

Kania W. 2004. *Observer error in measurements of nestling wing length in small passerines*. Ring 26, 2: 79-87.

Abstract

Wing lengths of nestlings of Great Tit *Parus major*, Blue Tit *P. caeruleus* and Pied Flycatcher *Ficedula hypoleuca* measured by one observer (WK) were compared with the measurements taken concurrently by one of 30 other observers. In total 1321 pairs of measurements were analysed. The differences between the measurers were found to: (1) depend on wing length; (2) vary between distinct wing-length classes and species; (3) be bigger in the case of inexperienced measurers (4) be small, only exceeding ± 1 mm in 7% cases and ± 2 mm in 0.5% cases. Such small measurement errors did not significantly bias the wing-length-based age estimation. The average differences between the age estimates derived from wing length taken by WK and other experienced measurers ranged from -0.3 to +0.3 day for various measurers, species and wing-length classes when 1-3 day-old nestlings (1-5 day-old in Blue Tit) were excluded. For the latter nestlings as well as for inexperienced measurers that range was -0.4 - +0.8 day.

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Key words: wing length, nestling age, observer error, measurer bias, Great Tit, *Parus major*, Blue Tit, *Parus caeruleus*, Pied Flycatcher, *Ficedula hypoleuca*.