Set-up – Final project Geosimulation Modelling WS 2020/ 2021
Epidemics in predator-prey systems
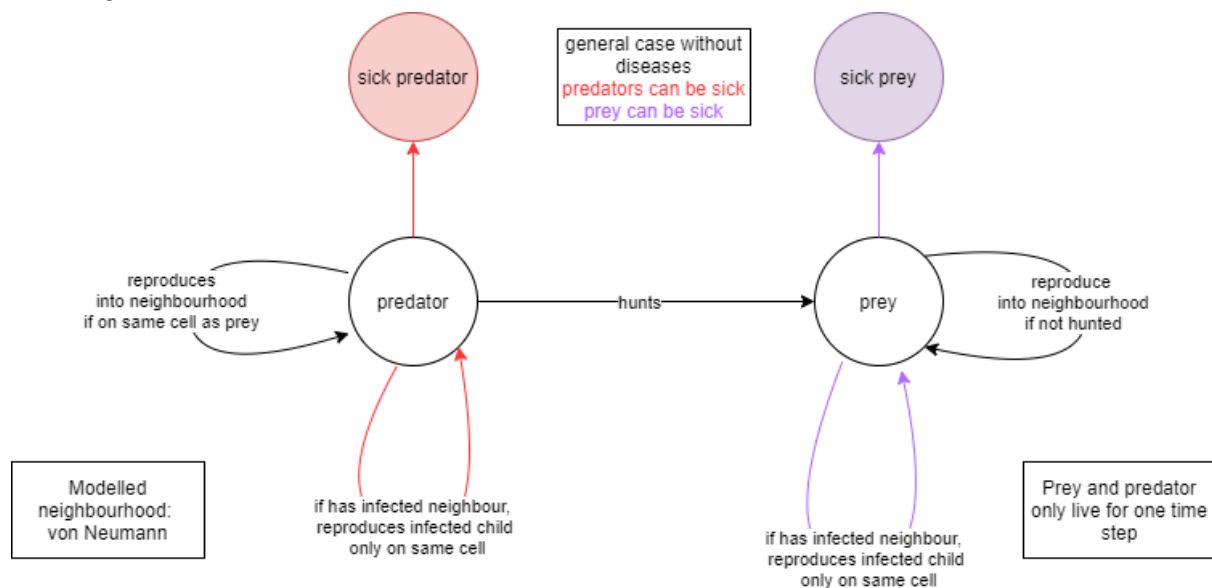Lukas Bäcker, Nick Jakuschona, Tom Niers, Jan Stenkamp

Research Questions
- Mimic the prey–predators interactions while a pathogen is affecting.
- How does a pathogen influence the evolution of prey and predators?
    - How does a pathogen among prey would influence the development?
    - How does a pathogen among predators would influence the development?
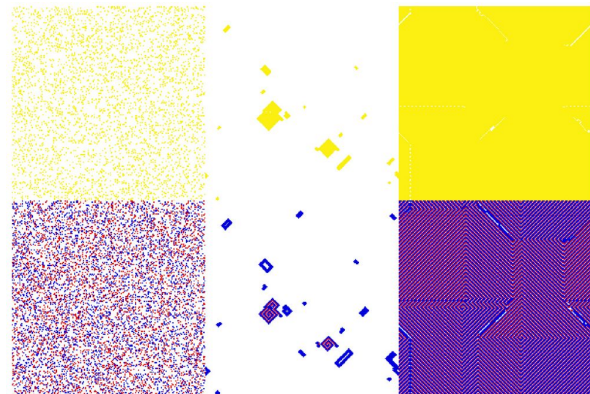
Conceptual Model

What we want to model
We would like to model the three different scenarios described in the paper and create the respective plots:
- No disease
- Disease among predators
- Disease among preys

On the right you can see one example plot from the paper for the disease among the predators and hopefully our results will look similar.

Task Division
1. Setting up the CA for the standard prey-predator model with given parameters by the paper without any influence of diseases.
2. Setting up further rules for infection among prey and predators (only one at a time)
3. Plotting results.
4. Preparing presentation.

Tasks will be solved together using pair-programming tools.

Time Planning
In each of the four remaining sessions we'd like to solve one of the tasks. The work in between the sessions we will plan from session to session depending on our progress.

GitHub repository: https://github.com/tnier01/GeoSimFinalProject