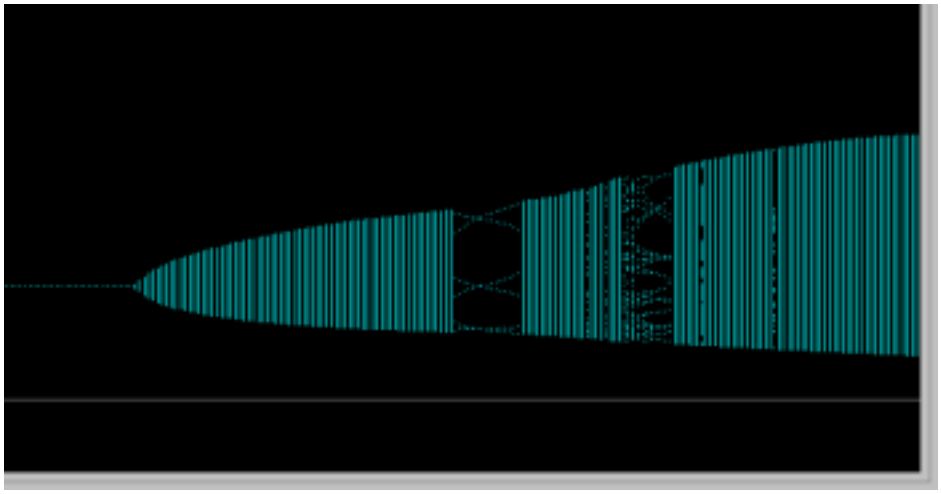
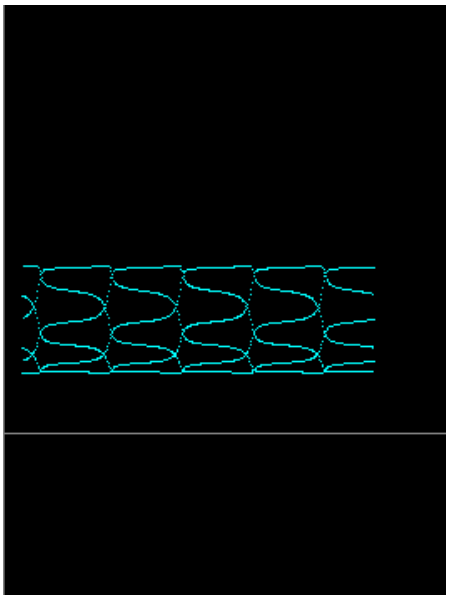
3. *Bifurcation diagram for Discrete Predator-Prey:* Download the following phaser Project file discrete_pp_bifurcation.ppf by just clicking on it (or by right-click and save it to our computer. Now load this file into Phaser). You should see the following bifurcation diagram:



In this diagram, parameter b is fixed and a is varied. The horizontal axis is the parameter a and the vertical axis is the x1 variable (prey). Notice that the prey population is periodic with period 6 in a small window of the bifurcation diagram. Pick an a value in this window and for this value of the parameter a, plot the prey and predator in the Xi vs. Time window, and also in the Phase Portrait view. Interpret your pictures in biological terms.

a = 3.18

Xi vs. time



Phase Portrait