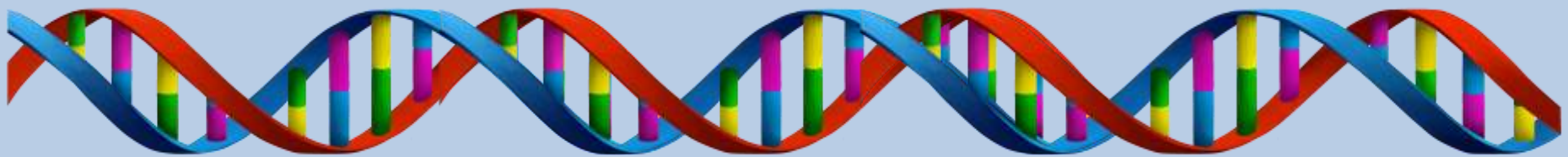


- 1. What are the three symbiotic relationships?**
- 2. What is competitive exclusion?**
- 3. Give an example of one ecosystem service that a stable environment can provide.**



# Biodiversity

- Ecosystem services

## Services Provided and Examples

### Purifying water

Wetlands and intact forests along rivers and around reservoirs filter and clean groundwater. Preserving buffer zones that perform these natural processes is significantly cheaper than building water-purification plants.



### Food production

Highly productive ocean areas provide large fishes, such as tuna, with food and space to thrive. Many wild plants may also produce food for humans.



### Buffering effects of weather

Mangrove forests protect tropical shorelines from erosion by storm waves and runoff. Dune grasses and salt marsh grasses do the same in temperate regions.



### Nutrient cycling

Healthy, actively growing forests remove carbon dioxide from the atmosphere. Bacteria and fungi also take up nitrogen and fix it into organic compounds.



### Pollinating

Bees, flies, and butterflies pollinate crop plants, including fruit trees and vegetables. Beetles, bats, and hummingbirds pollinate many other important plants.



### Maintaining soil structure

Detritivores and other soil organisms aerate soil and prevent it from becoming too compacted. Bacteria and fungi in soil as well as leaf litter microbiomes produce humus.



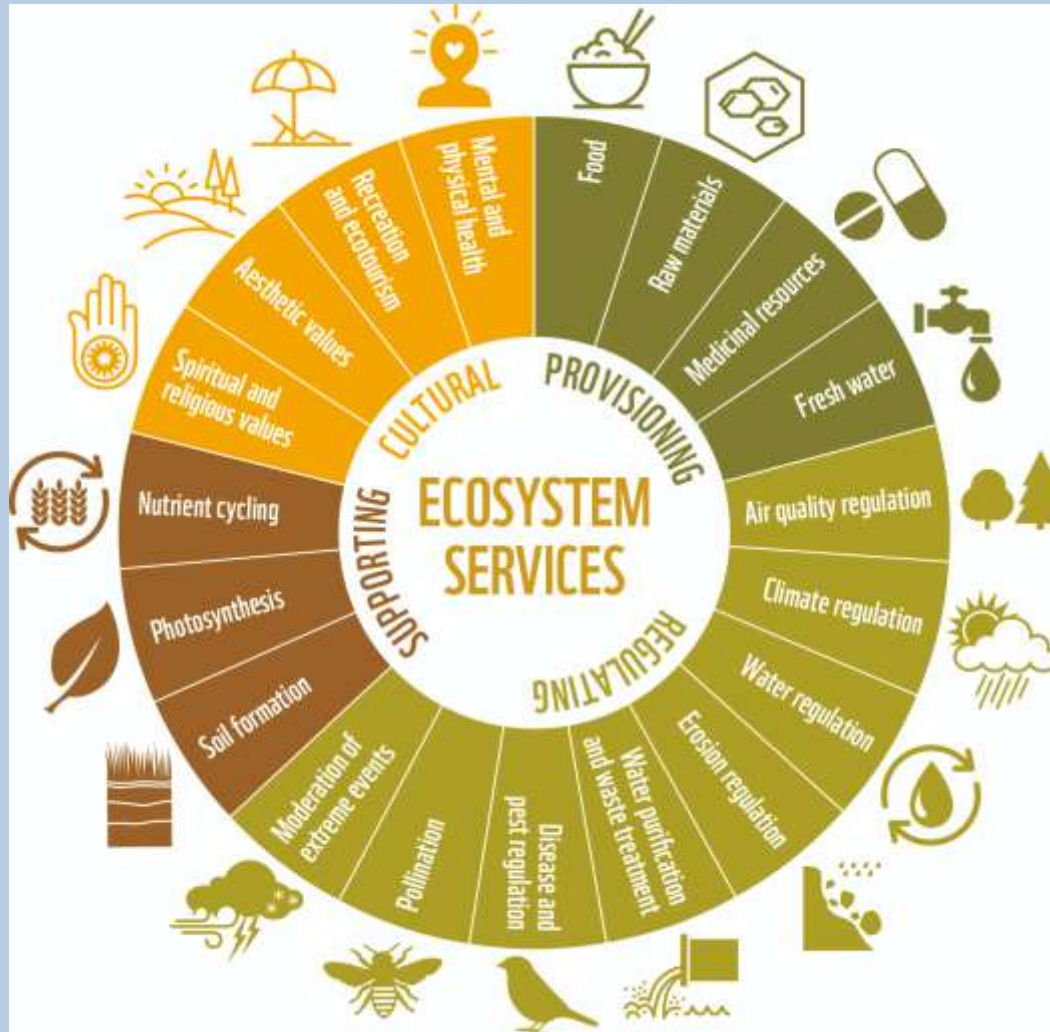
### Regulating pests

Many species of birds and bats eat insects like mosquitoes that can spread disease. These and other predators also eat crop-damaging insects.



# Biodiversity

- Ecosystem services



# Logistics

- **Unit 2 Ecology Assessment is this THURSDAY, Nov 7th**
  - **Cross out objectives 16,17**
  - **YOU MUST RETAKE UNIT 1 ASSESSMENT BY THURSDAY**

# Review

- **STAY ENGAGED**
- **Use your worksheet as a review**
- **<http://youtu.be/PagO3gmwmAo>**

