Eurasian Teal *Anas crecca* on West Island, Cocos (Keeling) Islands: First Australian record and first Southern Hemisphere record in the East Asian Flyway

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Summary. A Eurasian Teal *Anas crecca* was observed and photographed on West Island, Cocos (Keeling) Islands, in the eastern Indian Ocean. It was found swimming in a land-locked lagoon known as Bechet Besar (12°9′S, 96°50′E) on 10 December 2010. Subsequent to this it was seen by numerous observers, and was still present at the same site 12 months later. The BirdLife Australia Rarities Committee (formerly Birds Australia Rarities Committee) has accepted the sighting as the first documented occurrence of this species in Australian territory. As far as can be ascertained, this is also the first sighting of a Eurasian Teal south of the Equator other than in equatorial Africa.

Introduction

Between 5 and 11 December 2010 a group of birders led by RB visited the islands of the Cocos (Keeling) Group in the eastern Indian Ocean. This group of islands lies ~2000 km west of the Australian mainland, 1000 km south of the Indonesian island of Sumatra, and 2600 km south-east of Sri Lanka. The islands are administered by Australia and are situated within the Australian Economic Exclusion Zone.

During the group's stay the weather was calm and clear, apart from the regular afternoon rain showers. The preceding weather had been more extreme, however, as a category 2 cyclone (Anggrek) had formed ~500 km north of the islands on 30 October 2010 and passed to the west and south of the islands between then and 2 November 2010 (Australian Government Bureau of Meteorology 2011). Significantly, the cyclone had developed from a low-pressure area that had moved south-east down the western coast of Sumatra before taking a more westerly, then southerly route. This cyclonic event was accompanied by more widespread very strong but non-destructive northerly winds and heavy rain regionally.

Rainfall on the Cocos (Keeling) Islands during 2010 had been particularly heavy, and the 100-year annual record of 3300 mm was broken on 9 November 2010 (Australian Government Bureau of Meteorology 2011). Due to the heavy rain, all the lagoons and swamps on the islands were full of water. Vagrant bird species were also particularly plentiful, possibly due to the cyclone-related north winds of late October and early November (Cyclone Anggrek) blowing offshore

from Indonesia toward the Cocos (Keeling) Islands. Vagrant species reported on the islands during the time of RB's group visit included White-throated Needletail *Hirundapus caudacutus,* Yellow Bittern *Ixobrychus sinensis*, Chinese Goshawk *Accipiter soloensis*, Japanese Sparrowhawk *A. gularis*, Eurasian Hobby *Falco subbuteo*, Watercock *Gallicrex cinerea*, Common Redshank *Tringa totanus*, Large Hawk-Cuckoo *Hierococcyx sparverioides*, Hodgson's Hawk-Cuckoo *Cuculus nisicolor*, Purple-backed (Daurian) Starling *Sturnus sturninus*, and the Eurasian Teal *Anas crecca* discussed here. Many of these birds remained on the islands for some time, and were seen by visitors through to March 2011. Some of the sightings are still subject to acceptance by the BirdLife Australia Rarities Committee (BARC, formerly Birds Australia Rarities Committee).

Circumstances of the discovery

During the week that the group was on the Cocos (Keeling) Islands, all suitable habitat was searched intensively to maximise the probability of finding and identifying unusual birds. The Bechet Besar lagoon (also known as Inner Lake) is a recognised location for vagrants on the island, and it was first visited by RB's group on 6 December at ~0830 h local time. JS visited the lagoon again, alone, on 7 December at ~1100 h. The lagoon contains brackish water and has a close border of Coconut Palms *Cocos nucifera* that includes a low, dense growth of young palms and many overhanging palm fronds under which waterbirds can hide. It is ~300 m long but varies in width, being ~40 m wide towards the northern end and ~90 m wide at the southern end. Because of the high water-level, there was no exposed muddy edge.

On 10 December RB and JS visited the lagoon early, arriving at ~0500 h. At ~0530 h, JS was scanning the far end of the lagoon, ~300 m distant, using a 65-mm Zeiss spotting scope fitted with a 20–45× eyepiece, when she located a bird that looked different. The lagoon supports a population of Pacific Black Duck *Anas superciliosa*, and her first impression was that it could have been a small individual of this species. Once sharp focus was achieved, however, it was obvious that this was a teal *Anas* sp. At the time, JS was unaware that no species of teal had previously been reported from the islands. She began describing what she saw to RB, then passed the scope to him, and he confirmed that this was a teal. JS and RB watched the bird and other species at the lagoon for the next 2 hours, and JS took some very distant photographs using a digital SLR camera fitted with a 100–400-mm lens. Whilst under observation, apart for one short flight of ~20 m into an area of open water, the teal remained within 2 m of the farthest northern bank, close to or under the overhanging vegetation.

Description

Even at a distance, the bird was clearly a brown-coloured duck with the profile of a small compact teal with a relatively small and delicate bill. On the water it sat high, as if more buoyant than nearby Pacific Black Duck, so that the short tail was held well above the surface, slightly pointed up (Figure 1). The head was rather plain with a dark cinnamon hue, though close inspection revealed a diffuse

Figure 1. Eurasian Teal *Anas crecca* on water showing bill colour, green speculum with white edge, and white on flank at base of tail. West Island, Cocos (Keeling) Islands, 10 December 2010. Photo: Richard Baxter

Figure 2. Eurasian Teal in flight showing detail in spread upperwing. West Island, Cocos (Keeling) Islands, 6 February 2010. Photo: Rohan Clarke

dark line that extended from each eye towards the rear of the head, and on each side a cream spot at the base of the gape. The flanks were light brown with dark scalloping, and contrasted with the darker brown of the folded wings. A small flash of green speculum was also visible in each folded wing, and close inspection revealed that this speculum was bordered on the trailing edge by a thin white line. The most obvious feature at a distance was a narrow cream or white horizontal mark visible on the flank, adjacent to the side of the tail. In flight, the bird showed pale underwings, and views of the ventral surface showed the darker throat and breast, with this area clearly demarcated from the paler unmarked belly and vent. The bill was dark grey at the tip, shading to cream at the base, particularly on the lower mandible (Figure 1).

During the observations in December 2010, the bird did not dabble but may have been feeding on floating vegetation. It was not heard to call.

The teal was reported to be present at Bechet Besar through late December 2010 and January 2011 (M. Carter *in litt.*; P. Marsh *in litt.*; P. Jones *in litt.*). When RHC observed the bird on 6 February 2011, his attention was focussed on the spread wing (Figure 2). In flight, the bird showed a largely grey-brown upperwing, including all primaries, most coverts (other than the greater secondary coverts) and the scapulars (although the scapulars also showed cinnamon fringes). As with most duck, distinctive pattern within the wing was restricted to an innerwing panel that included the greater secondary coverts and the secondaries. This involved a broad blue-green speculum that extended across all secondaries and was bordered above and below by continuous white bars. The lower white border to the speculum formed a narrow pale trailing edge to the secondaries that was uniform in width. The white upper border to the speculum was clearly wedge-shaped, being noticeably broader towards the outerwing and narrowing to a relatively fine point towards the body; over much of its length it was two or three times as broad as the pale trailing edge of the wing. This covert bar was mostly white but there were one or two cinnamon greater coverts closest to the body. At this time the bird had almost completed a conventional moult of primary feathers, with just the outermost primary (p10) a retained old feather and the second from outermost primary (p9) still growing in (remaining eight primaries being fresh).

RB returned to the Cocos (Keeling) Islands in December 2011, ~12 months after the initial discovery and, remarkably, what was presumed to be the same individual duck was still frequenting the Bechet Besar lagoon.

Discussion

Identification

The bird was clearly a small buoyant but rather delicate teal, with a rather plain appearance when at rest on the water, and a distinctive pattern of the wing when in flight. Further, as the bird was first located in early December and had largely completed a conventional moult by February, any adult male plumage would have been apparent by the February sighting, and the bird can be identified as a female that was presumably adult (at least by February 2011).

That the Cocos bird was neither a Grey Teal *Anas gracilis* nor Chestnut Teal *A. castanea* was immediately obvious, given that those species have a plain unmarked face and do not show a pale streak adjacent to the tail-coverts (Marchant & Higgins 1990). Similarly, although both Garganey *A. querquedula* and Sunda Teal *A. gibberifrons* have been reported in Australia (Christidis & Boles 2008), both can be discounted because neither shows an obvious pale streak adjacent to the tail-coverts (Mullarney *et al.* 1999; Robson 2000; Brazil 2009). The Sunda Teal is also larger and more robust than the Cocos bird, lacks facial stripes, appears more dark-capped, and typically shows a broader white covert bar in the spread wing (Robson 2000). Female and juvenile Garganey can also be further discounted as they show a more prominently marked head and a darker, less conspicuous, speculum than the Cocos bird (Mullarney *et al.* 1999; Brazil 2009). The Cocos bird was also not a female or juvenile Baikal Teal *A. formosa* (an abundant small teal that occurs in the East Asian Flyway) because it did not have a distinct pale loral spot or a pale supercilium. The spread wing of the Baikal Teal shows a broad white trailing edge to a narrow glossy green speculum and a narrow and indistinct cinnamon covert bar (Mullarney *et al.* 1999; Brazil 2009), which differs greatly from the Cocos bird.

This process of elimination leaves just two contenders: Eurasian Teal and Green-winged Teal *A. carolinensis* (collectively known as the 'Common Teal' complex). Identification as a female 'Common Teal' is relatively straightforward, as the Cocos bird showed all of the typical field marks of this pair of species, such as small compact size; fine delicate bill; indistinct facial pattern, including a diffuse dark eye-stripe; pale horizontal flank-streak; and pale base to the bill.

BARC, the Australian checklist authority, defers to taxonomy of the International Ornithological Union (formerly the International Ornithological Committee) bird checklist (I.O.C. World Bird Names) (Gill & Donsker 2012) in circumstances where previously unrecorded species are detected in Australian territory (T. Palliser *in litt*. 2011). Under that checklist, Eurasian Teal and Green-winged Teal are recognised as separate species, with Eurasian Teal (as the name suggests) being found throughout Europe and northern Asia, and Green-winged Teal being restricted to North America. Nevertheless, the taxonomy of these forms is not fully resolved, and not all authors recognise both species (e.g. Clements 2007). Given this, if at all possible, identification as either a Eurasian Teal or a Green-winged Teal would ensure inclusion as a full species on the Australian bird checklist regardless of the taxonomy that is followed.

Separation of Eurasian Teal from Green-winged Teal is challenging, given that the two species differ only subtly, as suggested by their previous treatment as a single Holarctic species. Garner (2008) argued that the details of the pattern of the upperwing are central to their separation. In the Cocos bird the upper border to the speculum is mostly white with just one or two cinnamon greater coverts closest to the body. This is typical of Eurasian Teal, but in Green-winged Teal this covert bar is often largely (or occasionally wholly) cinnamon (Garner 2008). This white covert bar is also clearly wedge-shaped, being noticeably broader towards the outerwing and narrowing to a relatively fine point towards the body. Again, this feature is typical of Eurasian Teal, as in Green-winged Teal the pale covert

bar is more uniform in width across the spread wing (Garner 2008). Finally, the upper border to the speculum is broader (2–3 times as broad) when compared with the pale trailing edge to the secondaries and, again, this is typical of Eurasian Teal. In contrast, the Green-winged Teal invariably shows a narrower covert bar and a broader pale trailing edge, so that these two parallel pale bars (either side of the speculum) are of about equal width (Garner 2008). Another feature that supports the identification of the Cocos bird as Eurasian Teal is that females of that species appear paler and less heavily marked than in the female Green-winged Teal (Gillson 2004). For example, the female Green-winged Teal typically shows a dark crown, dark line through each eye, dark cheek- or ear-spot, and pale crescent at the base of the bill, whereas the female Eurasian Teal is plainer faced (Gillson 2004); the Cocos bird was thus more consistent with the latter.

Distribution and vagrancy of the Eurasian Teal

The Eurasian Teal breeds across much of the Palaearctic region from the United Kingdom in the west to China, Japan and Russia in the east. It is highly migratory and mostly winters in equatorial Africa, the Indian subcontinent, central and southern China, Taiwan, South Korea, Japan and the Philippines (Robson 2000). In South-East Asia, it is an uncommon to locally common winter visitor south to Thailand (Li *et al.* 2009). Although there are no reliable estimates of the population wintering in South-East Asia, it can at times be abundant, and Li *et al.* (2009) speculated that the total population numbered between 600 000 and a million individuals in this flyway.

The Eurasian Teal has a recognised history of vagrancy (Perrenou *et al.* 1994). It has occurred in Alaska and in the western contiguous states of the United States of America (Jarvis 1966; Gillson 2004), where it has been detected with Green-winged Teal. South of its usual wintering range in Africa, it has also been observed in the Democratic Republic of the Congo (formerly Zaire) (Madge & Burn 1988), Tanzania (Mackworth-Praed & Grant 1970) and Kenya (Carboneras 1992), with the southernmost records apparently at Lake Victoria (2°23′S) (Soothill & Whitehead 1978). In Asia, it has occurred as a vagrant in Peninsular Malaysia (Madge & Burn 1988), Singapore (Robson 2000; Kwong 2005) and Malaysian Borneo (Robson 2000). It would therefore appear that in South-East Asia, Eurasian Teal are considered vagrants south of latitude ~12°N. Indeed the confirmed sighting nearest to the Cocos (Keeling) Islands was in Singapore ~1660 km to the north-north-east. The Eurasian Teal on West Island, Cocos (Keeling) Islands, documented here is thus the first reported sighting of this species for an Australian territory (BARC Case no. 660: accepted, T. Palliser *in litt.* 2011), the first south of the Equator outside Africa and, at latitude 12°08′S, the farthest south that a Eurasian Teal has ever been recorded.

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