear to be of significance in establishing it as a distinguishable form.

Grateful acknowledgment is made to the Director of the Canterbury Museum, Christchurch, for the loan of comparative material.

**PURCHASE OF BACK NUMBERS.**—Stocks of some issues of the Bulletin are nearly sold out, and members who wish to complete their files are urged to do so without delay. Prices are obtainable from the secretary. As there may be some members who do not require all the past issues, the council invites them to make these available to the society by returning them to the secretary. For those who desire it, payment is offered at prices fixed by the council.

**STOAT AND STILTS.**—On the morning of November 16, 1952, when passing at Taieri Mouth an area of swamp land covering about 20 acres and divided by a channel of water about the centre, we noticed that the area was dotted with pied stilts which appeared to be nesting. We stopped to observe them, and there the following incident was noted by M. E. Hickman (D.N.F.C.), J. Hickman (O.S.N.Z.) and myself:—Swimming strongly up the channel towards the area occupied by the stilts was a stoat. When it came to a bend in the channel where some rushes grew—the nearest covering to the breeding area of the stilts—it climbed the bank. The nearest stilts saw it, and, making a great outcry, flew at the stoat. All the stilts in the immediate neighbourhood joined in the attack, calling loudly and diving at the stoat, which seemed terror-stricken. It raced from rush to rush seeking cover, and, until it found adequate concealment, was followed by screaming, diving stilts. When the stoat was no longer visible, the stilts dispersed over the swampy ground, settling down on nests or hunting for food. There were at least 15 birds in the attacking party, and over 30 stilts in the area. Birds in the two localities further from the channel to the north and to the south did not join in the attack.—I. Tily, Dunedin.