

- **Agent behavior:**How do the agents behave/work?

Agents eat their designated food. They move randomly and reproduce when they have enough energy.

- **System behavior:** How does the overall system behave/work?

The lions or in this case the skulls eat the hyenas, which eat the antelope, which eat grass. You can adjust grass growth and observe the populations of each animal.

- **Rationale for agent rules:** Why did you give the agents these rules?

I haven't changed the previous rules and simply added in reproduction and grass patches. I made these additions because I thought they were fundamental to the model

- **Model output:**Have you developed new measures for the output? Do you think your model currently provides a good description of the system's behavior? Why or why not?

I added in a simple plot for each population, which I think is the most fundamental tool in analyzing an ecosystem.

- **Questions:**What questions do you have about your model?

I want to see the energy levels for each group of animals and see how that changes over time. I also want to find a solid equilibrium point for all three animals.

- **Next steps:**Briefly list your next steps for improving the model.

I had a difficult time this week and didn't quite get as many improvements as I hoped for, but the next few things I want to get to are adding an energy plot and "variabilize" numerous components to make it easier to find an equilibrium point where all the animals live continuously.

- **Model Analysis:**What conclusions can you draw from the model's output?

So far I can really only say it is a lot more challenging to find an equilibrium point with 3 animals than two. It is very sensitive to small changes, and apex predators struggle to not die off.