Evolution of bird song dialects: modelling the role of habitat acoustics in speciation.

In collaboration with Dr. Hans Slabbekoorn, Universiteit Leiden and Dr. Tom Smith, UC Los Angeles, I am developing a spatially explicit model simulating the evolution of song divergence. Acoustic communication is an important aspect of fitness in birds, as it plays a role in territory defense as well as mate choice. However, habitats differ in their sound transmission properties, causing some songs to be more efficient in some habitats than others. The model explores the interaction between song divergence, habitat structure, and fitness benefits in subdivided populations in order to predict which conditions may lead to reproductive isolation.

Participants:

Jacintha Ellers, Hans Slabbekoorn, Tom Smith