THE USE OF PRIMARY MOULT IN AGEING THE 6-15 MONTH AGE CLASS OF

SOME PALAEARCTIC WADERS

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Palaearctic waders in their first (juvenile) plumage are normally fairly easy to distinguish in the hand, from older birds. Once body moult takes place, it is often difficult to age satisfactorily these first-year birds. In all wader species visiting southern Africa from the northern hemisphere, except for <u>Calidris</u> <u>minuta</u>, the juvenile has only a partial primary moult, involving a varying number of outer feathers. This factor allows juveniles to be distinguished easily from adults (i.e. older than second year) by the much fresher appearance of the outer primaries. This distinction will hold good until the older inner primaries start to be replaced at the first complete primary moult at the beginning of



A Greenshank being moulted

Photo:S.Pringle

their second southern summer.

Insufficient data have been collected on most species to confirm how widespread this form of moult may be, but I would suggest that all birds intending migrating north probably replace these outer feathers at least. Whether this is the case or not with some overwintering species such as <u>Pluvialis squatarola</u> is not yet known but should be checked by coastal workers. It is possible that all the first year plovers have a complete moult of the remiges starting in January or February although arrested moult has been noted in a first year <u>squatarola</u> in May.

Curlew Sandpiper Calidris ferruginea

Adult birds moult during the period August to early March, the duration of moult in an individual probably being about 3 to $3\frac{1}{2}$ months.

First-year birds replace the outer four to six primaries during the period January to July. Those birds moulting early probably

intend to migrate north with the breeding population whilst the overwintering birds tend to moult later. Occasionally the complete primary moult may start before the outer primary moult is completed.

Little Stint Calidris minuta

Adult birds moult during the period early September to March, some birds only starting in the latter half of November. The duration of individual moult is about 3 to $3\frac{1}{2}$ months (Tree in prep.).

First year birds have a complete replacement of the primaries, normally starting end November/early December with occasional birds starting in early November. Most birds have completed moult by early April though a few birds may continue till a later date and it is possible that some, possibly sickly or injured birds, do not moult at all.

The moult of these first-year birds is generally more rapid than that of older birds, taking about $2\frac{1}{2}$ months to complete.

Ruff Philomachus pugnax

Adult birds normally moult during the period August to February, the actual duration is not yet known but is in excess of 3 months.

First-year birds replace the outer two to four primaries (one record of six) in the period January to April. Overwintering birds may start the complete wing moult as early as the beginning of July. Care must be taken with second-year birds which sometimes moult the six to eight unmoulted first-year primaries and then halt, moulting the outer feathers at a later date thus giving a slight difference between these two sets of feathers, but this contrast is nowhere as great as that of the first partial moult.

Using wing moult in conjuction with changing leg colour and plumage (Tree in prep.) should give one a pretty accurate age guide.

Common Sandpiper Tringa hypoteucos

Adult birds may start moulting in the latter half of August and some birds may not be finished moulting until the end of February. Moult probably takes 3 to 4 months in individual birds.

First-year birds replace the outer five to seven primaries, this moult starting from the beginning of December and some birds may not be completed till April.

Because of the considerable overlap in moulting time between the age groups and the poor contrast between old and new primaries on first-year birds considerable care, especially at night, must be taken from December onwards.

Marsh Sandpiper Tringa stagnatilis

I have handled surprisingly few Marsh Sandpipers in active moult. Adult birds appear to complete all or most of their moult prior to arrival here, most birds arriving in fresh plumage or late arrested moult. The completion of moult after arrest may not be until as late as February.

First-year birds moult the outer two to four primaries but with the sparse information available no estimate of the moulting period can yet be made although one bird was just completing its outer primary in late May. Overwintering one-year-old birds may start their complete moult in June or July.

Greenshank Tringa nebularia

Adult birds normally moult during the period late July to early January.

First-year birds moult only the outer two to four primaries, normally during the period January to April. The first complete moult may start as early as the latter half of May in overwintering birds.

Wood Sandpiper Tringa glareola

Adult moult takes place from late July while the later birds should be completed by the end of January, individuals probably taking about $3\frac{1}{2}$ to 4 months to complete moult.

First-year birds moult the outer three to five primaries during the period January to early April.