Love thy neighbour? – Spatial variation in density dependence of nest survival in relation to predator community. *Diversity and Distributions (2021).*

Authors:

Magali Frauendorf, Andrew M. Allen, Eelke Jongejans, Bruno J. Ens, Wolf Teunissen, Christian Kampichler, Chris A. M. van Turnhout, Liam D. Bailey, Hans de Kroon, Jenny Cremer, Erik Kleyheeg, Jeroen Nienhuis, Martijn van de Pol

File list and description:

- *CodeAnalysis.R* - the only file that you need to open. It loads datasets and has the code to run the analysis to reproduce the results described in the paper.

- *Data.csv* – the data used to run the code described in CodeAnalysis.R. The columns of the csv file means the following:

  - NestSuccess: if a nest was successful (with at least one hatchling); 0=not successful, 1=successful
  - OYC_Density: nesting density of oystercatcher in a radius of 100m around the nest location in breeding pair/ha.
  - Dist_km: distance from the nest location to the coast in km
  - Year: year of monitoring the nest survival
  - Habitat: Habitat type where nest was located
  - MamDominance: Mammalian dominance index; 1 meaning only mammalian predators are present around the nest location, 0 meaning that only avian predators are present around the nest location
  - ObsDays: number of days the nest is exposed and monitored.
  - Fail: 0 meaning the nest was successful (at least 1 hatchling), 1 meaning the nest was not successful (0 hatchlings); this is the inverse from NestSucccess.
  - Method: Subpop=local population dataset (island populations), Nestkaart= country-wide dataset
  - Loc: location, meaning the name of the local populations
    - Ameland Oerd=Island 1 population 1 (Fig. 2)
    - Ameland Vierkant=Island 1 population 2 (Fig. 2)
    - Schier=Island 2 (Fig. 2)
    - Hoge Berg=Island 3 population 2 (Fig. 2)
    - Stex=Island 3 population 1 (Fig. 2)
    - Nestkaart= country-wide dataset (Fig. 2)
  - Godwit_Density: nesting density of black-tailed godwits within a radius of 100m around an oystercatcher nest location in breeding pair/ha
  - Lapwing_Density: nesting density of northern lapwings within a radius of 100m around an oystercatcher nest location in breeding pair/ha
  - Redshank_Density: nesting density of common redshanks within a radius of 100m around an oystercatcher nest location in breeding pair/ha
  - AllMeadowBirdSpc_Density: nesting density of all four meadow birds (oystercatcher, godwit, lapwing, redshank) combined within a radius of 100m around an oystercatcher nest location in breeding pair/ha

- *DataFig4.csv* – Data for plotting Figure 4. The data are extracted when running the R code.

- Population: indicating the abbreviation of the populations
    - AC=Island 1 population 1 (Fig. 2)
    - AI=Island 1 population 2 (Fig. 2)
    - S=Island 2 (Fig. 2)
    - S*=Island 2 where date from another study is used
    - TI=Island 3 population 2 (Fig. 2)
    - TC=Island 3 population 1 (Fig. 2)
    - C Low=country-wide dataset with low mammalian dominance index
    - C Mid= country-wide dataset with medium mammalian dominance index
    - C High= country-wide dataset with high mammalian dominance index
- Estimate: beta of the model result
- Std_Error: standard error from the model result
- Median_MamDominance: median from the mammalian dominance index (per population)
- SD_MamDominance: standard deviation from the mammalian dominance index
- n: number of monitored nests
- Dataset: Local population or Country-wide dataset (Fig. 2)

- *Mammal.png* – image used for Figure 4

- *Bird.png* – image used for Figure 4