

Andren\_Data\_1.csv – Data used in models 1 and 2, as well as in the alternative model 3 for only southern Sweden.

Column names:

Area – code for area, 4 = southern Sweden

Time – time line

Year – the year of monitoring

Lynx.FG – number of lynx family groups

Harvest – number of lynx harvested

Andren\_Data\_2.csv – Data used in models 3 and 4

Column names:

Area – code for area, 1 = central Sweden – A, 2 = central Sweden – B, 3 = central Sweden – C, 4 = southern Sweden

Time – time line

Year – the year of monitoring

Lynx.FG – number of lynx family groups

Harvest – number of lynx harvested

Traffic\_1 = number of lynx killed in vehicle collision after the census in February and before the birth pulse in May

Traffic\_2 = number of lynx killed in vehicle collision after the birth pulse in May and before the census in February

R-codes the Bayesian hierarchical population models

Linear density-dependent growth rate (Model 1)

Model\_1\_DD

Model\_1\_JAGS

Quadratic density-dependent growth rate (Model 2)

Model\_2\_DD\_quadratic

Model\_2\_JAGS

Quadratic density-dependent growth rate, less vague priors (Model 2 alt)

Model\_2\_DD\_quadratic\_alt

Model\_2\_JAGS\_alt

Density-independent growth rate and comparing southern and central Sweden (Model 3)

Model\_3\_DID

Model\_3\_JAGS

Density-independent growth rate only southern Sweden (Model 3 alt)

Model\_3\_DID\_alt

Model\_3\_JAGS\_alt

Density-independent growth rate, including lynx killed in vehicle collisions and comparing southern and central Sweden (Model 4)

Model\_4\_DID\_vehicle

Model\_4\_JAGS