

Ageing and Sexing Series*

Part 5: Ageing and sexing the Eurasian Woodcock *Scolopax rusticola*

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INTRODUCTION

The criteria presented here have only been established from European specimens. Even if only one species is known, we cannot be sure that these criteria are available for Asian populations.

The Eurasian Woodcock is distributed throughout Eurasia from approximately 35°N to 65°N, except in South Asia, where it can be observed to 10°N, and from the coast of the Eastern Atlantic to that of the Western Pacific, as far as 160°E. In Europe, it breeds mainly in the woodlands of Russia, Fennoscandia and Central Europe. Autumn migration starts in the last ten days of September in Russia but major migratory movements usually occur from mid-October to the end of November. The main wintering grounds of the European population are in W and S Europe (the British Isles, France, and the Iberian Peninsula) and around the perimeter of the Mediterranean (Italy, Greece, Turkey, and North Africa). Spring migration starts at the end of February with a peak in March. The latest birds reach their breeding grounds in mid-May in the east of European Russia. The woodcocks that breed in Central and N Asia winter in India, China and in the northern parts of South East Asia.

MOULT SCHEDULE

Post-juvenile moult, in which juvenile plumage is partially replaced by first winter plumage, starts when young birds are about two months old, i.e. from the beginning of June (at the earliest) to mid-October (Fig. 1). It lasts about one month. This moult concerns all feathers except primaries, secondaries, tertials, greater primary coverts and under-wing coverts.

Post-juvenile moult is stopped by post-nuptial migration departure, the timing of which varies and depends on the locality of the breeding grounds. No moult occurs during migration and winter except sometimes for tail feathers till late November.

The complete moult of greater upper-wing coverts depends on hatching date. Birds that hatch after the end of June, especially in northern and eastern breeding localities, do not have enough time to completely moult their greater upper-wing coverts. Consequently, in the wintering grounds, first-year birds can be classified into three categories according to the moult pattern of their greater upper-wing coverts: completely moulted, incompletely moulted, and unmoulted. Unmoulted greater upper-wing coverts are not moulted until the following summer.

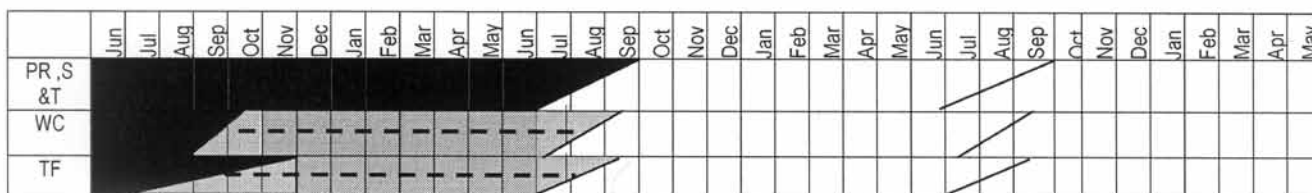


Fig. 1. Moult schedule of Eurasian Woodcock. PR, S & T = primaries, secondaries and tertials. WC = upper- & under-wing coverts. TF = tail feathers. Black = juvenile feathers, grey = winter plumage, white = breeding plumage. Broken line = presence of retained juvenile feathers.

*This series summarising current knowledge on ageing and sexing waders is co-ordinated by Włodzimierz Meissner (1Avian Ecophysiology Unit, 2Vertebrate Zoology Unit, Department of Vertebrate Ecology & Zoology, University of Gdańsk, Al. Legionów 9, 80-441 Gdańsk, Poland. w.meissner@univ.gda.pl). See *Wader Study Group Bulletin* Vol. 113 p. 28 for the Introduction to the series.

Moult of body feathers can occasionally be observed in first-year birds in February–March.

Adult post-nuptial moult can be observed from late June to early October. As for first-year birds, moult can be stopped by migration departure, particularly for under-wing coverts. Some adults may have under-wing coverts of the juvenile pattern and can be classified as second-year birds.

AGEING

Plumage differences between juveniles and adults relate mainly to the patterns on the primaries, upper- and under-wing coverts.

Juvenile plumage

In juveniles, the greater upper-wing coverts are short and narrow with a predominance of warm colours (reddish-brown or tawny) (Fig. 2). The dark-edged bars across these coverts are narrower and more greyish than in adult-type plumage and the down at the base of the feathers is less developed.

The primary coverts of juveniles are tipped reddish-brown which is similar to the colour of the spots on the same feathers (Fig. 3). This fringe is generally 1.5–2.5 mm wide, but in a small proportion of birds it may be narrower.

The light spot on the underside of the tail feathers is a dull greyish-white and the light-brown patterns are more prominent and more diffuse than in adult-type feathers.

First winter plumage

First year birds can be distinguished by the wear on primaries 8–10 (Fig. 4). Wear can be slight (such as a few notches on the inner web), medium (notches on both webs) or heavy (large notches on both webs) depending on the age of the bird.

The greater primary coverts are not replaced during post-juvenile moult so they are the same as those of juvenile plumage.

First winter birds hatched at the beginning of the breeding season have time to moult all their greater upper-wing coverts before autumn migration and so these coverts are similar to those of adults (Fig. 5). Birds that were hatched at the end of the breeding season have no time to moult any greater coverts so these all have the juvenile pattern. A third group only have time to moult some of their greater upper coverts so both adult and juvenile patterns are present (Fig. 2). Usually the greater upper-wing coverts moult in a regular manner from the outermost towards the body (1 to 16). But sometimes the moult can be irregular with unmoulted coverts occurring among coverts that have already moulted (Fig. 6).

In first winter birds, the shape of the tip of primaries 5 and 6 is slightly convex (Fig. 7) and the greater under-wing coverts are brownish with pointed/oblong tips (Fig. 8). The light spot on the underside of the tail feathers is bright white and the light-brown spots are usually well-defined.

Adult plumage

Adult plumage is similar throughout the year. There is no difference between breeding and non-breeding plumage.

Adults moult their large feathers (primaries, secondaries, tertials and tail-feathers) during July–September. In autumn and winter, the primaries are unworn and in distinctly better

condition than those of first-winter birds (Fig. 4). The shape of the tips of primaries 5 and 6 is broad and slightly concave (Fig. 7). When the primaries are fairly old in spring/summer, their tips can be slightly worn.

Adult primary coverts have a narrow fringe (<1.5 mm wide) which is whitish and paler than the spots on the same feathers (Fig. 3). All greater upper-wing coverts are russet and light brown with a clear pattern. They are rather long and wide, with well developed down at the base. Under-wing coverts are greyish with broad “square” tips (Fig. 8). Occasionally adults have retained juvenile under-wing coverts and these can be aged as second year birds.

Ageing summary

The presence or absence of characteristic juvenile feathers, such as upper- and under-wing coverts and tail-feathers, combined with an assessment of primary wear means that the ageing of woodcock as first-year birds (*Ringling codes: EURING – 3; North American – HY*) or adults (*Ringling codes: EURING – 4; North American – AHY*) is straightforward until about June. In autumn, winter and spring, most first winter birds can be identified by primary wear and shape and the presence of retained coverts. Some birds that show all the usual characteristics of adults may retain old juvenile under-wing coverts and these may be aged as second-winter birds (*Ringling codes: EURING – 5/7; North American – SY/ASY*).

SEXING

No sex-related differences in plumage are known. On average, males have shorter bills and a longer tails than females but there is a large overlap which makes it impossible to sex the majority, but a bill length of >80 mm can be used as a criterion for females and a tail length of >88 mm as a criterion for males. More birds can be sexed using the tail/bill ratio. Adults with a tail/bill ratio of ≥ 1.20 are males; if it is ≤ 1.10 , they are females. Juveniles with a tail/bill ratio of ≥ 1.20 are males; if it is ≤ 1.00 , they are females. This allows sex-determination of about 45% of adults and 25% of juveniles.

ACKNOWLEDGEMENTS

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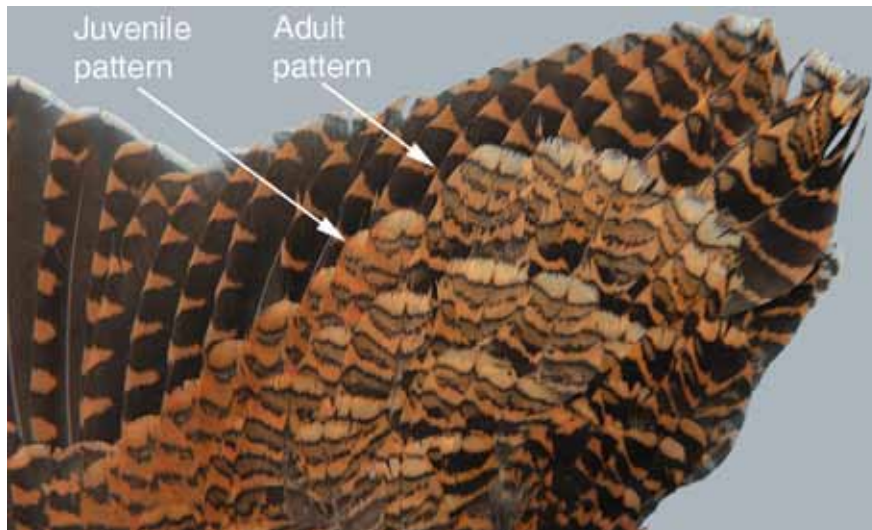


Fig. 2. Incomplete moult of greater upper-wing coverts in a first-winter Eurasian Woodcock. Two feather patterns are visible: juvenile and adult. Note differences in feather size and colour.

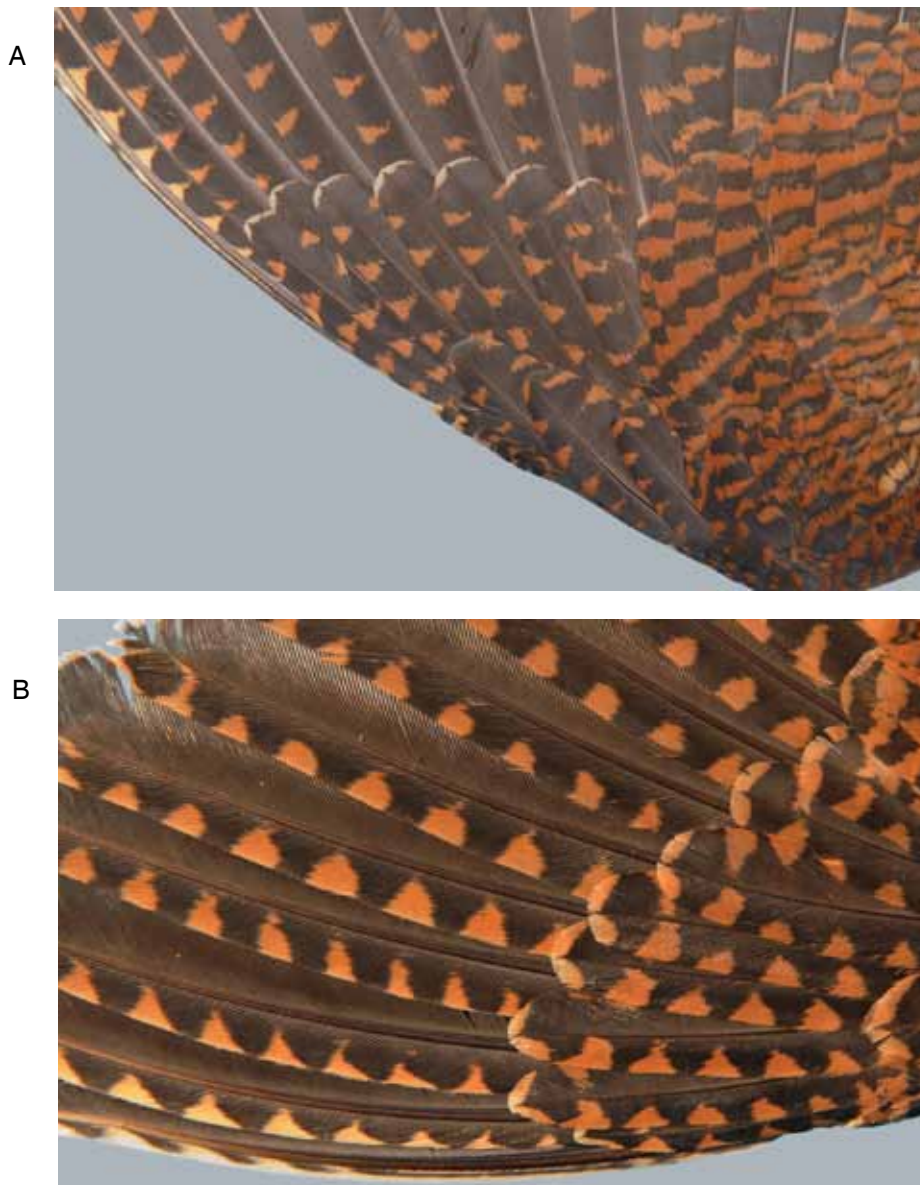


Fig. 3. Typical pattern on primary coverts of (A) adult and (B) first-winter Eurasian Woodcock.

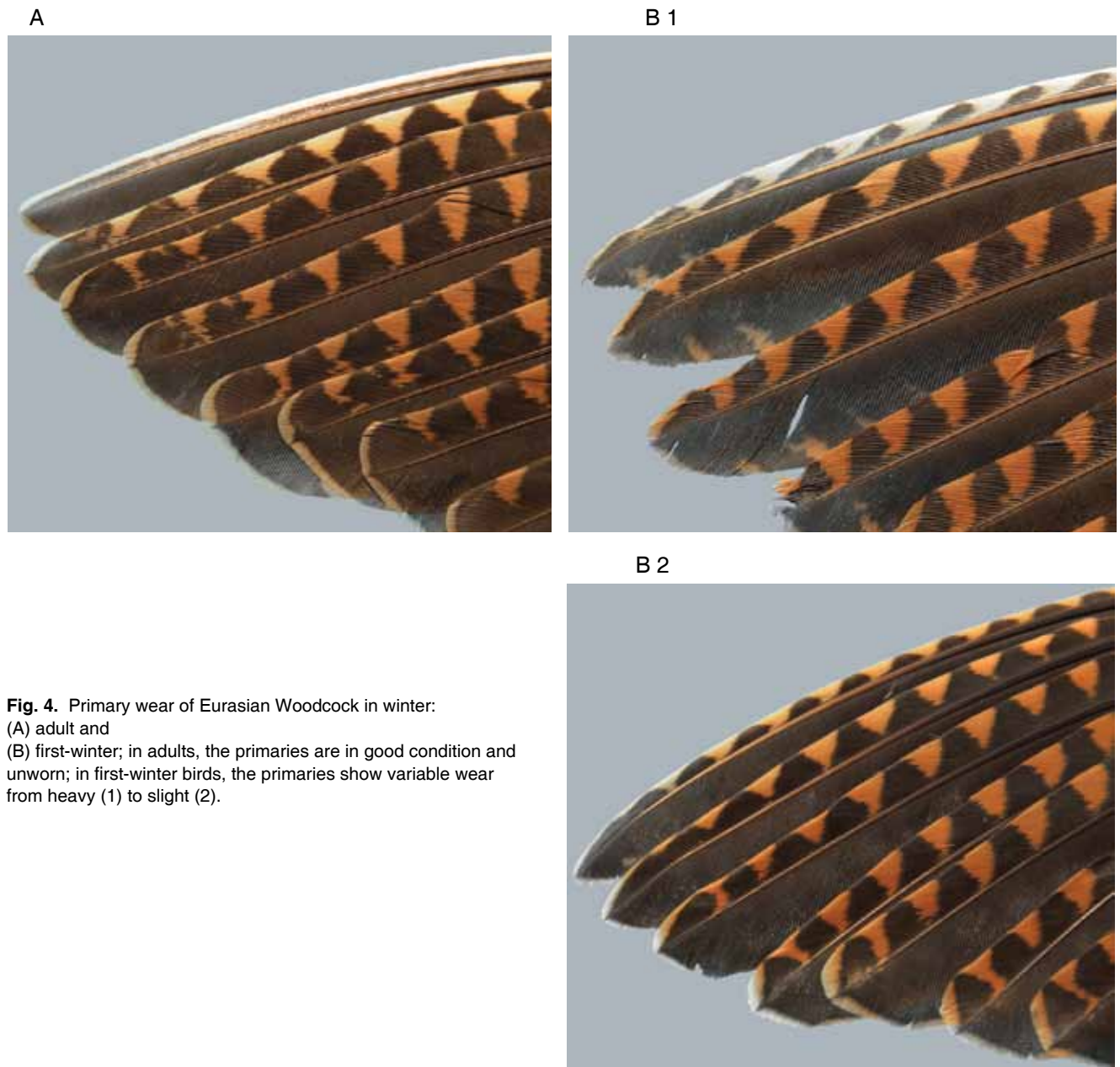


Fig. 4. Primary wear of Eurasian Woodcock in winter: (A) adult and (B) first-winter; in adults, the primaries are in good condition and unworn; in first-winter birds, the primaries show variable wear from heavy (1) to slight (2).

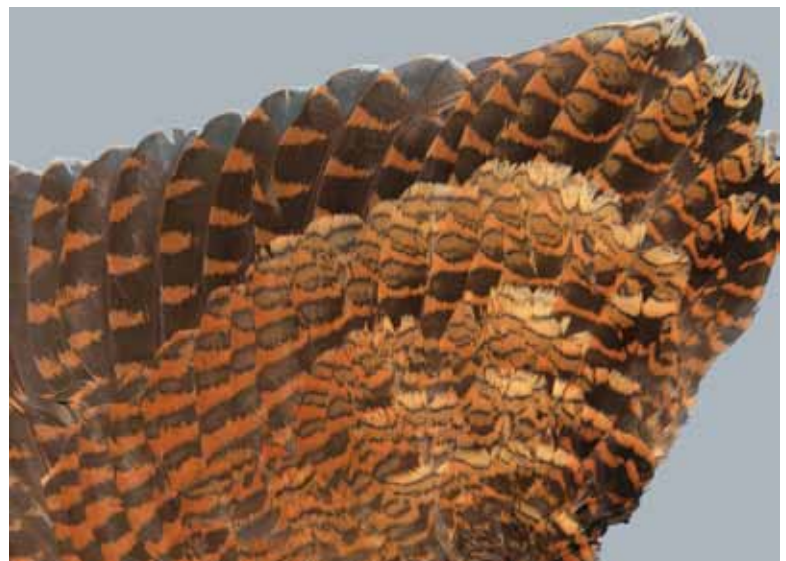


Fig. 5. Completely moulted greater upper-wing coverts in Eurasian Woodcock; this can be observed in both first-winter and adult birds.

Fig. 6. Incomplete and irregular moult of greater upper-wing coverts in Eurasian Woodcock.

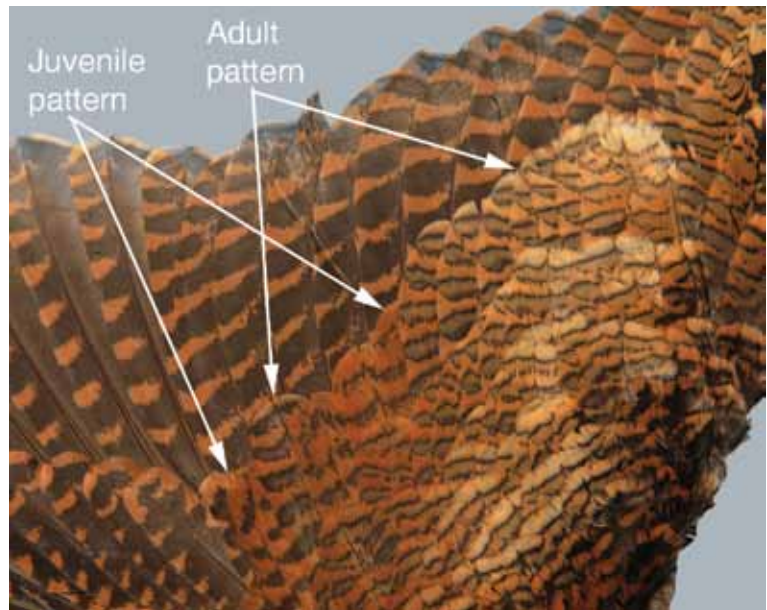


Fig. 7. Primary tip-shape in Eurasian Woodcock: large and slightly concave in adults (A), slightly convex in first-winter birds (B).

Fig. 8. Greater under-wing covert tip-shape in Eurasian Woodcock: broad and square-shaped in adults (A), pointed and oblong in first-winter birds (B).

