ECOLOGY 8310
HW10

Consider a 3-species system: 1 predator with 2 prey species (A and B). The predator eats both prey types, and exhibits a type 2 functional response. The prey compete intraspecifically, but do NOT compete interspecifically. The system is at equilbrium, with all three species persisting at constant densities. Now you conduct an experiment in which you reduce (and maintain) prey species A to half of its ambient density. You monitor the density of all three species (prey species A is obviously constant) from the start of the experiment and continue to do so for a very long time.

In the *absence* of any trait-moderated effects, explain the subsequent dynamics of the predator and prey species B (relative to a control system that remains at its equilibrium). Make sure you include the short-term effects of the manipulation as well as the long-term outcomes.