



Linda J Wilson @LindaJWilson9 · 4 May 2021



#WSTC7 #PopSesh1 1/4 To date, knowledge of #kittiwake diet in Britain & Ireland has come from relatively few colonies. Our #seabirdDiet samples collected during @RSPBScience tracking #fieldwork allowed us to investigate how diet varies geographically. #ornithology

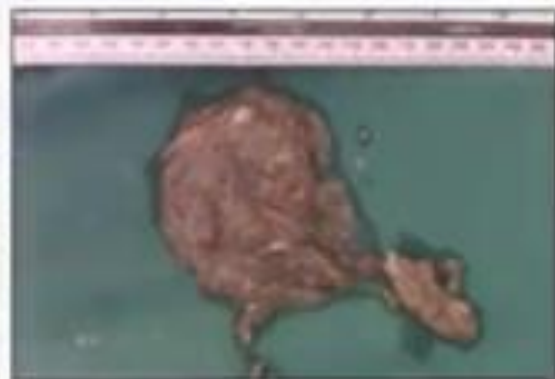




Linda J Wilson @LindaJWilson9 · 4 May 2021

...

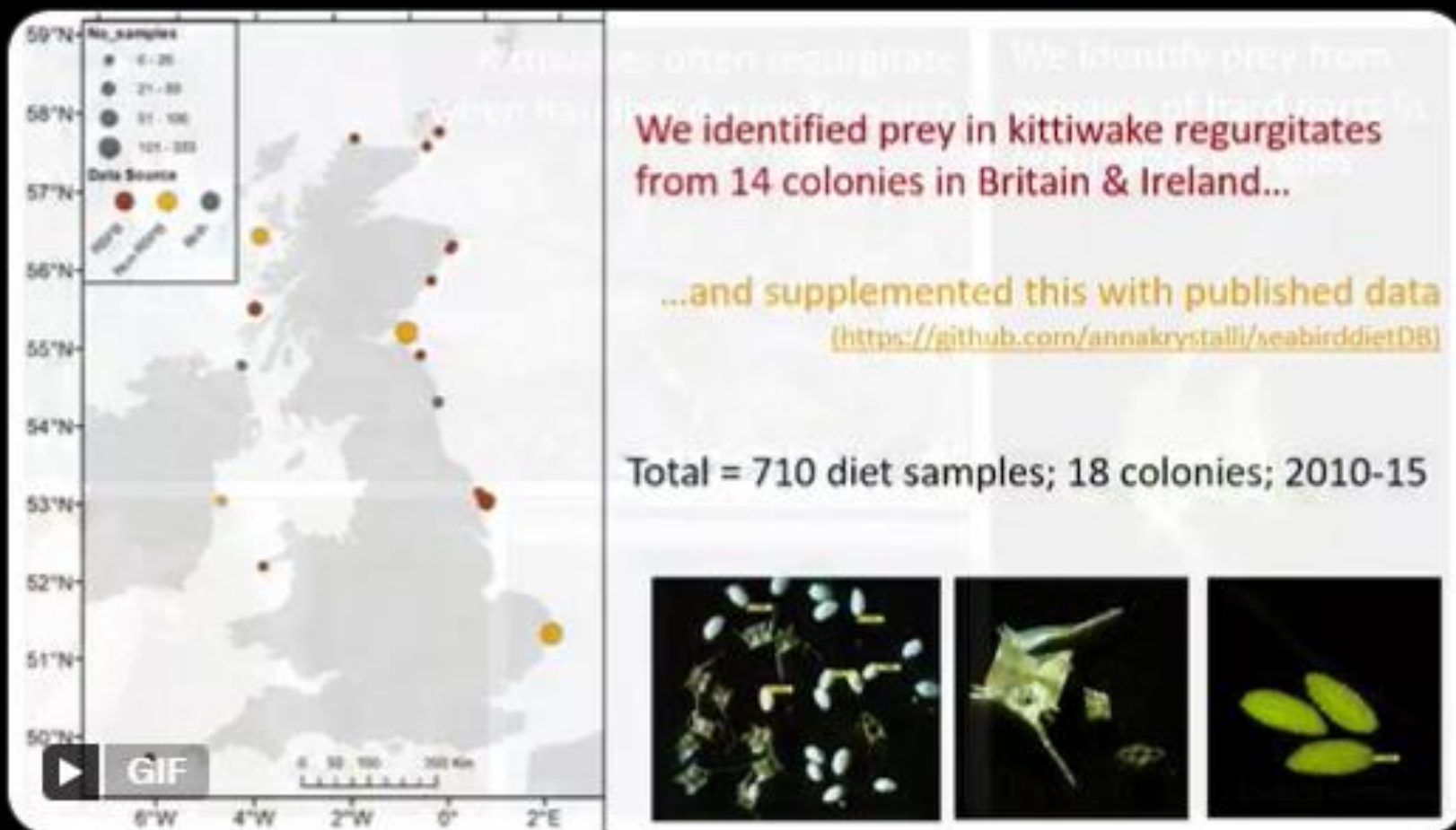
#WSTC7 #PopSesh1 1/4 To date, knowledge of #kittiwake diet in Britain & Ireland has come from relatively few colonies. Our #seabirdDiet samples collected during @RSPBScience tracking #fieldwork allowed us to investigate how diet varies geographically. #ornithology





Linda J Wilson @LindaJWilson9 · 4 May 2021

#WSTC7 #PopSesh1 1/4 To date, knowledge of #kittiwake diet in Britain & Ireland has come from relatively few colonies. Our #seabirdDiet samples collected during @RSPBScience tracking #fieldwork allowed us to investigate how diet varies geographically. #ornithology





Linda J Wilson @LindaJWilson9 · 4 May 2021

...

#WSTC7 #PopSesh1 2/4 We looked at geographic variation in occurrence of the 3 main prey types. Probability of samples containing #sandeel higher in #GreaterNorthSea than #CelticSeas and declined with latitude. Opposite true for #gadids. But no geographic variation for #clupeid



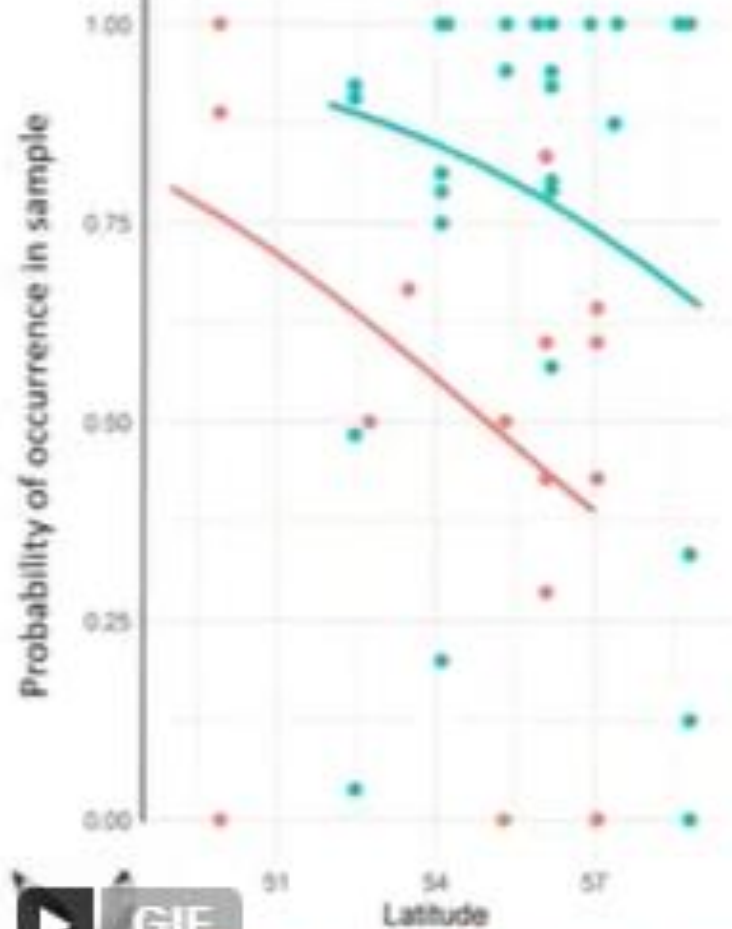
- We grouped diet samples into two regions which differed in severity of breeding success declines

- Celtic Seas > Greater North Sea breeding success declines¹

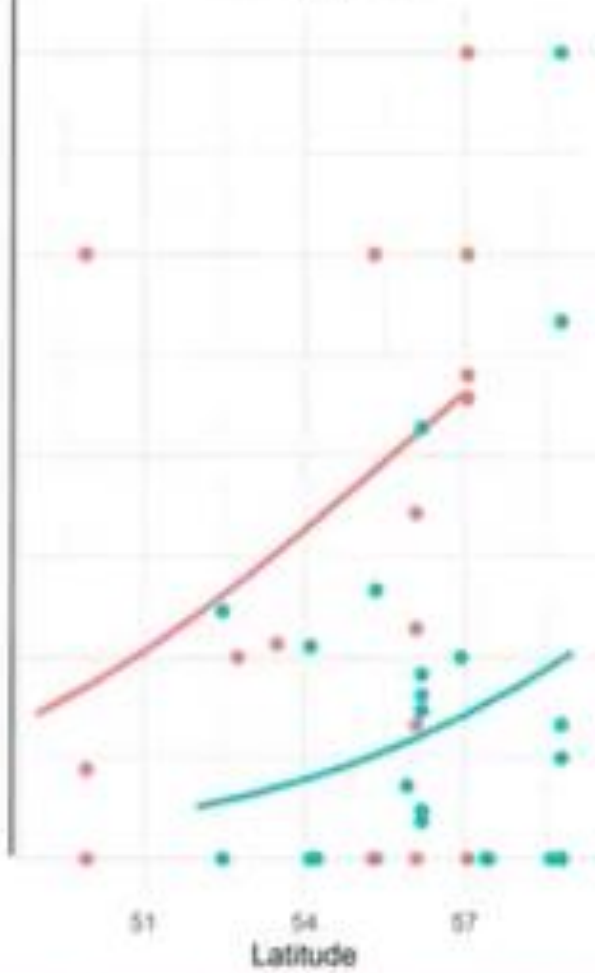
¹Cook & Robinson 2010. BTO Research Report 573



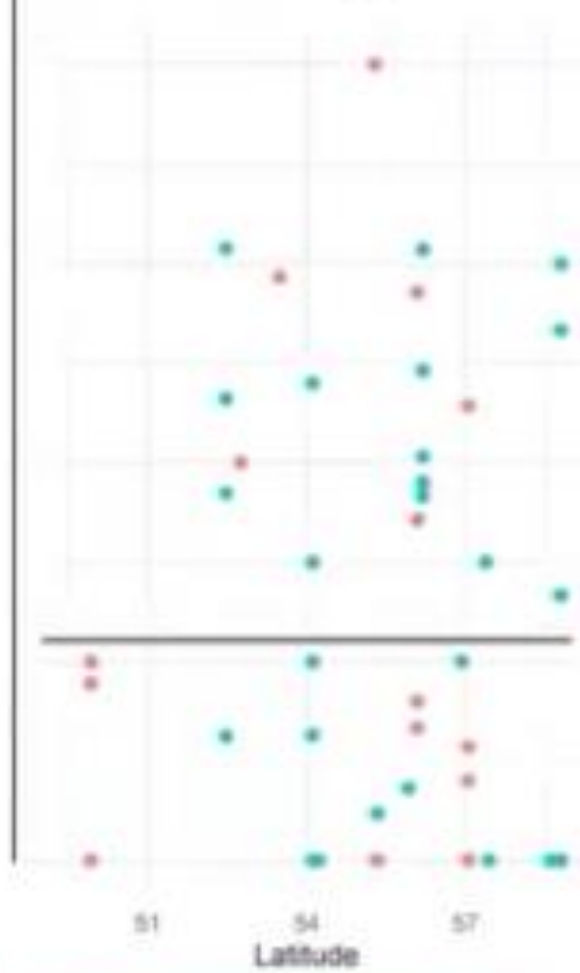
Energy rich



Energy poor



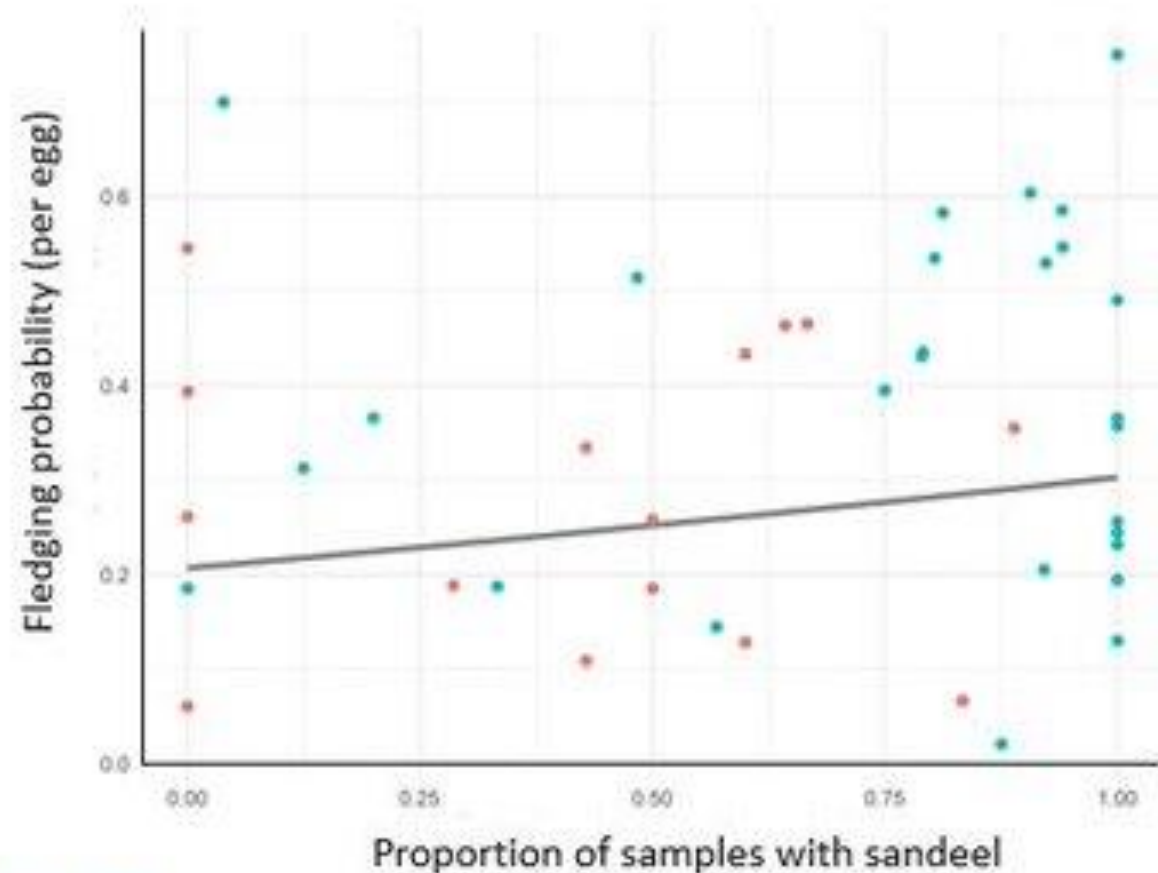
Energy rich



Celtic Seas (more severe breeding success declines)

Greater North Sea

Breeding success was related to diet composition



- Celtic Seas
- Greater North Sea

- Positive but weak relationship between breeding success and the proportion of samples containing sandeel
- Relationship is consistent between the two regions





Thanks for
watching!

Acknowledgements

RSPB diet data were collected during the FAME/STAR tracking project, thanks to all fieldworkers, funders and collaborators. Published diet data were downloaded from Seabird Diet Database created as part of the Marine Ecosystems Research Programme. Breeding success data were downloaded from the Seabird Monitoring Programme database <https://app.bto.org/seabird/>

Summary

- To date, kittiwake diet research has focussed on the role of North Sea sandeels
- But while sandeel dominate kittiwake diet, the importance of clupeid and gadid as alternative prey varies geographically
- So conservation of other forage fish species is also crucial
- Particularly important in context of climate change effects which differ between regions and forage fish species