

# Revising birds' skin preparation for facilitating its scientific utility

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Bird skins are traditionally prepared with folded wings, but reviewing some features of this material such as plumage details, and biometric measurement can be difficult when folded. To facilitate the research consultation new designs have been proposed as splitting wings and tarsus from the rest of the animal or opening a single wing. However, the feasibility for consultation has been rarely assessed. Our aim is to assess if a new method of non-folded skins improves consultation. By using an ornithologist meeting, we exposed skins from two different passeriform species under different preparation methods (folded wings, and splitting wings and tarsus). Ornithologists identified moult patterns and took biometric measurements (total wing length, Primary 3 (P3) length and tarsus length) from both species and skin preparation methods. Afterward, we made a quiz about their preferences regarding the best preparation method to obtain data.

Over the information obtained from the preference quiz, we applied a non-parametric Wilcoxon test comparing both methods. Among a total of 43 comparisons, we observed significant differences in preference, being the method with splitting wings and tarsus significantly preferred for moult patterns. The same was true for tarsus length measurement. For P3 length measurement, we detected a non-significant positive tend towards splitting wings. Contrary, total wing length measurement was significantly preferred when folded wings. These patterns maintained for both species.

Our conclusion is that for most measurements the splitting wings and tarsus method is preferred. This new method will facilitate consultation work, although it has some handicaps, such as a larger room for storage.

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