

Seasonal and ontological variation in diet and age-related differences in prey choice, by an insectivorous songbird

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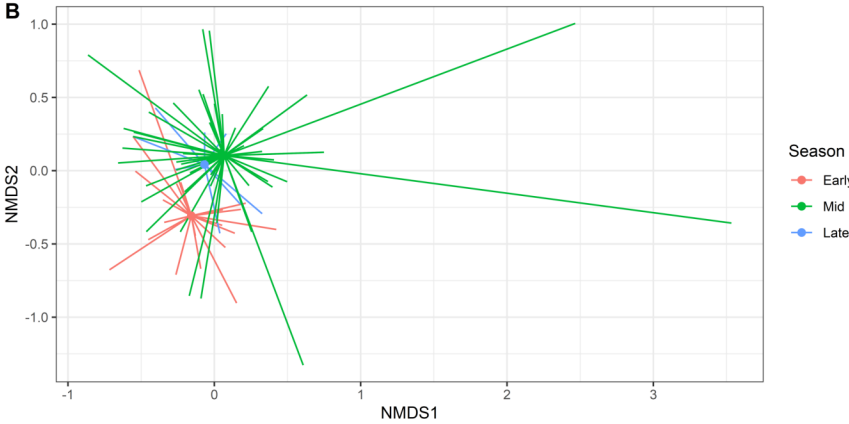
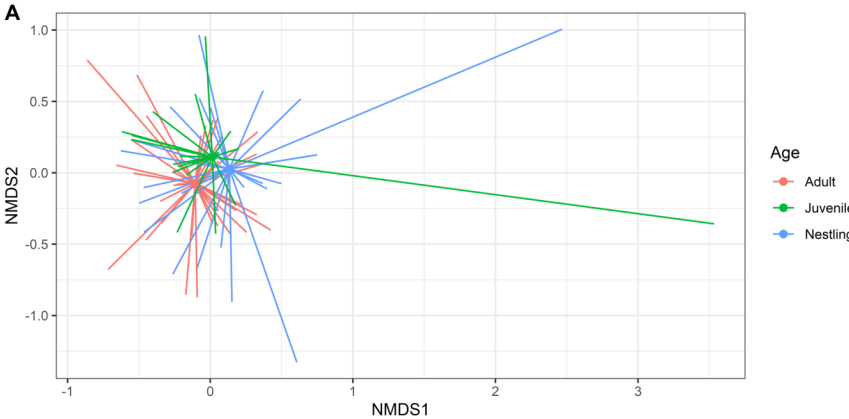
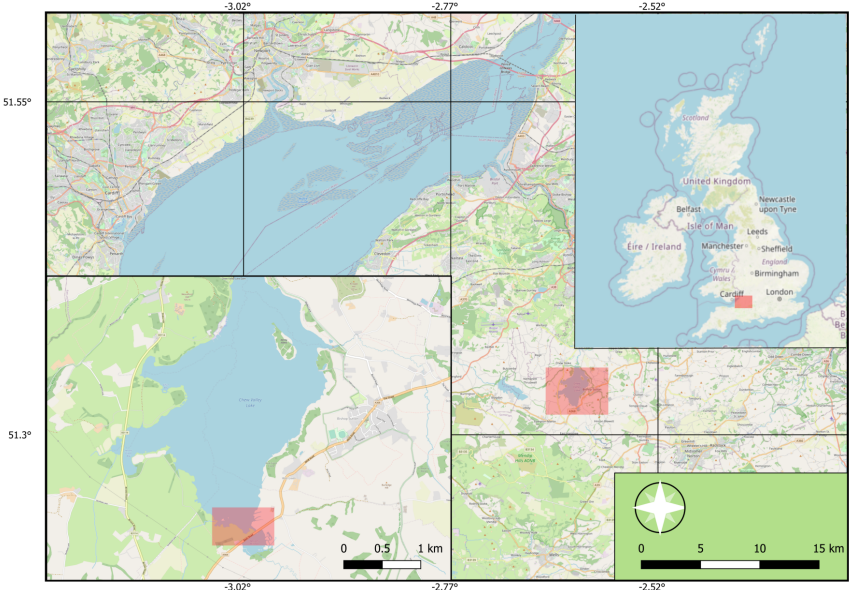
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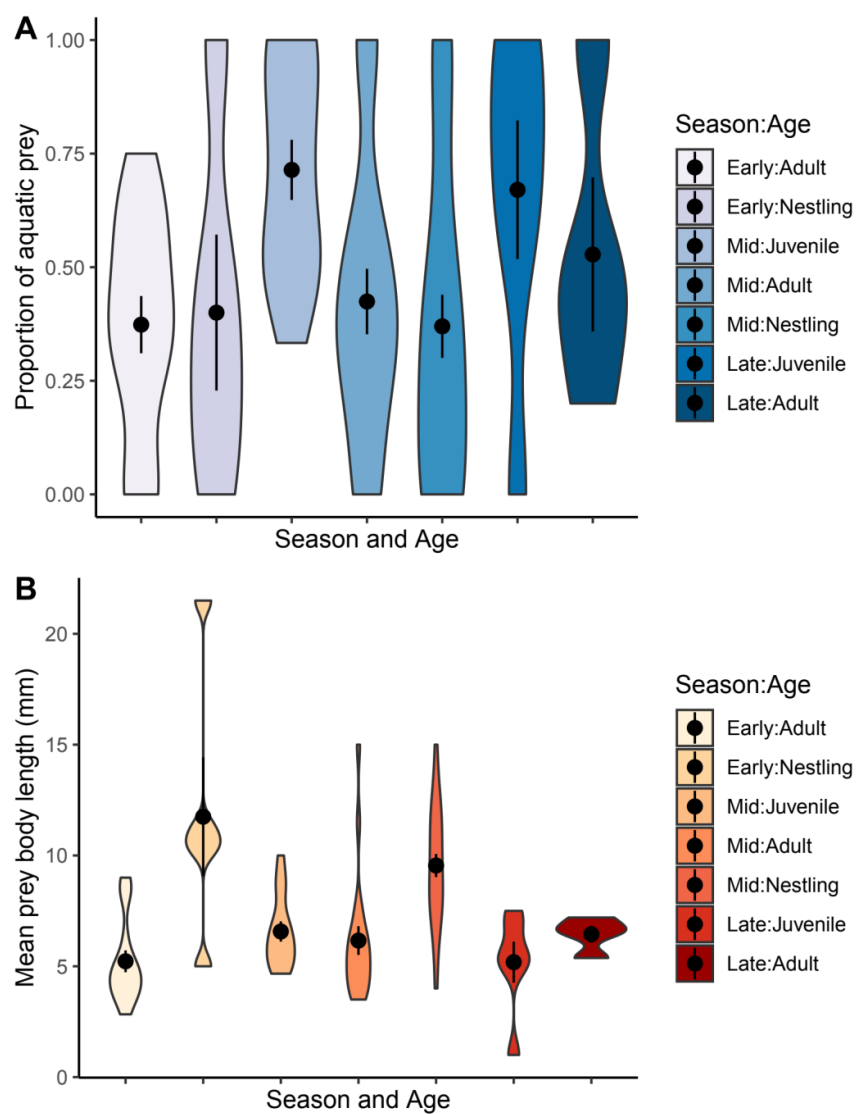
Abstract

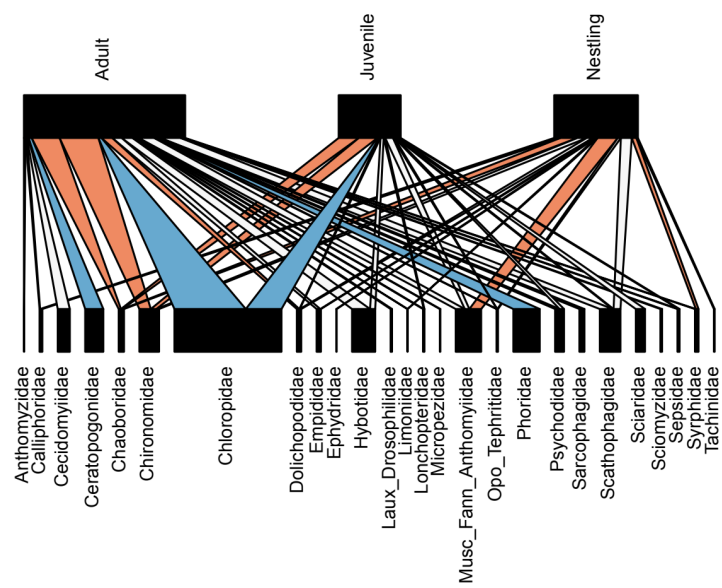
The diet of an individual animal is subject to change over time, both in response to short-term food fluctuations and over longer time scales as an individual ages and meets different challenges over its life cycle. A metabarcoding approach was used to elucidate the diet of different life stages of a songbird, the Eurasian reed warbler (*Acrocephalus scirpaceus*) over the summer breeding season of 2017. The faeces of adult, juvenile and nestling warblers were screened for invertebrate DNA, enabling identification of prey species. Dietary analysis was coupled with monitoring of Diptera in the field using yellow sticky traps. Seasonal changes in warbler diet were subtle whereas age class had a greater influence on overall diet composition. Age classes showed high dietary overlap, but significant dietary differences were mediated through the selection of prey, i) from different taxonomic groups, ii) with different habitat origins (aquatic versus terrestrial) and iii) of different average approximate sizes. Our results highlight the value of metabarcoding data for enhancing ecological studies of insectivores in dynamic environments.

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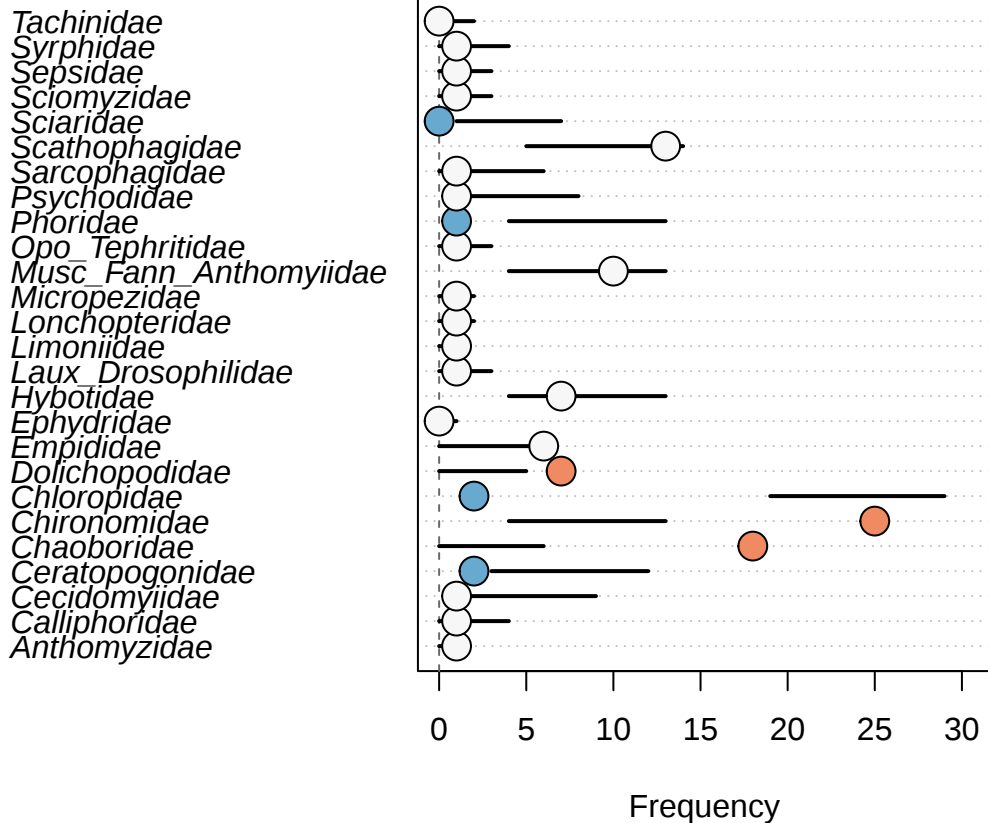
2022 Davies et al. reed warbler ontology diet manuscript IPV - Copy.docx available at <https://authorea.com/users/491552/articles/574520-seasonal-and-ontological-variation-in-diet-and-age-related-differences-in-prey-choice-by-an-insectivorous-songbird>





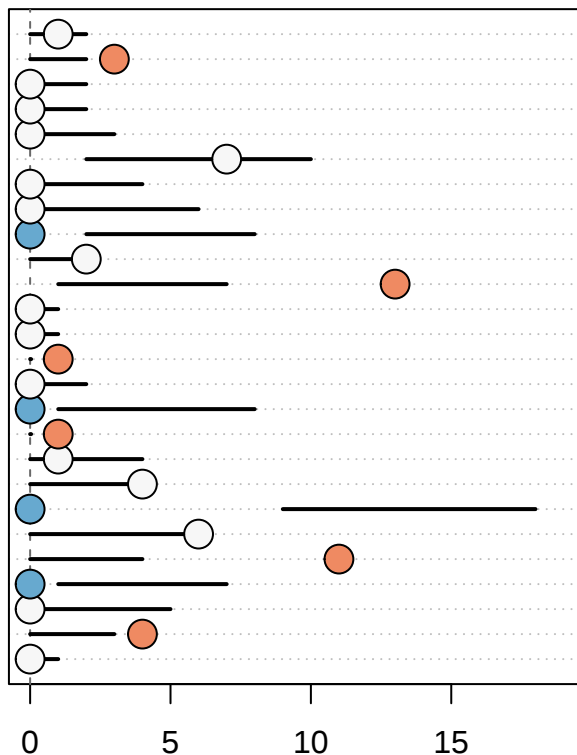


Adult



Nestling

Tachinidae
 Syrphidae
 Sepsidae
 Sciomyzidae
 Sciaridae
 Scathophagidae
 Sarcophagidae
 Psychodidae
 Phoridae
 Opo. Tephritidae
 Musc. Fann. Anthomyiidae
 Micropezidae
 Lonchopteridae
 Limoniidae
 Laux. Drosophilidae
 Hybotidae
 Ephydriidae
 Empididae
 Dolichopodidae
 Chloropidae
 Chironomidae
 Chaoboridae
 Ceratopogonidae
 Cecidomyiidae
 Calliphoridae
 Anthomyzidae



Juvenile

