

# PROBLEMS WITH THE AGEING OF DUNLINS IN AUTUMN

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Amongst features that are used widely to differentiate juvenile and adult Dunlins *Calidris alpina* is the colour of the wing coverts. In juveniles these are fringed buff, whilst the new wing coverts of adults (after moulting) should be fringed whitish (Prater *et al.* 1977, Ferns 1981). At least some second-year birds can be identified by the presence of juvenile feathers (with buff fringes) in the inner median coverts (Holmes 1966, Prater *et al.* 1977). As a result of our work on waders at the mouth of the Vistula in Gdansk Bay (Poland), we now believe that this method of distinguishing age classes of Dunlins may be more complicated than is generally supposed, and that consequently some Dunlins may be aged wrongly on the basis of wing covert colour. We outline the reasons below.

At the mouth of Vistula, waders (mainly Dunlins) have been ringed throughout July to September in most recent years. Birds are caught in traps checked every two hours from sunrise to sunset (Gromadzka 1981). In the first half of July mainly adult Dunlins of the nominate race are caught. The few juveniles that we catch belong to the local breeding population of *schinzii* race (Gromadzka 1983). At that time adults have worn feathers. Amongst them, second-year birds (identified by buff fringes of some inner medians) have especially worn primaries, tertials, median coverts and rectrices.

In the first half of July we catch the first adult Dunlins starting to change their primaries, the earliest recorded date being 7 July. In about mid-August, we start to catch juveniles, and adults are more and more advanced in primary moult. By the end of August/beginning of September most adults have renewed all their primaries. Beginning in the second half of July, during primary moult (at a primary moult score above 15), the median wing coverts are replaced also. It is easy to see these new median covert feathers, since they look very fresh. However, not all new coverts look like typical adult winter ones (i.e. with whitish fringes). Most adults have a mixture of new median coverts fringed buff-brownish (similar to juveniles) and whitish. Occasionally we even catch adults with all new medians fringed buff-brownish. These could be distinguished as adults from the remnants of a black belly patch, and growing or new primaries. The buff-brownish colour of adult medians varies in intensity: in some birds it is very pale, in others it is bright rust-brown.

The catching of Dunlins during autumn migration in 1983 at the mouth of the Vistula was exceptionally successful, compared with other years, so we could follow changes in plumage in more detail than before. Between 20 July and 7 September, 1409 adult Dunlins were caught. 70% were moulting, and amongst these about 20% had buff-brownish fringed new median coverts. Preliminary examination of primary moult data indicates that second-year Dunlins started to moult their primaries earlier than older birds, possibly because most second-year birds do not

breed (Soikkeli 1970). Adults with some or all buff-brownish coverts, likewise started primary moult earlier than adults with all new medians fringed whitish. Perhaps these adults with buff-brownish fringed median coverts had not bred that year.

We were prompted to write this note after receiving reports of two Dunlins that we had ringed at Vistula mouth in autumn 1983 as adults with some buff-brownish covert fringes, and which were recaptured late in the same non-breeding season. One was caught in GDR on 1 September, 3 days after ringing at Vistula mouth. The other was caught in the Netherlands at the end of November, three months after ringing. Both were aged as juveniles when recaptured. This means that these birds, for the people who recaptured them, must have looked similar to juveniles, at least according to the colour of the medians. When ringed, the bird recaptured in the GDR had been moulting its primaries, and still had remnants of the black belly patch and of summer breeding plumage on the mantle, so its subsequent identification as a juvenile may have been a recording error. But how did the Dutch recaptured bird look three months after ringing? The Dutch ringers, Lida Goede and Piet Zegers, who recaptured this bird, explained as follows: "... we were puzzled by this bird.... On its registration card we noted: looks like an adult, but its wing coverts have traces of light brownish fringes. At this time of year (November-December) we recognise adults by their grey wing coverts and new primaries, juveniles by their brown fringed coverts and slightly worn primaries.... We had a similar case... a bird collected 22 October 1982 had new primaries and secondaries... had still about three-quarters of its breeding plumage and showed large black belly patch: clearly an adult. However the same faint brownish fringes were noted on new wing coverts".

There are two main questions which arise from these observations:

1. is the brownish colour in the median coverts of adults connected with age, or is it another kind of variability?
2. how can these adults be distinguished from juveniles when both age groups are in complete winter plumage? As described above, mistakes in assigning age-classes may occur, but how widespread is this problem? Any such errors will usually result in adults being identified wrongly as juveniles. We think that it is essential in late autumn to look very carefully at the amount of wear on the primaries: juveniles should have primaries a little more worn than adults.

We have found no answers in European publications to these questions. However Holmes (1966) indicated that the confusion of juvenile with adult Dunlins in western North America is possible "because some new coverts.... of adults may have the same buffy coloration as the corresponding juvenile feathers".

Do other ringers have examples in their files of moulting adults that were subsequently recorded as juveniles? We would be most pleased if anyone who has similar observations, or can suggest solutions to the problem, would contact us.

We are most grateful to Nigel Clark, Nick Davidson, Peter Ferns and Tony Prater for commenting on an earlier draft outlining the problem.

#### REFERENCES

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## REVIEWS AND ABSTRACTS

SCHMIDT, F.-U. 1978. [Studies on the migration of the Jack Snipe (*Lymnocyptes minimus*) in the valley of the River Leine in Southern Lower Saxony.] *Faun. Mitt. Sud-Niedersachsen* 1: 369-388. Author's address: Kabenstr. 18, 3044 Neuenkirchen, G.D.R.

#### Abstract by Hermann Hötter

This paper deals with 882 observations and 103 trapped specimens of Jack Snipe in the valley of Leine in the years 1970-1977.

Spring migration started in February and ends in May, with a peak in late March or early April. Autumn migration, when numbers exceeded those during spring migration, started in early September, reaches its peak in the middle of October, and ends in late November. There are observations of birds during winter but not during summer.

Recaptures of 18 ringed birds yielded minimum resting durations from 1 to 40 days.

The measurements of the ringed birds are given in Table 1.

Table 1. Morphometrics of Jack Snipes in Lower Saxony. All measurements are in mm.

	n	mean	range
wing	83	115.46	106-125
tip of wing	38	51.58	46-58
tail	84	52.00	45-60
bill	84	41.19	38.6-43.5
nalospi	84	37.05	34.4-39.1

There were highly significant correlations between bill length and nalospi, as well as between wing length and the length of the tip of the wing. No significant correlations were found between any other measurements.

Weights ranged from 37.1 - 75.0g. The mean weight in spring was 65.2g (n=4) and in autumn was 55.4g (n=80). Most weights of recaptures within 7 days had dropped. Losses ranged from 1.2g - 10.0g (n=7) between first and second capture. For longer periods before recapture weights had usually risen, by 0.2g - 10.8g (n=6).

The paper gives data also on resting habitats, behaviour, vocalisations and daily activity.

Kalchreuter, H. (ed.). 1983. PROCEEDINGS OF THE SECOND EUROPEAN WOODCOCK AND SNIPE WORKSHOP (FORDINGBRIDGE, MARCH/APRIL 1982). Pp. 164; black-and-white photographs and numerous text figures. Verlag Dieter Hoffman, 65 Mainz 41, Federal Republic of Germany. Price £5.00 (DM 19.80).

With the exception of the final two chapters, one on changes in the migration pattern of the Common Snipe *Gallinago gallinago* (showing that their main moulting and winter quarters have shifted from the Netherlands to Britain), the other on hunting bags of Snipe in Denmark, all this collection of papers refer to Eurasian Woodcock *Scolopax rusticola*. The contributions from the Game Conservancy at Fordingbridge, particularly from Graham Hiron, provide a sound core of information of interest to all wader specialists. Other contributions come from several European workers. Topics covered include diet, breeding biology and behaviour, production estimates, population dynamics, migration and fidelity to wintering sites. The "game" aspects of the species are covered in several papers on hunting and "harvesting" Woodcock at different times of year and in different parts of Europe. The result is an excellent compilation of the present state of knowledge of Woodcock biology, with many points highlighted that could repay study in other wader species.

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