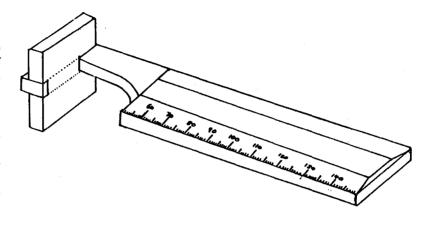
## A simple "head and bill" ruler

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Citation: Reynolds, C.M. 1986. A simple "head and bill" ruler. Wader Study Group Bull. 48: 12.

This is a stepped-ruler with a section cut away for the bird's head as shown in the diagram. The measurement is taken by resting the bill tip on the scale and this thus removes any risk of bending the bill. The original model was made from a length of scrap perspex of cross-section  $4.5 \times 0.5$  cm. The cutaway was removed and a piece of plastic fitted in to form the stop. Then a white plastic ruler was glued into position, having carefully zeroed it. It was originally designed with a gap of 48 mm for use on Dunlin Calidris alpina, but during two years use it has also proved to be suitable for other species up to the size of Bar-tailed Godwit Limosa lapponica.



## Correct measurement of the wing-length of waders

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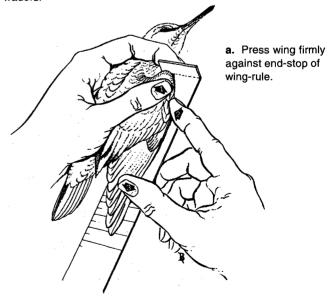
Citation: Evans, P.R. 1986. Correct measurement of the wing-length of waders.

Wader Study Group Bull. 48: 11.

It has been drawn to my attention that there is some confusion as to the most reliable method of measuring the winglength of waders, i.e. the method that minimizes differences in measurements obtained from the same bird by different workers on the same occasion, or by the same worker on different occasions (when the plumage of the bird is wetter or drier than usual; not, of course, when the wing is more or less abraded at the tip!) I considered various methods of measurement in a paper (Evans 1964) which may not be generally available to wader workers, and recommended the use of the flattened and straightened measure, in which both the camber along and across the wing and the natural curvature of the primaries are removed. This produces a maximum measurement and is the method recommended in the 3rd edition of the BTO Ringer's Manual (Spencer 1984), which may not be generally known to workers outside Britain. The description of the method in the Manual closely follows the text of my original description, and is as follows:

[The measurement is made] by sliding the wing forward along the rule until it meets the stop, straightening the bastard wing so that it falls into line (as far as possible) with the longest primary, and then straightening and extending the longest primary to its maximum length by stroking the thumb of the free hand along the shafts of the primaries, from the

Figure 1. The correct method of measuring wing-length in waders.



b. Straighten curve of wing.c. Stroke along feathers to their end.

