Programme Plan

The research carried through the course of this program will aim to answer several questions. The main research question of the project describes the fundamental aspect in a short sentence. The main question is then further divided into two research questions, one for each group. Then to ensure a steady step by step development of the application, the two research questions will be further divided into sub-questions.

# Central research question:

What will happen to the population of deer, cattle, horses & geese if a number of foxes are released in the preserve?

# Group 1 research questions:

## Main research question:

* + How do the foxes and geese interact, and what is the resulting effect on the grass?

## Sub-research questions:

* + - At what rate does the grass in Oostvaardersplassen grow?
    - How many geese does a fox kill per day?
    - What is the population of geese in the preserve?
    - What is the population of foxes in the preserve?
    - How does the population of geese affect the rate of grass growth?
    - How will the fox’s hunt for geese affect the geese’s eating habits?

# Group 2 research questions:

## Main research question:

* + How do the herbivores and the geese compete for the grass in an enclosed area?

## Sub-research questions:

* + - What are the populations of each animal?
    - What is the rate of grass consumption of each animal?
    - How do animal populations change as a result of grass availability?

For some of these questions, we will be able to find the answer in the provided literature and/or online. Those answers will form the basis of a mathematical model, which we will use to simulate the potential outcomes.

The creation of this model will be split into 2 groups; both of them creating a partial model which aims to answer 1 of the 2 main sub-questions. Once this is done we will aim to combine them into a single functional application.