

## VARIATION IN ANIMAL BODY CONDITION BETWEEN TWO ALTITUDES IN A SMALL PASSERINE: NORTHERN RED BISHOP

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### ABSTRACT

This study examines how altitude and sex influence body condition in the Northern Red Bishop (*Euplectes franciscanus*) during the breeding season. We compared individuals from two distinct sites in Plateau State, Nigeria: the high-altitude Amurum Forest Reserve (1280 m) and the low-altitude Pandam Wildlife Park (175–315 m). Using residuals from a regression of body mass against wing length as a body condition index (BCI), we analyzed morphometric data from 102 birds. Generalized linear models revealed no significant differences in BCI between sites ( $p = 0.533$ ) or between sexes ( $p = 0.294$ ). These findings suggest that Northern Red Bishops maintain consistent body condition across altitude gradients, indicating ecological flexibility. This resilience may reflect similar habitat quality or adaptive traits. Further studies are needed to explore additional factors influencing body condition and the species' long-term responses to environmental change.

**Keywords:** Body condition index, passerine, *Euplectes franciscanus*, altitude, ecological resilience.