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FEATURE ARTICLES

GEOGRAPHIC VARIATION IN THE TRADE-OFF BETWEEN NESTLING GROWTH RATE AND BODY CONDITION IN THE TREE SWALLOW

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Abstract. Nestlings can exhibit considerable variation in developmental patterns both within and among locations due to differences in environmental conditions and parental investment. I investigated trade-offs between nestling growth rate and residual body mass (body condition) at three locations across the range of the Tree Swallow (*Tachycineta bicolor*). Nestlings at the northern extreme of the range in Alaska had slower growth rates, lower body mass, and higher residual body mass than nestlings in New York and Tennessee. High insect availability was correlated with increased growth rates of nestlings in New York and Tennessee, but not in Alaska. Conversely, nestlings in Alaska showed increased residual body mass with high insect availability, but nestlings in New York and Tennessee did not. The trade-off between growth rate and residual body mass varied among sites, with fast-growing nestlings in Tennessee maintaining a higher residual body mass than those in Alaska. These results suggest that factors affecting offspring growth and condition vary among sites, leading to geographical differences in offspring development trajectories.

Key words: body condition, developmental trade-offs, environmental variation, food availability, geographic variation, nestling growth, *Tachycineta*.