BISC 204, Lab 6A

Lab 6A Objectives:

1. Describe the model that you're thinking about and model diagram with one of your peers, and with Prof. Matthes to get feedback for moving forward.
2. Self-evaluate and edit your model choice and diagram in response to feedback.
3. Develop at least two research questions and/or hypotheses that you are going to investigate with your model. Share these with your peer partner for feedback.
4. Outline the modeling methods that you will use to evaluate your questions and/or test your hypotheses.
5. Start to develop the code to run your model and your simulation experiments.

Lab 6A Model Discussion with your Peer (for each individual model):

1. Describe, generally, the topic of your model and why it is biologically important.
2. Describe and present your model, using diagram that you produced for your Pre-Lab.
3. Discuss the following questions:
    - What are the assumptions of this model?
    - Could the model be simpler, without causing too much biological unrealism?
    - Are there any key processes that are missing and would be relatively straightforward to add to the model?
    - Do you have parameter values for the model in hand, and if not, are there plans/ideas of how you can get parameter values?
    - What types of hypotheses and/or research questions could be investigated with this model?

[*After discussing both models, break to individually develop and write research questions/hypothesis*.]

4. After developing research questions/hypothesis:
    - Describe your research question / hypothesis
    - Is the hypothesis falsifiable?
    - What is the null hypothesis?
    - How will you design a modeling simulation experiment to test the hypothesis?