**FW 508: Agent-based ecology and modeling**

**Student Projects**

Students will work individually or in pairs to develop and utilize a simulation model in Netlogo to address chosen questions in ecology or natural resource management (or a related field). These models are intended to provide students with a strong foundation in agent-based modeling in ecology. Each project team is responsible for developing a project report in the form of an oral presentation, presented on Friday 16 September. Presentations are limited to 15 minutes. The presentation must include:

(1) a clearly defined statement of the objectives of the project & questions model will address

(2) a precisely defined conceptual model of the system of interest delineating system boundaries and internal structure

(3) a Netlogo simulation model that contains (at minimum)

(a) patches and turtles with their own attributes

(b) interactions among individuals and their environment (e.g., feedbacks, thresholds, competition, etc.)

(c) a user interface with at least one input (e.g., slider, switch, chooser) and one plot

(4) Evaluation scheme (e.g., identification of patterns for evaluation, types of analyses planned, etc)

(5) Lessons learned, data gaps/needs, path forward