

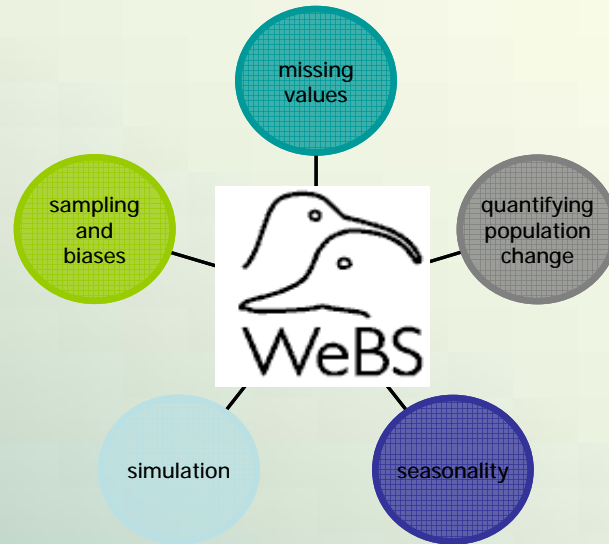
TERESA FROST



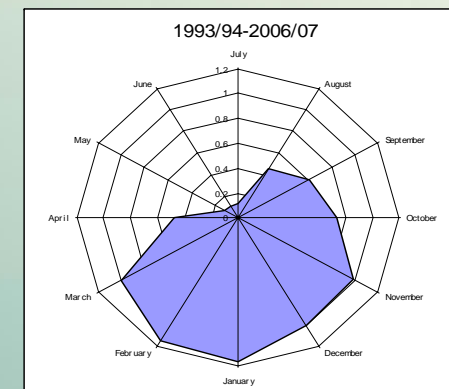
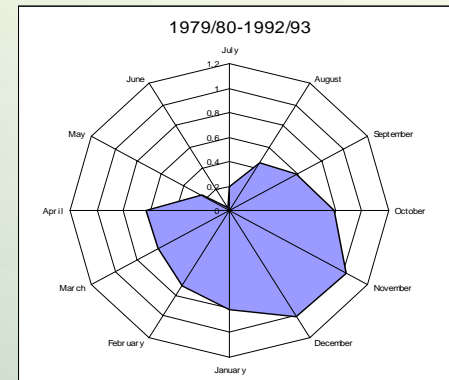
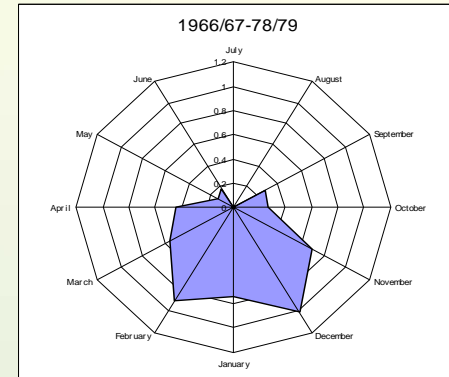
About me

As a birding statistician, I began a research project called **Stochastic Modelling and Analysis of Wildfowl (*Anatidae*) Data from the Wetland Bird Survey** in 2004. The aim of the project is to improve and extend the statistical methods used in a long running bird monitoring scheme.

I started work at the Kent & Medway Biological Records Centre in May 2008 and am writing up my PhD thesis part-time.



Kent Shoveler Phenology

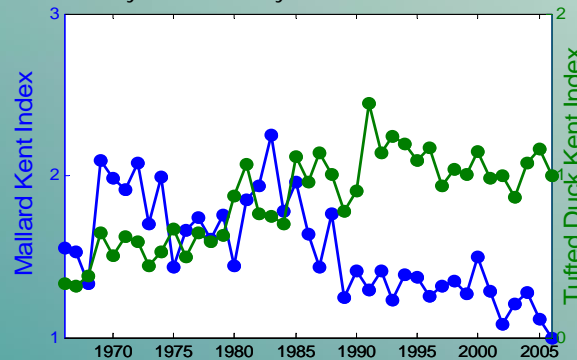


Monitoring Change

Some wildfowl species are increasing in Kent, such as tufted duck. Others, such as mallard, are decreasing.

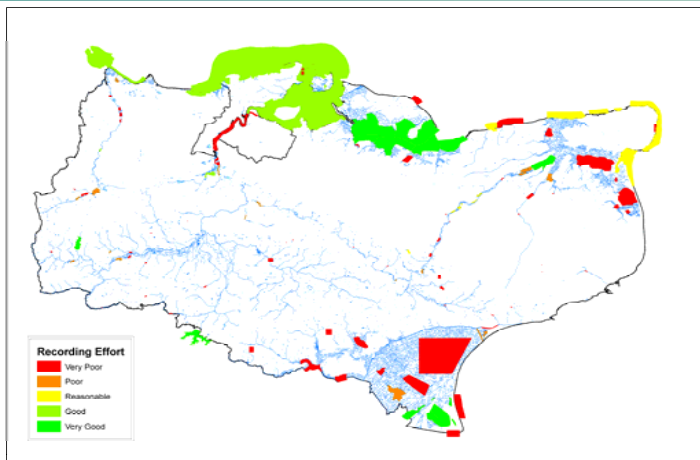
An advantage of WeBS as a monitoring scheme is that counts are taken every month. This allows us to measure phenological change as well as population change.

The plots to the right show month indices calculated for three time periods for shoveler for sites in Kent. In the earliest period the peak in shoveler numbers was in December with relatively small numbers present in the autumn and spring months. In the 1980s, shoveler started arriving earlier, with larger numbers present in the autumn. In more recent years they have also been staying later into the spring, with the maximum numbers being present in January and February.



Kent WeBS sites

Some sites have been surveyed for longer than others. Only the green sites, for which less than half of all possible counts are missing, are used when compiling national population indices for wildfowl species.



One aim of this project is to develop statistical methods that use more of the available data, so that national population indices include data from important sites, such as Pegwell Bay, which are currently not utilised due to too much missing data.

Overlaying the areas which are currently surveyed with Kent habitat survey data held by KMBRC helps to assess the current coverage of Kent's waterbodies by WeBS.

