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The Wellington Harbour Board asked for the first survey to be done, Max Falconer organised the first survey and Dr Dave Dawson collated all the data from the first survey and carried out some preliminary analyses. Dr Richard Sadleir suggested the second survey be done, and Dr John Cockrem entered some data from the second survey onto computer, and made those files available to me. Rod Cossee, Barrie Heather and Ralph Powlesland improved the manuscript.

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SHORT NOTE

A Chestnut Teal at the Manawatu River estuary – a new bird for New Zealand

Over the past decade increasing numbers of Grey Teal (*Anas gibberifrons*) have used the R. Manawatu estuary as a sanctuary during the duck shooting season. While counting a flock of c.115 Grey Teal there on 3 June 1991, JLM saw a noticeably darker bird feeding with them on the open mudflats with its lower body partly hidden in a shallow channel. From the green gloss on the head and the reddish-brown upper breast it was assumed to be a male Brown Teal (*A. aucklandica*) and was shown to R & S Creswell as such about 20 min later. Although by then disturbance had extended the viewing distance to 200-300 m, the distinctive breast colour and head pattern were still clearly visible.

The bird was still present on 15-16 June and, as many Brown Teal are now captive bred, it was checked by telescope for bands at less than 100 m range. It had no bands, but a number of features were noted which were not consistent with the original identification as a Brown Teal. These included

dark brown spotting of the lower breast and belly, red eye without an eye ring and a broad white bar over the green speculum. As these differences all mirrored plumage characters of Grey Teal, the possibility of a Brown Teal x Grey Teal hybrid was initially considered. However, after consulting relevant texts it appeared more likely that it was a male Chestnut Teal (*A. castanea*) moulting into breeding plumage.

We saw the bird again 2 weeks later when the main identification points were confirmed and some changes towards full adult plumage noted. The lighter brown of the lower cheeks and the pale area on chin and throat had virtually disappeared, the demarcation between neck and breast was more obvious, the white thigh patch on the right side was more distinct and one was beginning to become evident on the left.

It was not seen on 13-14 July, although some 120 Grey Teal were still present, and not seen subsequently.

Age

Although the bird was clearly a male and not yet in breeding plumage, the question arose whether it was in eclipse or in transition from juvenile plumage. Relevant to this were further questions on whether eclipse plumage occurs in the wild and if so with what frequency. Over the 25 years since eclipse plumage was first described from captive Chestnut Teal (Delacour) a range of opinions has been expressed. Frith, in his monograph on Australian waterfowl, stated categorically that eclipse plumage had not occurred in the wild. This view has been tacitly supported by many other authors (e.g. Macdonald), who by making no reference to eclipse implied that they considered it not to occur. Those few authors who made reference to eclipse (e.g. Pizzey) offered no opinion as to its status in the wild. Different views have, however, been expressed recently although in both cases the authors fail to provide any data to support their views. Madge & Burn (1988) considered that eclipse birds may be overlooked in the wild, and Marchant & Higgins stated, on the unreferenced authority of P.J. Fullagar, that males which have bred successfully "usually attain full eclipse plumage".

It is scarcely surprising that descriptions of eclipse plumage and views as to its ability to be separated in the field from female and juvenile birds are also subject to considerable variation.

All descriptions and illustrations of eclipse do, however, agree that, although the head loses its green gloss to some degree, it remains uniformly dark except for a pale area on the chin and foreneck. The presence on the Manawatu bird of a pale area on the cheeks, similar to that of juveniles, appears to indicate therefore that it was an immature. This is supported by its moult into breeding plumage still being incomplete at the end of June, as data in Marchant & Higgins show that in adults the pre-breeding moult occurs during April-May.

Behaviour

The bird maintained close contact with the Grey Teal flock, feeding with them at low tide on the exposed mudflats, channels and shallow pools, although occasionally showing some aggression to birds feeding too close by extending its head and neck horizontally with bill open. During high

tide it rested on the open water, reacting with the Grey Teal flock to various disturbances by flying further out towards the centre of the river and only slowly drifting back into sheltered water among the remains of *Spartina* clumps. Towards the end of June it was observed on several occasions responding to 'down-up' courtship display by parties of 4 or 5 Grey Teal.

Origin

Was the bird a wild vagrant from Australia or an escape from captivity in New Zealand? The possibility of an escape was discussed with aviculturalists in both Wellington and the Manawatu. Their views were that very few Chestnut Teal are captive in New Zealand and, as any losses would be difficult to replace, adults would be pinioned. Few young are reared and any which are would be kept well secured until pinioned. It was considered very unlikely that the bird was an escape, particularly as it appeared to be an immature. Nothing in its behaviour suggested that it had been in captivity; it did not permit a close approach and was not banded.

Within Australia the species' normal range lies south-east of a line from Rockhampton in Queensland to Ceduna in South Australia with a small population south of Perth in Western Australia. Vagrants, mainly juveniles, occur outside this range both within Australia, e.g. Darwin and Northern Queensland, and beyond, e.g. New Guinea and Lord Howe Island, where a pair nested in 1944 (Hindwood & Cunningham 1950). Frith suggested that such movements are made in association with Grey Teal, which are essentially nomadic and which are considered to irrupt frequently into New Zealand (Turbott 1990). Frith thought that these Chestnut Teal are simply caught up with the Grey Teal flocks. There is, however, the additional possibility of cross fostering of ducklings in those areas where both species breed in the same location.

That the Manawatu River estuary bird was an immature in the company of Grey Teal is consistent with a wild bird of Australian origin rather than an escape from within New Zealand.

Description

A small compact duck very similar in size, shape and stance to Grey Teal but noticeably darker, particularly when seen head on, and heavier bodied when seen from front or rear. Distinctly smaller than NZ Shoveler and about two-thirds the size of Mallard.

Forehead, crown, nape and neck dark blackish-brown with a green gloss on crown and nape visible at close range. Back dark brown with lighter brown feather edgings. Speculum green with broad white bar in front. Tail dark brown.

Throat and chin initially pale buff, grading through light brown cheeks into dark brown of head below eye (similar to, but darker and less extensive than, Grey Teal), but becoming uniformly dark brown by end of June.

Neck dark blackish brown with clear demarcation from breast when in display with head up. Deep red-brown on breast and belly, with dark spotting on lower breast and belly of similar size and extent to that of Grey Teal.

Flanks dark brown with paler edgings, somewhat darker than Grey Teal's Undertail very dark brown. Pale patches developing on each thigh, initially very obscure and on right-hand side only.

Eye red with no eye ring. Bill blue-grey, slightly bluer than Grey Teal's but of similar size and shape. Legs and feet dull grey, legs similar in length to Grey Teal's.

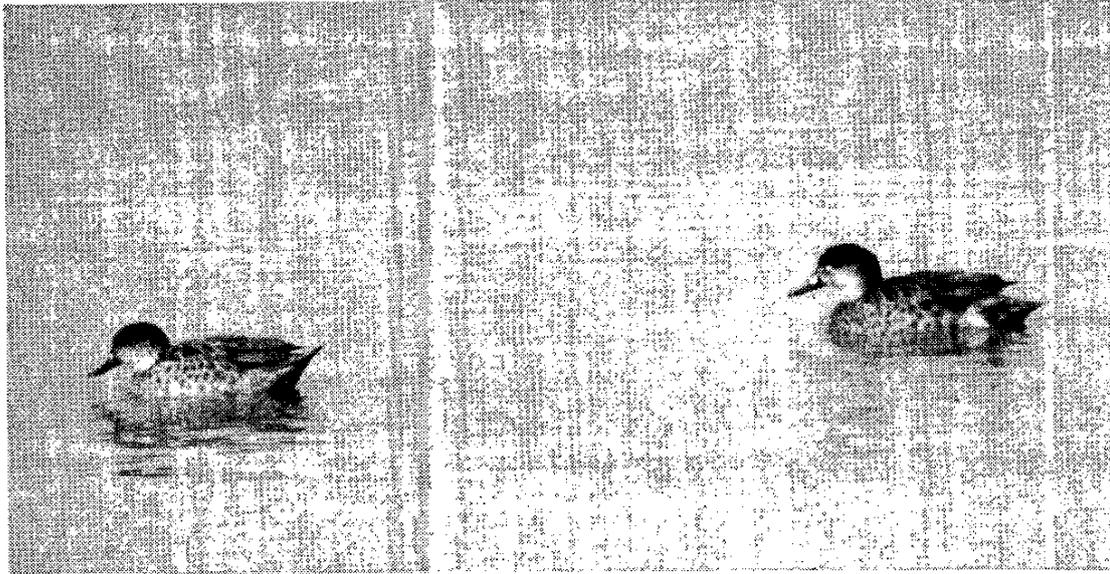


FIGURE 1 — Male Chestnut Teal at the Manawatu River estuary, with a Grey Teal on its left, June 1992. Note the rather darker overall appearance, including the breast (reddish brown in life), the whitish patch on the flanks and the very dark undertail. The pale lower cheeks indicate that the bird was an immature. (The pale spots on the top of the bill and in front of the eye are highlights caused by water on the bird's head.)

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Postscript

Between 23 May and 11 July 1992, a further three Chestnut Teal were observed at the Manawatu River estuary among a flock of 300 - 400 Grey Teal. Two of these birds were in similar plumage to the 1991 bird and were identified as immature males, and the third appeared to be a female. Details of these birds are currently before the Rare Birds Committee. A photograph of one of these birds is shown in Figure 1.

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