

# Assignment 3: Predators, Prey, and Foodwebs

## 1. Community Stability: connections count

With  $S = 250, \sigma = 0.3$ , how does stability depend on  $C$ .

## 2. Examples of particular dynamics

2.1 damped oscillations of a population to a stable equilibrium point

2.2 stable cycles

2.3 unstable dynamics away from a nontrivial equilibrium

2.4 chaotic dynamics