The plan:

Assess biodiversity of this plot today

Give data to Jenn & Carla to summarize

Restore with native vegetation

Assess biodiversity afterwards and compare

Biodiversity

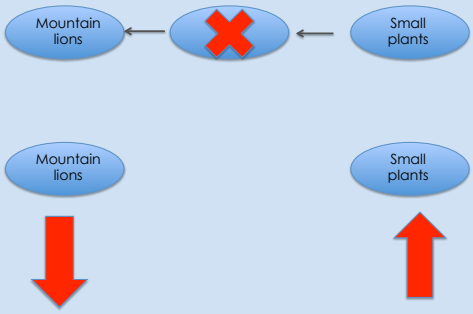
What is biodiversity?

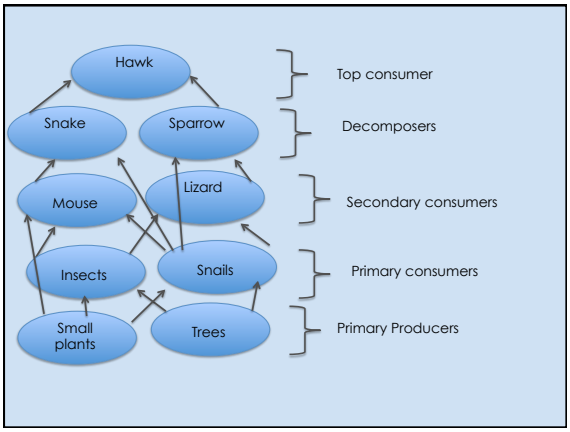
Why is biodiversity important?

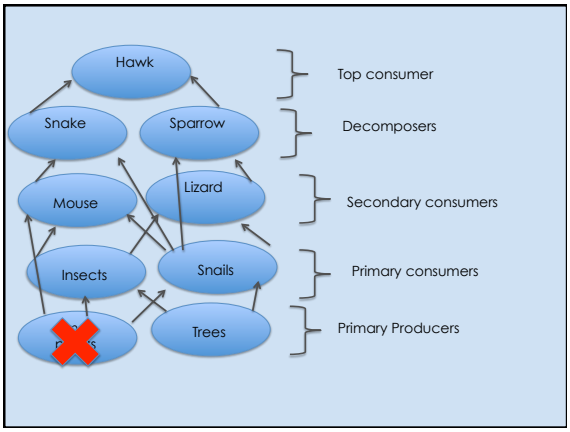
What do healthy ecosystems provide for humans?

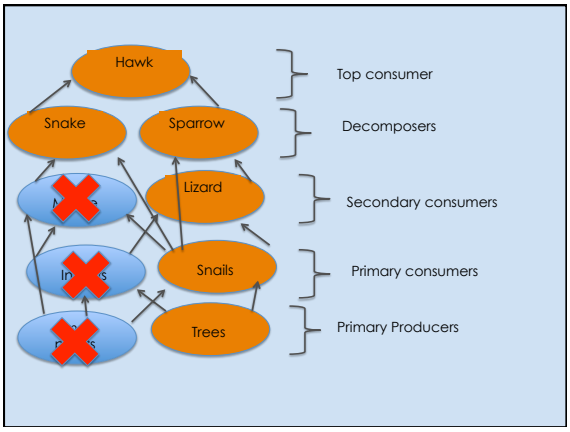
Biodiversity: of a forest

Biodiversity: of a forest

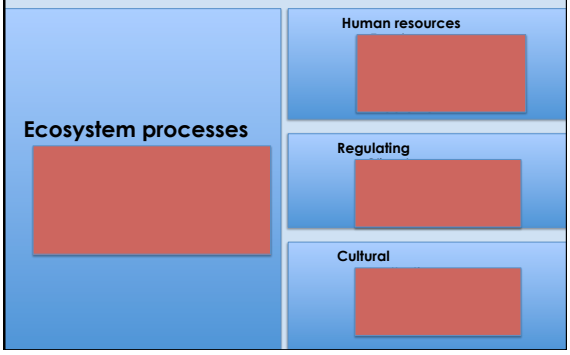








Ecosystem Services



Ecosystem Services

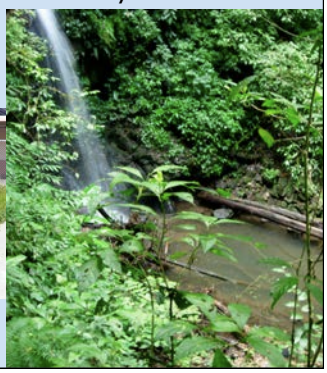
Ecosystem processes
- Nutrient cycling
- Making new soil
- Primary production

Human resources
- Food
- Fresh Water
- Wood and materials
- Fuel
- Medicine

Regulating
- Climate
- Floods
- Disease
- Water purification

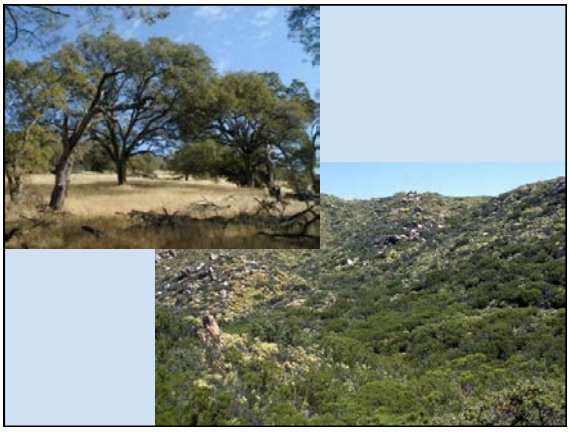
Cultural
- Aesthetic
- Spiritual
- Educational
- Recreational

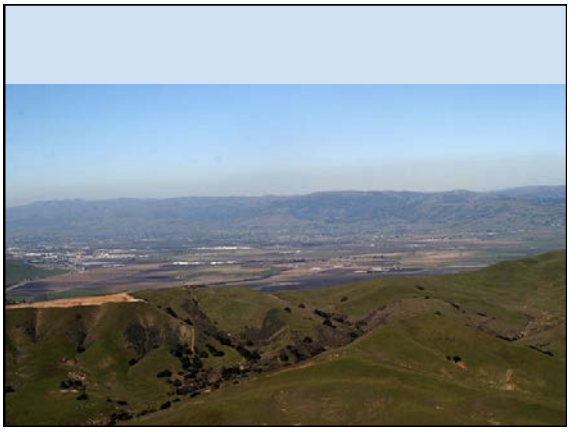
Biodiversity



Restoration of Watsonville Vegetation

What did Watsonville look like before people were here?





The plan:

Assess biodiversity of this plot today

Give data to Jenn & Carla to analyze

Restore with native vegetation

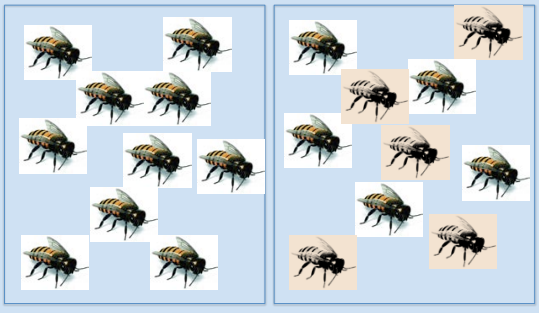
Assess biodiversity afterwards and compare

How do we measure biodiversity?

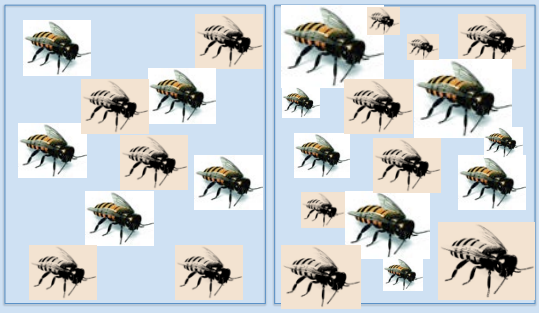
- Each of these species are really different…
  - How do we compare "apples to oranges"?
- Many species!
  - That is A LOT of counting.

http://www.npr.org/blogs/krulwich/2012/11/29/166156242/cornstalks-everywhere-but-nothing-else-not-even-a-bee

There are lots of ways a community can be diverse.



How are these communities different (diverse) from each other?



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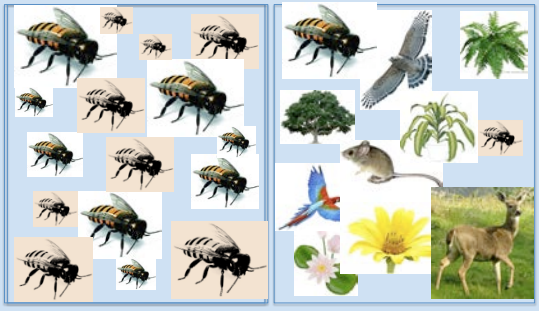

Biodiversity can be *quantified* (counted) in many different ways

Biodiversity can be *quantified* (counted) in many different ways

Total number of species
- Plants
  - Number of woody species vs. herbaceous species
  - Grasses vs. non grasses
  - Pollinator types (bee pollinated, wind pollinated, bird pollinated)
  - Differences in leaf shapes
  - Differences in height
- Insects
  - Number of species
  - Abundance of a single species
  - Pollinators vs. non – pollinators