

# Study Resources

- Homework #3
- Notes from Review recitation
- Dr. Sargent's Website ([link](#))
  - Old Exam 2 ([link to website](#)) – some questions relevant
  - Population Biology Resources ([link](#))
    - Lotka-Volterra Competition ([website](#))
    - Recent Character Divergence in Darwin's Finches ([website](#))
    - play with Populus: (free download)

# Concepts

- Interspecific interactions
- Competitive exclusion: *Gause - Paramecium*
- Stable coexistence of competitors: *Gause - Yeast*
- Lotka-Volterra Competition
- Niche Theory - *Hutchinson*
- Resource partitioning & Character divergence
  - *Lack, Grants - Darwin's Finches*

# Concepts

- Predator/prey coexistence
  - Gause – Protozoa
  - Lynx/hares
  - Huffaker - mites
- “Prudent predation”
- Predator “switching”
  - Murdoch & Oaten
    - guppy predator,
    - tubifex & *Drosophila* prey
- Indirect effects
- Trophic cascades
  - Mary Powers
    - Ozarks - streams
    - California - streams
- Keystone predators
  - Robert Paine – *Pisaster* pred
- Disturbance
  - Robert Paine - intertidal
- Paradox of enrichment – Harper
- Succession