

Safety

Hazardous Household Product symbols

1. Poisonous



3. Explosive



2. Flammable



4. Corrosive



DANGER



WARNING



CAUTION

Labels that say "danger" are the most hazardous.

Workplace Hazardous Material Information System

Ecosystems

- **Ecosystem** – a self supporting community of living (biotic) and the non-living (abiotic) environment.
- **Biotic** – anything that is alive. E.g. plants, animals, fungi, mold, bacteria, etc.
- **Abiotic** – anything that is not alive. E.g. rocks, air, water, etc.

- **Ecology** – the study of ecosystems.
- If you were an ecologist you would study how biotic and abiotic factors influence each other in an ecosystem.

<http://www.youtube.com/watch?v=O3CZFfyed3M>



Sustainable Development

- **Sustainable development** – Using resources responsibly, so that future generations will still be able use them.

- What are pesticides?
- What is bioamplification?

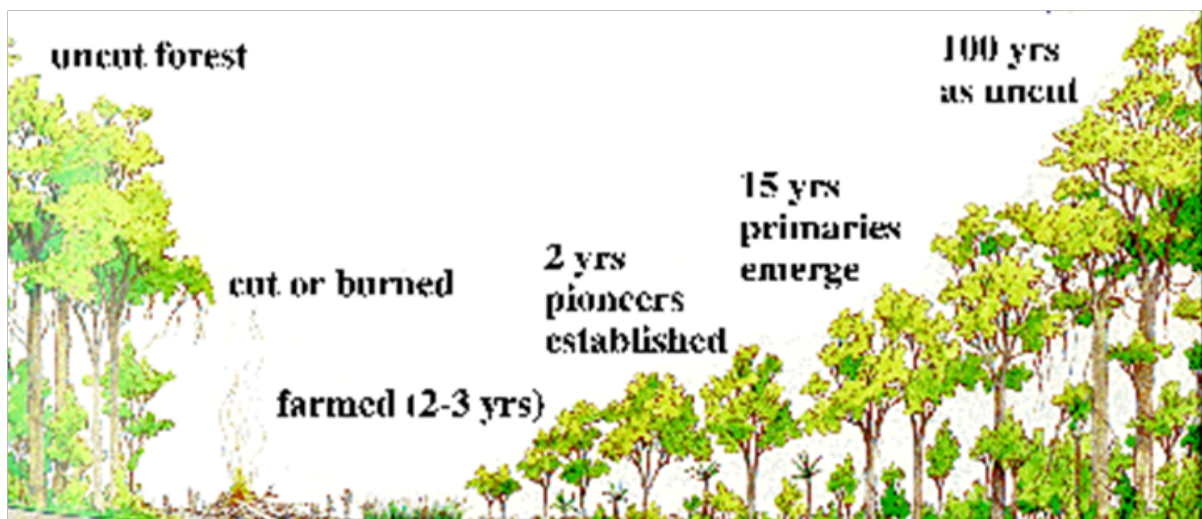
What are their potential side effects?

Succession p. 48-49

- **Succession** – the process that turns one type of ecosystem into another.

E.g. To increase the number of blueberries in an area trees are burned.

This removes the forest and replaces it with low shrubs (blueberries).



Succession

1. **Gradual change** – Occurs over decades or centuries.
Caused by a gradual change in weather, continental drift.

2. **Sudden change** – starts in hours to years.
Caused by a sudden change in weather or the ecosystem.

- **Climax community** – the community of biotic factors that exist after succession occurs.

Energy Flow

- **Trophic level** - The level of a food chain an organism is in.

Examples:

- **Primary Producers** (1°)- Organisms which get their energy from inorganic sources e.g. plants.

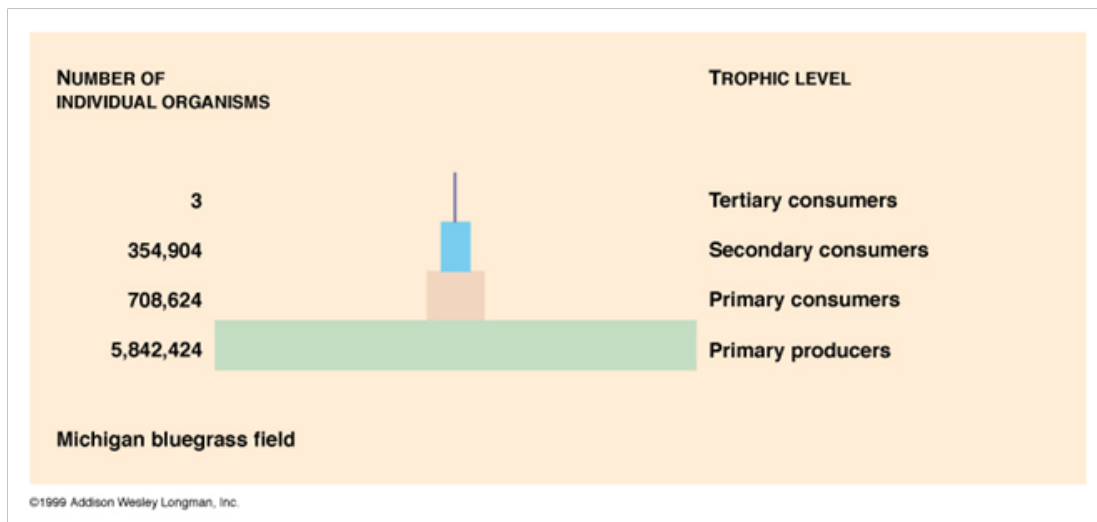
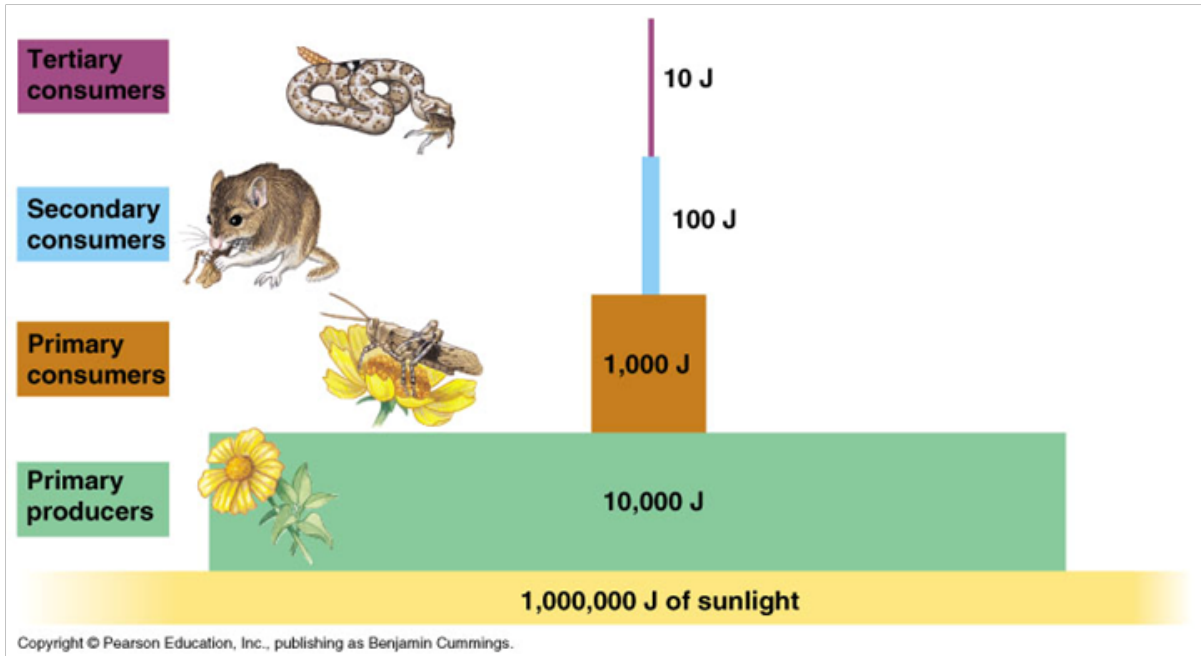
- **Primary Consumers** (1°)- Organisms which get their energy by eating primary producers e.g. hare, caribou

• **Secondary Consumers** (2°)- Organisms which get their energy by eating primary consumers e.g. fox, owl.

• **Tertiary Consumers** (3°)- Organisms which get their energy by eating secondary consumers e.g. snake, tuna.

• **Quaternary Consumers** (4°)– Organisms which get their energy by eating secondary consumers. True quaternary consumers are rare. E.g. When an eagle eats a snake.

Decomposers - Eat only dead organisms. E.g. most fungi.



Pyramid of numbers

Competition

- **Competition** – When organisms fight for the same resources.

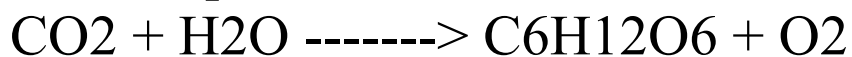
- There are two types:

1. **Intraspecific Competition** - When two organisms of the *same* species compete.

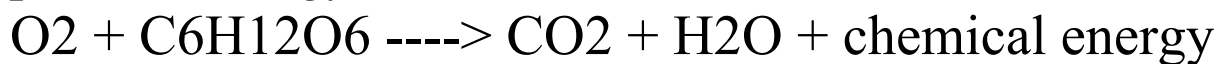
2. **Interspecific Competition** - When two organisms of *different* species compete.

The Carbon Cycle p. 62 - 65

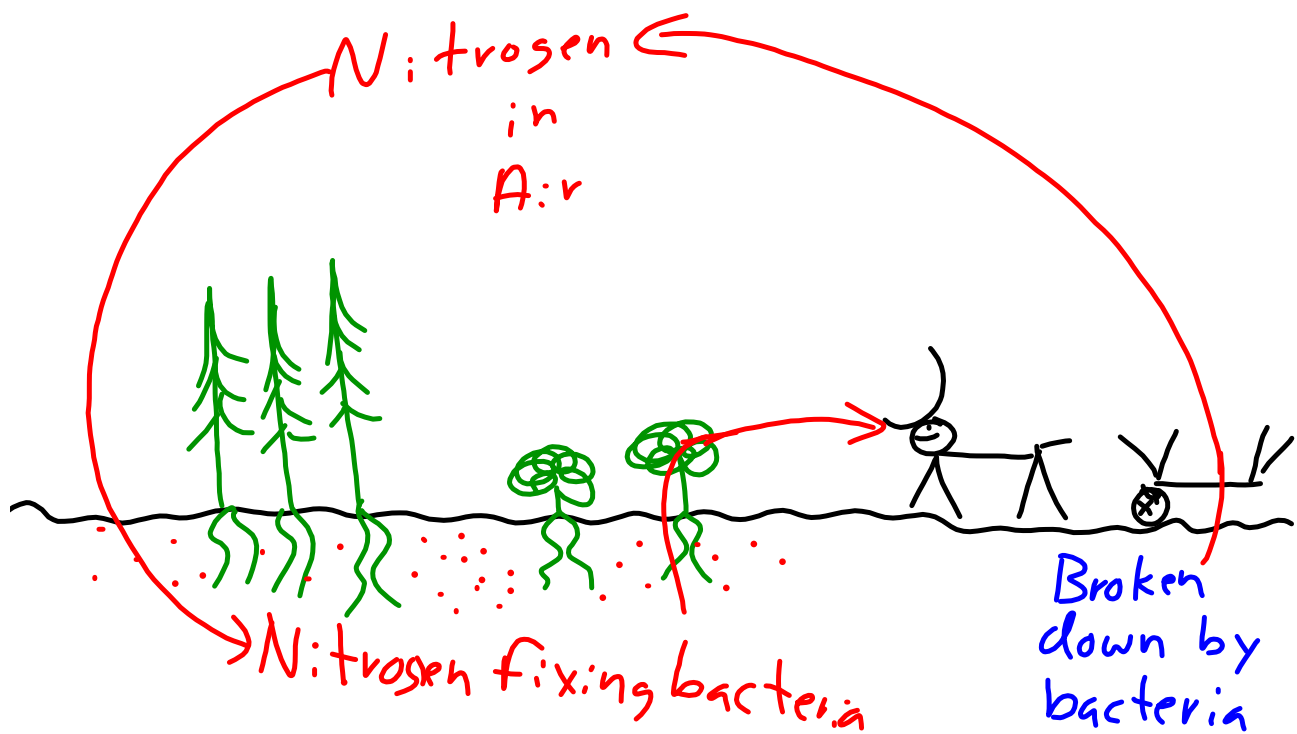
1. Photosynthesis – The process where plants use light energy to produce sugar (glucose).
Plants compete.



2. Cellular respiration (Aerobic respiration) – The process where plants and animals use glucose to produce energy.



The Nitrogen Cycle



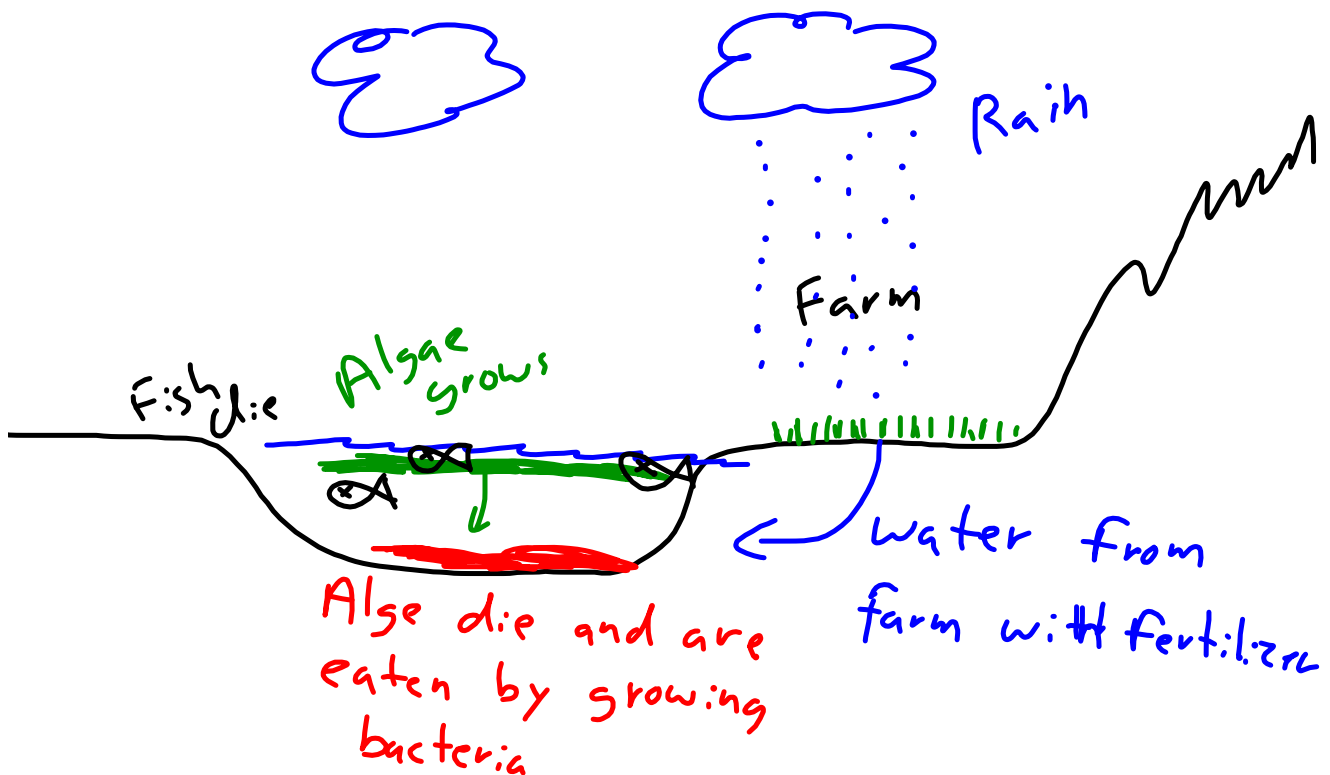
How can humans affect this?

<http://www.youtube.com/watch?v=1XC7xT0mIbY>



Eutrophication

Eutrophication – Increasing the amount of nutrients in ponds which causes the increased growth of bacteria.



<http://www.youtube.com/watch?v=UGqZsSuG7ao>



Biomes p. 88-93

- **Biome** – A large portion of the biosphere that takes in several similar ecosystems.

The seven Biomes are:

1. Tundra
2. Boreal forest
3. Grasslands
4. Temperate deciduous forest
5. Mountains
6. Freshwater
7. Oceans

<http://www.youtube.com/watch?v=1XC7xT0mIbY>



Attachments

1206Attendance.xlsx