ASSIGNMENT 7: FLOCKING COWS

Introduction

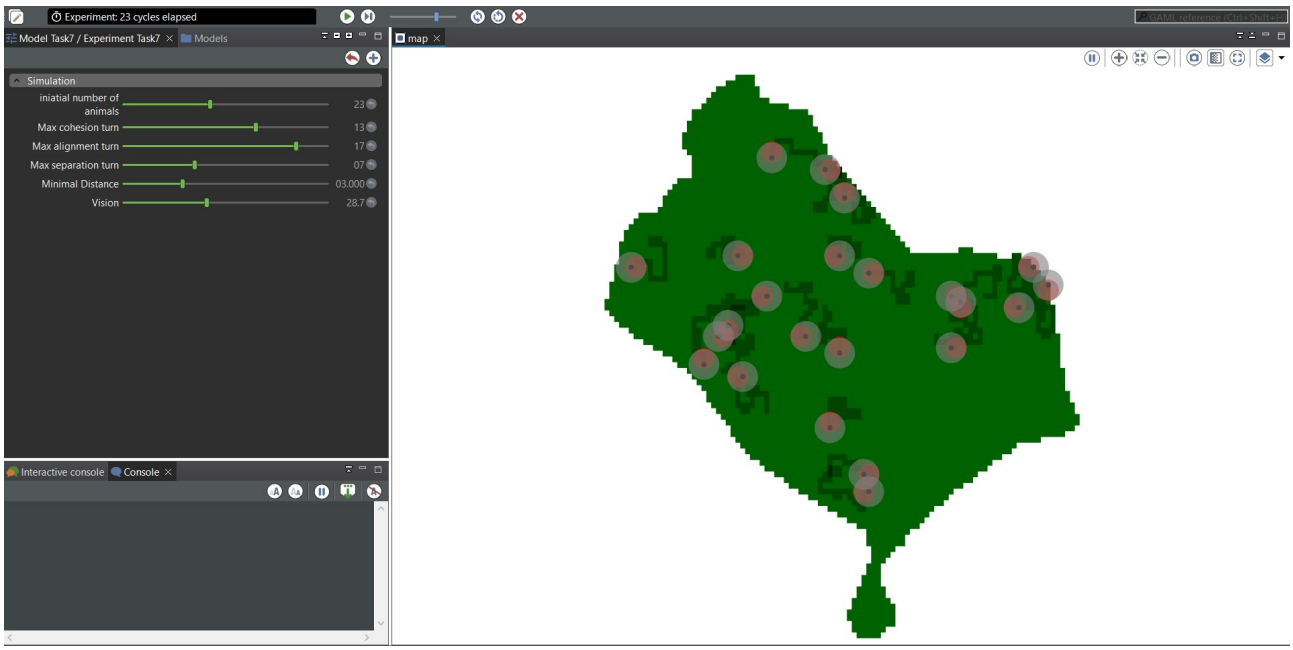
This week's code has the objective to create a user-control functions, allowing users to change some parameters for flocking, and also practice GAML's logic with what was learned so far.

Methodology

The development of this code was based in three parts: Assignment 6 base, flocking code provided by Mrs Wallentin and the third one needed to develop this week.

Results

More reflexes, actions and aspects were created in order to accomplish what was asked. Cows can move, turn, get together or run away from each other. Besides that, cows grass graze and leave a trail where they ate it. In Figure 1 a preview of the changeable parameters and cows grazing within the grass polygon.
A user can drag the sliders and change the number of individuals, the angles of turning, cohesion and even the vision angle – that also changes the gray buffer in the map proportionally.



Discussion

The task had its level of complexity, however it was lower than Assignment 6. So far, it is interesting to see how all this grazing cows scenario developed and turned into a more than 300 lines of code.
It is palpable the applications of GAML's in several simulations. Nonetheless there are still a few things to cover, like exporting simulated data into a CSV or JSON file. With this last step, things will be complete for taking things to the next level, such as modeling.