

# What's on the Menu?

## A snapshot of Godwit and Lapwing chick diets

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In light of long-term wetland restoration efforts, and provincial policies aimed at increasing both insect and meadow bird diversity, we focus on understanding the diets of Black-tailed Godwit and Northern Lapwing chicks.

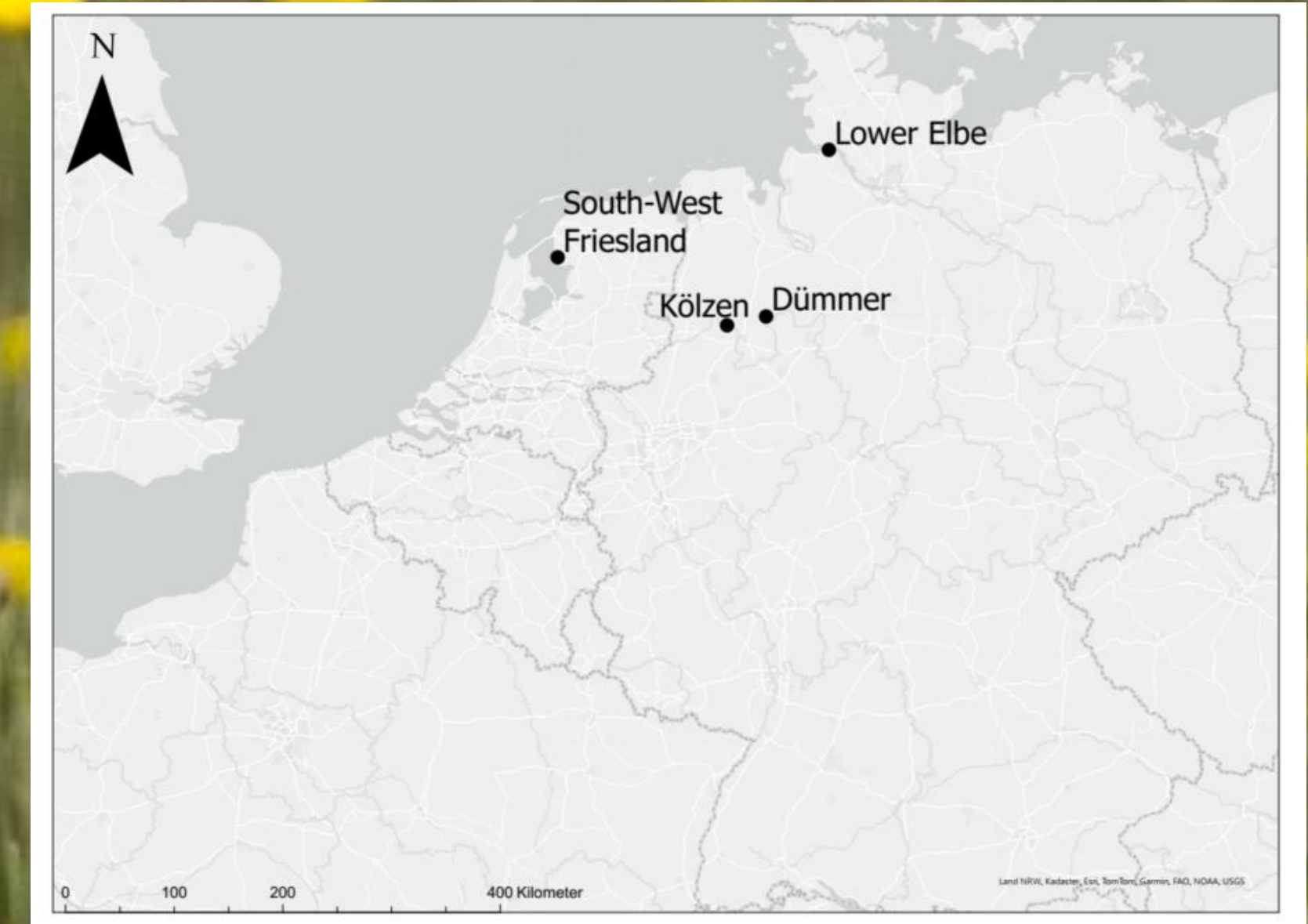
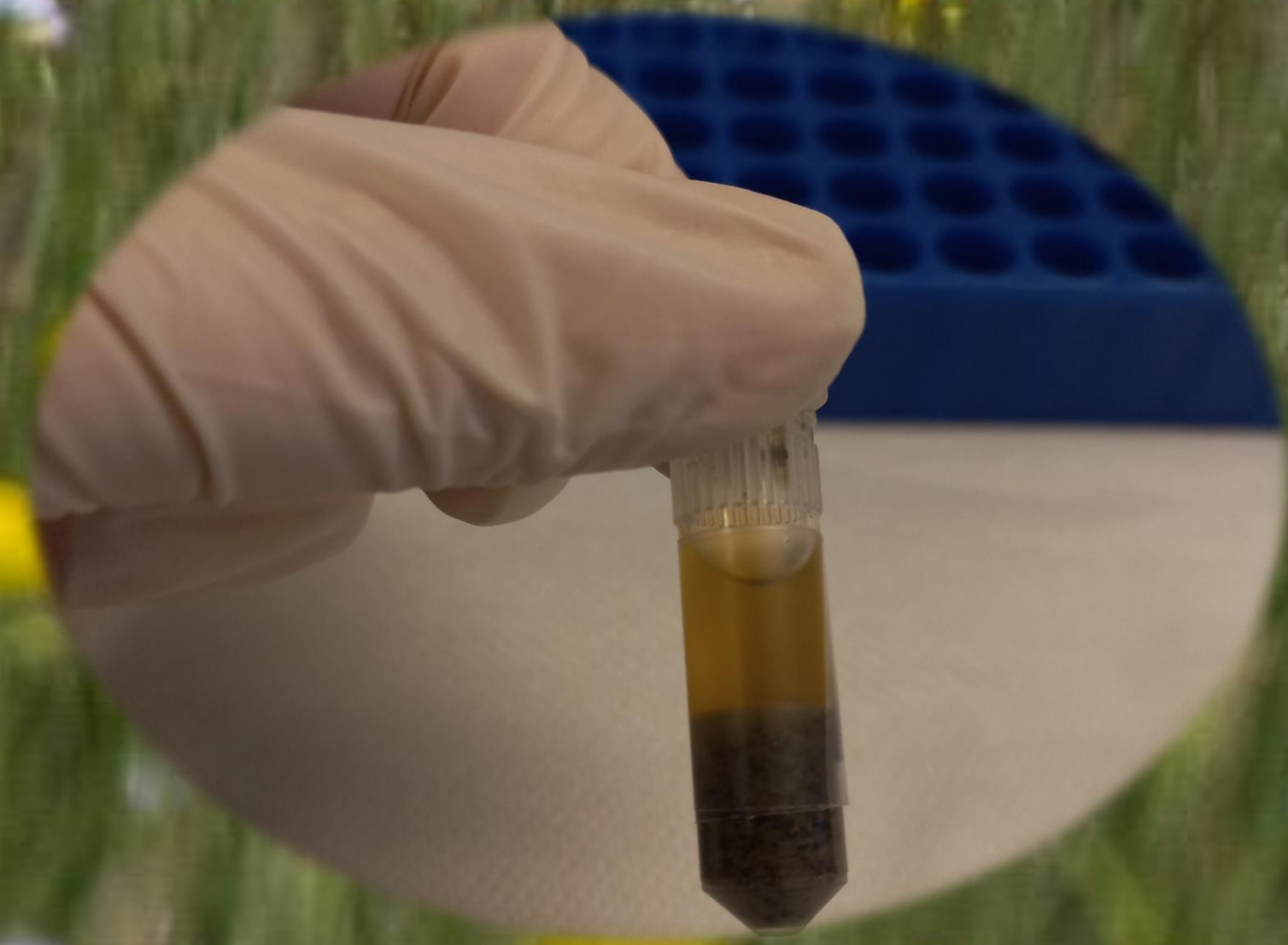


Fig. 1. Locations where fecal samples were collected in 2022

The composition of insects and other arthropods consumed by Godwit and Lapwing chicks, revealed by DNA metabarcoding techniques.



**DNA metabarcoding:** A short, standardized gene region for identifying animal, plant, and fungal species.

Invertebrate families were included if they were found in at least 20 of 58 Godwit fecal samples and at least 15 of 40 Lapwing fecal samples.

Keep in mind that the scales for frequency and relative abundance are different.

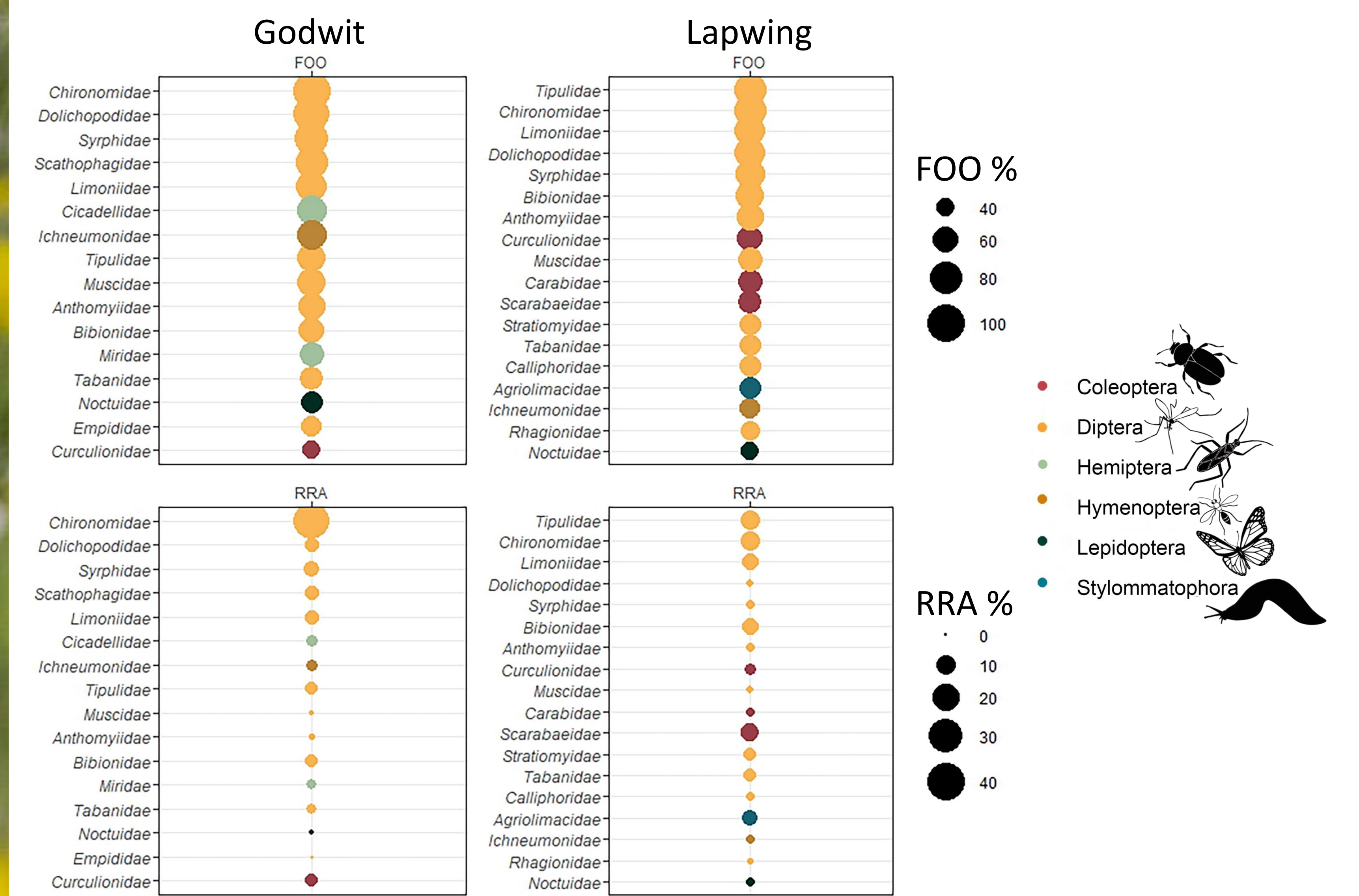


Fig. 2. Comparing Frequency Of Occurrence (FOO) showing how often different arthropod families were found in the fecal sample of Godwit and Lapwing chicks, and Relative Read Abundance (RRA) showing how much DNA from these families was detected relative to the total abundance.

Godwit chicks predominantly feed on flying insects, while Lapwing chicks consume a larger proportion of ground-dwelling prey, highlighting important diet differences between meadow bird species.

This study provides modern tools to compare habitat quality, and habitat provision between regions, which is crucial for protecting migratory meadow bird populations.