

Eurasian Hobby *Falco subbuteo* at South Lake, Perth, February 2016: The first Australian mainland record

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Abstract. An adult Eurasian Hobby *Falco subbuteo* was seen at South Lake, in Perth, Western Australia, on 6 February 2016. It was subsequently resighted the same day and on many following days by numerous observers over a 5-week period. This record represents the first Australian mainland record for the species (accepted by BirdLife Australia Rarities Committee: BARC Case no. 912).

Introduction

The observation of an adult Eurasian Hobby *Falco subbuteo* in Perth, Western Australia, represents the first Australian mainland record of this species [BirdLife Australia Rarities Committee (BARC) Case no. 912] and the third for Australia and its external territories, following two previously accepted records from Cocos (Keeling) Island in 2010 (BARC Case no. 682) and 2014 (BARC Case no. 903). There are two unaccepted records, one from Cocos (Keeling) Islands in 2003 (BARC Case no. 414) and one from Christmas Island in 2007 (BARC Case no. 533).

The Eurasian Hobby has been well documented as a long-distance trans-equatorial migrant. It breeds in northern Europe and Asia during the Southern Hemisphere winter (Northern Hemisphere summer), then migrates to equatorial regions of northern India and south-eastern Asia and central and southern Africa during the Southern Hemisphere summer (Northern Hemisphere winter) (Mendelsohn 1997; Orta *et al.* 2018) (Figure 1).

During the non-breeding season, the Eurasian Hobby frequently occurs in eastern Africa as far south as South Africa, where typically the southernmost records are at a similar latitude to Perth, at approximately 32°S (eBird 2019). The species is also regularly recorded through south-eastern Asia, but not further south than approximately Thailand (eBird 2019). It occurs in a range of habitats, typically in lowland areas. As it is an aerial hunter, it prefers open areas such as wetlands, pastures, and open woodlands (Orta *et al.* 2018).

Observations

On 6 February 2016 at 0850 h, I was walking south along the access track from North Lake Road to South Lake when a bird of prey flew close to my left, crossed in front, and perched at the top of a dead tree. It is likely that it was flushed from a perched position, because of the close distance, slow flight and its perching again. The perched bird was observed very briefly through a 20–60 x 85 spotting scope (Vortex Optics) and was recognised as an unfamiliar species (from the combination of its small size for a falcon and the stark contrast in dark cap

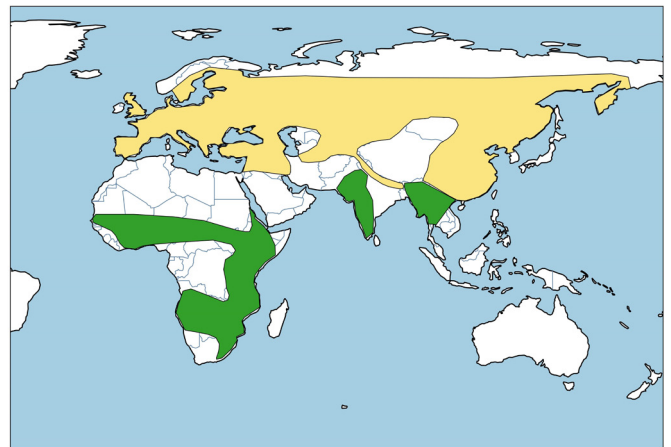


Figure 1. Typical distribution of the Eurasian Hobby: cream areas breeding (Southern Hemisphere winter), green areas non-breeding (Southern Hemisphere summer). Blank areas displayed between the two distributions are likely to be migration zones through which individuals transition. Figure adapted from Orta *et al.* (2018) and eBird (2019).

and white throat plus dark striations on the white breast). Two photographs were taken through the scope using an iPhone (Apple Inc.). The bird then took flight, giving good flight views including the underwing. The images were immediately sent to Daniel Mantle and Plaxy Barratt, who identified the bird as a Eurasian Hobby.

The habitat immediately surrounding the sighting consists of a small, open wetland (~160 m in diameter) bounded by bulrushes *Typha domingensis/orientalis* and paperbark *Melaleuca* spp. trees. Surrounding the lake is a remnant patch of mixed Jarrah *Eucalyptus marginata* and Marri *Corymbia calophylla* woodland with mixed banksia *Banksia* spp. woodland understorey. The parcel of land forms part of the Beeliar Regional Park and is ~1.0 x 0.7 km in size, bounded by major roads. Immediately north of South Lake is the much larger Bibra Lake.

The Eurasian Hobby was resighted by other observers on the same day. At c. 1130 h it was relocated perched in a large Marri tree close to the initial sighting. Over the next 5 weeks, it was regularly seen flying overhead and perching in large trees. Flight views were more common in the early morning and late afternoon, presumably when

the bird was foraging. Consistent with the documented ecology of the species (Orta *et al.* 2018), it was seen to forage late in the afternoon on flying insects, particularly dragonflies (Odonata), catching and consuming them on the wing, in foraging behaviour typical of hobbies. All observations were made in relatively close proximity to the original sighting. On several occasions, interactions between resident Australian Hobbies *Falco longipennis* and the Eurasian Hobby were observed, with the former actively pursuing and chasing the latter. The last reported sighting of the Eurasian Hobby was on 12 March 2016. It is estimated that >50 people observed it over the time period of 6 February–12 March 2016.

Physical description of the bird and identification

Size of the Eurasian Hobby was similar to the Australian Hobby, with direct comparisons made with this species in the field. In the literature, both species are described as of similar build, length and wing-length (Brazil 2009; Svensson 2009; Menkhorst *et al.* 2017; Orta *et al.* 2018). The Eurasian Hobby was readily distinguished by its white underparts (with dark streaks), contrasting markedly with its upperparts (uniform dark slaty-grey to black), including the cap, back of neck, back, wings, rump and tail (Figure 2).

The dark cap strongly contrasted with the white throat, cheek-patch and eyebrow. The dark cap extended down each side of the bird's face, giving a moustached appearance when viewed from the front. The white throat then transitioned to a white breast and belly marked with heavy, black, vertical striations. The vent area and 'trousers' around the legs were a rufous-red colour, and the undertail was slightly barred black and white. The legs were bright yellow (Figure 2).

When the bird was in flight, the complex black-and-white barring and spots on the underwing were visible. At the time of the initial sighting, flight photographs showed that the bird was still actively moulting the primary feathers, with the outer primary feathers still regenerating (Figure 3).

The physical features of the bird suggest that it was an adult. Juveniles of the species lack the red vent and leg



Figure 2. Eurasian Hobby perched at South Lake, Perth, Western Australia, 5 March 2016. Photo: Nathan Piesse



Figure 3. Eurasian Hobby in flight at South Lake, 6 February 2016. Photo: Steve Reynolds

'trouser' colouring and are buff on the breast and throat areas, as opposed to this bird, which had a clean white colour. Additional features suggested that the bird was a male: compared with females, adult males are slimmer, with narrower wings, and tend to show unstreaked or finely streaked 'trousers', whereas females are more noticeably marked (Forsman 2016). Observations of the bird and photographs did not display any notable streaking on the 'trousers', suggesting that it was a male.

Although the overall shape of the bird was very similar to an Australian Hobby, the clean white colour on the belly, breast and throat area as well as the rufous vent and 'trousers' around the legs are colour patterns not seen in the Australian Hobby, and thus clearly differentiated it from this species.

Discussion

Typically, the Eurasian Hobby occurs in both southern Africa and south-eastern Asia during the Southern Hemisphere summer. The individual observed at South Lake could be from either origin, likely to have followed the wrong continent if of African origin or alternatively overshooting its typical Asian range. The date of the last sighting of the bird (12 March 2016) coincides closely with the departure of the bird for its northward migration (Dowsett *et al.* 2008; Meyberg *et al.* 2011), as searches for the bird continued for up to a week with no sightings after this date.

The typical departure period from Zambia during a 28-year study was mid March (Dowsett *et al.* 2008), and a female fitted with a GPS device commenced northward migration from Angola in Africa at latitude 10°37'S on 31 March 2010 (Meyberg *et al.* 2011). If the arrival date of the Eurasian Hobby at South Lake was consistent with migration patterns observed in Zambian birds, then it would be expected that it had arrived at South Lake in approximately mid October (Dowsett *et al.* 2008).

These dates may differ slightly as Zambia is ~1800 km north in latitude of Perth. The Eurasian Hobby has been shown to average 248 km per day on migration and it can travel up to 620 km per day (Meyberg *et al.* 2011). Consequently, a distance of 1800 km (approximate distance in latitude between Perth and Zambia) could be travelled in <1 week and therefore arrival and departure dates might have been similar to the long-term studies in Africa (Dowsett *et al.* 2008).

It is also common for south-eastern Asian bird species to overshoot their typical range and occur in Australia, especially off the north-western coast of Australia (e.g. see Hassell *et al.* 2003; Clarke *et al.* 2016). These sightings may be a result of cyclones or extreme weather events, or possibly a result of pressures in the region such as deforestation and climate change which may be resulting in expansion of their current range and resulting in more Australian sightings of birds originating from south-eastern Asia (Brooks *et al.* 1999; Sodhi *et al.* 2004; Foden *et al.* 2013).

In the years following this initial sighting in 2016, sightings of Eurasian Hobbies have continued to be made in Perth during the months of December, January and February in 2017, 2018 and 2019 within 3 km of the initial sighting at Bibra Lake and North Lake (eBird 2019). Physical characteristics of these birds suggest that they were different individuals from the individual first observed and described in this paper (eBird 2019).

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