



# Threats to Biodiversity

EQ: What events affect biodiversity?

# 5 Threats of Biodiversity (HIPPO)

1. Habitat  
destruction/fragmentation
2. Invasive species
3. Population growth
4. Pollution
5. Overconsumption



# Habitat Destruction

- Changing a habitat to suit human needs...for housing, farming, etc.

- This displaces animals/plants. As the human population grows, so does habitat destruction!



# Fragmentation

- Breaking up large habitats into smaller habitats.
- Creates an “edge” habitat where “inner” habitat used to be. Some plants and animals cannot adapt to these changes.





# Invasive Species

- Any organism that has been relocated somewhere other than its original habitat.
- Oftentimes, invasive species out-compete native species resulting in disruption of the ecosystem and food chain. Many native organisms are becoming endangered by this!

Synonyms include:

Introduced species, non-native species, exotic species and alien species...

Zebra Mussel



Asian Beetle



# Population growth of Humans

- Increasing population means greater demand for food, shelter, fuel and water.
- This often leads to habitat loss, pollution, resource scarcity and overconsumption (in areas with enough money)
- Humans are coming into greater (more frequent) contact with previously wild areas with high biodiversity





# **Population expected to reach 8 billion by 2020**



# Pollution

- Pollution can alter the habitat to the point where some plants and animals will not be able to adapt.
- **Global Climate Change**--many species are intolerant to changes in temperature--affects feeding relationships and breeding patterns.
- **Acid rain/Air pollution**--these types of issues do not respect borders. US acid rain fell in Canada destroying sugar maple forests which upset the amount/quality of maple syrup produced.





# Overconsumption

- Individuals consuming way more resources than needed to survive – sometimes more than is needed for a high standard of life
- Industrialized nations make up 25% of the world's population, but use 75% of its resources.
- US makes up only 5% of world's pop--causes 33% of world's pollution!

