

Title of Dataset:

Zimova, Marketa (2022), Color molt phenology and camouflage mismatch in polymorphic populations of Arctic foxes, Dryad, Dataset, <https://doi.org/10.5061/dryad.djh9w0w3n>

Dataset containing fox molt progression and monthly average TerraClimate data. Observations of individual foxes were based on photos from camera traps mounted on dens and feeding station adjacent to dens by one observer (DM). Each observation was based on multiple photos from the same day.

Description of the Data and file structure

Sheet 1: fox_molts_data – containing 1,881 individual repeated measurements of a Arctic fox molts. Variables are structured in nine columns listed below:

date – date for observation in format yyyy-mm-dd.

individual – names for individual foxes. Foxes with ear tags are named according to abbreviations of color pattern in ear tags. Untagged foxes are named after the den they were first identified at, followed by their color morph and an individual number.

molt – numeric variable ranging from 0 – 100 in seven stages 0, 5, 25, 50, 75, 95, 100 representing the percentage of winter pelage on the observed fox. These stages are described in Protocol for Arctic Fox Molt Phenology in supplementary material.

snow – numeric variable of the percentage of snow cover on the den observed from camera trap ranging from 0 – 100 in steps of 5.

color – factor with two levels “blue” and “white” representing color morph of fox.

white – numeric variable showing percentage of white fur on the fox. For white foxes, this variable shows the same number as molt, and is always at 0 for blue foxes.

den - factor with 16 levels of den names showing den where fox was observed.

area – factor with two levels “vindelfjallen” and “helags” representing the two populations.

year – factor with three levels “2015”, “2016”, and “2017”.

molt_cat – factor with three levels “1”, “2” and “3” representing collapsed categories of molt-variable used for models. 1 = winter pelage ($\geq 75\%$ of body covered by winter fur), 2 = summer pelage ($\leq 25\%$ of body covered with winter fur) and 3 = molting pelage (all other molt stages).

Sheet 2: climate data – monthly snow and temperature average

site - factor with two levels “vindelfjallen” and “helags” representing the two populations.

den - factor with 16 levels of den names showing den where fox was observed.

year - factor with three levels “2015”, “2016”, and “2017”.

month – factor with 12 levels numbered from 1 to 12.

swe – (snow water equivalent). Measured in millimeter and represents the water column contained in snow mass and is a product of the snow depth and snow density.

tavg – Average monthly temperature measured in °C.