## First-winter Indian Spotted Eagle Aquila hastata

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ndian Spotted Eagle Aquila hastata has previously been regarded as a subspecies of Lesser Spotted Eagle Aquila pomarina. Parry et al. 2002, however, give many reasons why it should be regarded as a species in its own right. The colouration, many measurements and breeding biology differ distinctly from those of Lesser Spotted Eagle. In the AERC TAC report of December 2003 the issue is still undecided (AERC TAC 2003). Whatever its taxonomic position, it is important to keep in mind how different it is from Lesser Spotted Eagle, when trying to identify the spotted eagles in the Indian peninsula. The difference is not really covered in the field guides of the area (Grimmett *et al.* 1999), in which the description in fact fits Lesser Spotted Eagle and, therefore, is contradictory with the features of *hastata*. This at least partly explains why even experienced birders have had problems identifying many of the spotted eagles in India.

This article covers the field identification of juvenile Indian Spotted Eagle. It is mainly based on the almost 40 individuals that the authors have seen in Goa, India in winter (MK 1999-2003, AL & AF 2003), and in comparison with juvenile Spotted Eagle *Aquila clanga* in the field, as well as the impression the

authors have, based on literature (eg. Forsman 1999) and a rather broad experience of Greater Spotted, Lesser Spotted and Steppe Eagle *Aquila nipalensis* from Finland, eastern Europe, the Middle East, Arabia and Africa.

The Indian Spotted Eagle breeds in northern India (Ferguson-Lees *et al.* 2001). It is usually regarded as a resident, but the individuals in Goa are obviously wintering birds. We have only encountered first-winter birds there. *Hastata* is slightly less numerous than *clanga*, but it is not rare. In the observation period from November to March, the plumage of juveniles has been slightly worn, just



Fig I. First-winter Indian Spotted Eagle Aquila hastata. The belly of this bird is broadly pale. The 'window' formed by the inner primaries is typically distinct. Only one half-moon is visible at the bases of the outermost primaries. The wings are narrower than in Greater Spotted Eagle and the wing-tip is formed by six fingers (cf Fig. 2). This individual is also shown in Fig. 7. © Jari Peltomäki, Goa, India, December 1997.



Fig 2. First-winter Greater Spotted Eagle A. clanga. A pale bird, resembling a hastata, but the barring is less distinct and restricted to the middle of the feathers. The single half-moons at the base of the primaries are distinct. The wings are broader and show seven fingers, as the fourth is longer than in hastata. The tail is darker. © Annika Forsten, Oman, 11 November 2002.

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Fig 3. First-winter Indian Spotted Eagle. The single half-moons at the base of the outermost primaries are very indistinct. The narrow barring is visible on the primaries, secondaries and tail. © Annika Forsten, Velim Lake, Goa, India, 17 December 2003.



Fig 4. First-winter Indian Spotted Eagle. The same bird as in Fig 3. The Aquila patch at the base of the primaries is broad and diffusely bordered. The lesser and median coverts are distinctly paler than the remiges, while the greater coverts are somewhere in between, varying from brown to blackish-brown. The tips to the greater coverts are pale, but no white 'drops' are visible. Some white shows between the scapulars. © Annika Forsten, Velim Lake, Goa, India, 7 December 2003.

as in wintering juvenile Greater Spotted Eagles. This indicates that breeding occurs during the northern summer.

Indian Spotted Eagle is, like Lesser Spotted Eagle, distinctly smaller and more narrow-winged than Greater Spotted Eagle. The tail is proportionately longer and narrower. The legs are long and seem narrow, as in Lesser Spotted



Fig 5. First-winter Indian Spotted Eagle. A pale-looking bird. The pale tips to the greater coverts are worn narrow. There is no golden nape patch, typical of a Lesser Spotted Eagle. The bill seems robust, especially at the base and the gape is deep. The legs are thin as in Lesser Spotted Eagle. Matti Kapanen, Baga, Goa, India, 20 December 2000.

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Fig 6. First-winter Indian Spotted Eagle. From a distance and against the sun, only the sharply defined pale 'windows' and the white trailing edge to the wing are visible. © Annika Forsten, Velim Lake, Goa, India, 17 December 2003.



Fig 7. First-winter Indian Spotted Eagle. The same bird as in Fig. I. The colour of the upperparts is reminiscent of a Steppe Eagle A nipalensis, but the greater coverts are brown (not blackish) with pale tips forming only a narrow wing-bar. © Jari Peltomäki, Goa, India, December 1997.

Eagle. As in *pomarina* the fourth primary (from the inside, seventh from the outside), is rather short without creating a finger. The head and bill seem larger than in *pomarina*. The jizz and some of the colour features may even create an impression simlar to Booted Eagle *Hieraaetus pennatus*.

The colouration of the **underparts** is quite similar to those of a juvenile Greater Spotted Eagle. The wing-coverts are almost as dark as in Greater Spotted Eagle and they seem darker than the remiges. There is a varying amount of white on the

tips of the greater coverts, as in Greater Spotted and Lesser Spotted Eagle. The basic colour of the **remiges** is rather pale. The dark bars are distinctly narrower than the white bars, thus closer in appearance to Greater Spotted Eagle (although perhaps slightly more distinct) and narrower than in Lesser Spotted Eagle. In *hastata* the barring continues almost to the feather tip, unlike in *clanga*. The innermost three to four primaries are especially pale, and form a distinctly bordered pale 'window'. This 'window' is narrower and more distinct than in

juvenile *clanga*. The 'window' is visible from a surprisingly long distance as a pale wedge, or rather a triangle, against the otherwise dark underparts of a circling eagle. The outermost primaries darken towards the tip with only the tip of the fingers being darker than the other remiges. The feather bases are distinctly paler and often the barring reaches halfway onto the fingers. Many individuals lack the white half-moon at the base of the outermost primaries of a typical *clanga*. Some birds do show a half-moon, but probably never a *pomarina*-type dou-



Fig. 8. First-winter Steppe Eagle, A. nipalensis, is quite similar to Indian Spotted Eagle, but more contrasting. The primaries and greater coverts are darker and the pale tips to the greater coverts form a prominent wing-bar. The difference in structure is very obvious. © Annika Forsten, Oman, 17 November 2002.



Fig. 9. First-winter Greater Spotted Eagle. Compared to Indian Spotted Eagle, the Aquila patch is less distinct, being formed mostly by the shafts of the primaries. The wing-coverts show several rows of white-tipped feathers and the ground colour of these feathers is darker. © Annika Forsten, Oman, 17 November 2002.

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Fig. 10. First-winter Indian Spotted Eagle. The remiges and rectrices are rather pale with very narrow barring which reaches from the feather bases to the tips, even to the fingers. The wing-coverts seem distinctly darker than the remiges. The base of the outer primaries show only an indistinct single half-moon. There are only indistinct pale streaks on the breast. © Annika Forsten, Baga, Goa, India, 29 November 2003.

ble half-moon (at the bases of both the primaries and greater primary-coverts). The **tail** barring is similar to that of the remiges. The **breast** and belly are slightly paler than in *clanga* and there are often narrow, pale streaks on the breast as in *pomarina*, while in *clanga* these are usually more distinct and more contrasting. The **vent** and undertail-coverts are broadly pale brown as in other *Aquila* eagles. Some individuals show a broadly pale belly. The head often looks rather pale from below as in *pomarina*.

From **above**, a juvenile *hastata* is rather easy to separate from a juvenile Greater Spotted Eagle. The mantle, scapulars and wing-covert area (formed by the

lesser and median coverts) are pale as in pomarina, but the colour, being midbrown, recalls that of a juvenile Steppe Eagle. There is a uniform white wing-bar formed by the pale tips of the greater coverts. The greater coverts are mid- to dark brown, about halfway in colour between the leading lesser coverts and the remiges, although the darkness varies greatly depending on the angle (the greater coverts in pomarina are darker, similar in colour to the remiges). According to Parry et al. 2002, there are pale tips to the feathers on Indian Spotted Eagle, while on Lesser Spotted there are pale tips to both the feather tips and shafts. It is rather difficult to understand what this means and

our material is not large enough for such a difference to be noted, but it seems to us that *hastata* does not show such distinct pale drop-like tips to the median and lesser coverts as *pomarina* (and *clanga*) do, but rather restricts them to the tips of the greater coverts as in *nipalensis*. The *Aquila* patch is distinct in Indian Spotted Eagle. The uppertail-coverts are broadly white and sometimes there also seems to be some pale on the back. The trailing edge looks broadly white.

On perched birds noteworthy features on Indian Spotted Eagle are the long gape, which reaches almost to the rear of the eye when viewed from a 90° angle, and the lack of a pale nape patch. Many

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Fig. 11. First-winter Lesser Spotted Eagle. The remiges are darker and the bars broader than in Indian Spotted Eagle. This individual shows a distinct outer half-moon, but the inner is rather indistinct. The innermost primaries are only slightly paler than the others. © Annika Forsten, Israel, \* October 1996.

individuals show small white spots on the coverts and head when seen close up, as sometimes does *pomarina*. These probably wear off quickly.

When seen well, Indian Spotted Eagle is quite a distinctive eagle. The colouration does not seem to vary much. Simply put, from above a juvenile Indian Spotted Eagle looks like a juvenile Steppe Eagle, while from below it looks like a juvenile Greater Spotted.

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