

Lab 12

Population Ecology

Admin

- Quiz / HW
- Grades next week

Group Presentations

- 15 minutes for group meeting
 - write your first slide
 - 3 bullet points, 50 words max

Ecology

Putting the pieces together

- This is what I do for a living.
- We've learned lots of “pieces” of biology - ecology is how all those pieces work together in the day-to-day world.

Ecology is the interactions of living organisms with each other and their environment.

Population Ecology

Why are we here?

- Why do organisms reproduce?
- Everything is food for something else.
- More offspring than can possibly survive.
- Simple rules, complex patterns

Population ecology studies dynamics of species populations: change over time and space.

Population Ecology

The Rules

- Exponential growth in unconstrained environment
- No environment is infinite - growth to **carrying capacity**
- What regulates populations of rabbits and spiders?

Population Ecology Example

- In my garden, there are lettuce, aphids, and ladybugs.
- What if there are too many aphids?
- What if there are too many ladybugs?

Population Ecology

Humans

- What about humans?
- Movie time: http://www.albartlett.org/presentations/arithmetic_population_energy_video1.html

Review - Quizzes