

# AUSTRALIAN MUSEUM SCIENTIFIC PUBLICATIONS

North, A. J., 1896. On the seasonal changes in the plumage of *Zosterops caerulescens*. *Records of the Australian Museum* 2(7): 98–100. [31 January 1896].

doi:10.3853/j.0067-1975.2.1896.1208

ISSN 0067-1975

Published by the Australian Museum, Sydney

nature culture **discover**

Australian Museum science is freely accessible online at  
<http://publications.australianmuseum.net.au>  
6 College Street, Sydney NSW 2010, Australia



was found to be as clean as when placed in the case fifteen months previously.

The question naturally arises as to whether it is advisable that air in a museum case shall remain unchanged; this is an aspect of the question I do not profess to have studied, but there is one very apparent advantage. In warm climates great trouble is caused by those museum depredators, moths, and particularly the beetles *Anthrenus* and *Dermestes*; the exhibits have to be constantly handled, and the depredators destroyed. In a case constructed as before suggested, in which no interchange of air takes place, the contained air could be poisoned, and would so remain for a long period.

---

ON THE SEASONAL CHANGES IN THE PLUMAGE OF  
*ZOSTEROPS CÆRULESCENS*.

By ALFRED J. NORTH, F.L.S.  
(Ornithologist to the Australian Museum).

---

In describing *Zosterops westernensis* of Quoy and Gaimard in the "Catalogue of Birds in the British Museum,"\* Dr. R. Bowdler Sharpe makes the following observations:—"An Australian specimen has been described, and it is extraordinary that a bird which seems to be widely distributed on that continent should so much have escaped notice, the only allusion to the species that I can find in Mr. Gould's work being a passage where he mentions that some specimens of *Z. cærulescens* have the 'throat wax-yellow.' It seems to be the *Z. westernensis* (Q. & G.), a species re-instated in the system by Dr. Hartlaub (J. f. O. 1865) p. 20."

With a view of solving the mystery why so common a species should have been overlooked by most writers, I have given this subject my attention for the past two years, by careful observation and the collecting of a number of specimens of *Zosterops* found in the neighbourhood of Sydney. For a liberal supply of these birds every month, from January until the end of August, the thanks of the Trustees are chiefly due to Mr. H. J. Acland, of Greendale, and for a small series of Tasmanian skins to Mr. E. Leefe Atkinson, of Table Cape. Mr. J. A. Thorpe, the Taxidermist, too, has assisted at various times, and from the specimens

---

\* Sharpe, Cat. Bds. Brit. Mus. ix., p. 156 (1884).

collected or sent me for examination has prepared a series of nearly fifty skins in every stage of plumage. The result of my observations conclusively prove that the *Z. westernensis* of Quoy and Gaimard, the type of which was obtained by them at Western Port, Victoria, is only the spring and summer attire of *Z. cærulescens* of Latham. Taking the two extreme phases of winter and summer plumage exhibited in *Z. cærulescens*, it can be easily understood why each phase should be thought to belong to a distinct species; and it is only where one has these birds under daily observation, and obtains specimens during every month of the year that the intermediate stage, or the gradual transition of one phase of plumage to the other, is observed. These changes in the plumage of *Z. cærulescens* have already been pointed out by me in a series of skins exhibited in August last at a meeting of the Linnean Society of New South Wales. Typical examples of Latham's *Z. cærulescens*,\* with the deep tawny-buff flanks and grey throat, the autumn and winter attire of this species, may be obtained in the neighbourhood of Sydney from the middle of April until the end of August. Some specimens, however, are to be found during April that have not quite lost their summer plumage, and in August others that have already begun to attain their spring livery; these birds have the yellow throat more or less clearly defined. Usually the first indications of losing the deep tawny-buff flanks and acquiring the yellow throat are seen during a normal winter, about the second week in August, in some seasons a fortnight earlier, but in two specimens examined the grey throat was retained as late as the 19th September. During August and September, however, the gradual transition from the winter to the spring attire (the *Z. westernensis* of Quoy and Gaimard),† is slowly taking place, and by the middle of October not a bird is to be seen with the deep tawny-buff flanks and the grey throat. Specimens shot in November have the throats of a brighter olive-yellow than at any other period of the year; the flanks at that time being of a very pale tawny-brown. At mid-summer, when the breeding season with the species is virtually over, the throat is slightly paler than in the spring, and this livery is retained until the beginning of March. The flanks then become darker, increasing in intensity of colour from that time forward, the yellow feathers on the throat also disappearing and passing into grey until the autumn livery is again fully assumed by the end of April.

Of six specimens obtained at Table Cape, Tasmania, during April, 1894, three have the throat grey, the remainder faintly washed with yellow, and in all of them the flanks are of a deeper tawny-buff than in Australian examples.

---

\* *Z. dorsalis* (Gould), Bds. of Aust., iv., p. 81.

† Voy. de l'Astrolabe, pl. 11, fig. 4.

The distinguishing characters in the seasonal changes of the plumage of the under surface of *Z. caeruleescens* may be briefly summarized as follows:—

*Spring plumage.*—Throat bright olive-yellow; chest and breast ashy-grey, passing into dull white on the abdomen; flanks very pale tawny-brown; under tail-coverts dull white, in some specimens washed with yellow.

*Summer plumage.*—Similar to the spring, but the throat slightly duller in colour.

*Autumn plumage.*—Throat faintly washed with olive-yellow or gradually passing into grey; flanks tawny-buff.

*Winter plumage.*—Chin and sides of the throat dull olive-yellow; centre of the throat, the chest, and breast ashy; flanks, deep tawny-buff; abdomen and under tail-coverts dull white, the latter in some specimens washed with yellow.

*Transition from winter to spring plumage.*—Throat greyish-white, faintly washed with olive-yellow; flanks pale tawny-buff; under tail-coverts dull white, slightly tinged with yellow.

*Obs.*—The average measurements of examples obtained during winter and in summer are alike. All through the year some specimens are found with the under tail-coverts tinged or washed with yellow. This does not appear to be a sexual character, although from the specimens examined the yellowish wash on the under tail-coverts predominates among the males. As a rule, however, the dull white or white under tail-coverts are found in birds obtained during the winter.

Under the synonymy of *Z. westernensis*, Dr. Sharpe includes *Z. tephropleura*, of Gould, from Lord Howe Island, but the latter species can be readily distinguished from the spring plumage of *Z. caeruleescens* by its bright yellow under tail-coverts, and by its larger and more robust bill. At the Macleay Museum I have examined the type of *Z. ramsayi*, described by Mr. George Masters from specimens obtained by him on one of the Palm Islands, lying north of Halifax Bay, N.E. Queensland. It is a good and distinct species, with olive-yellow under tail-coverts, and a broad zone of white feathers round the eye. Dr. Sharpe, from the description of this species given in the Proceedings of the Linnean Society of New South Wales,\* considers it probably identical with *Z. westernensis*; but there is no question that the specific character pointed out by Mr. Masters, and the olive-yellow under tail-coverts will prevent one when examining this species from confounding it with the spring or summer plumage of *Z. caeruleescens*, or with any other Australian member of this genus.

---

\* Vol. i., p. 50.