

Introduced Species

Science 10 Notes

Species in an Ecosystem

In an ecosystem, you can group the populations living there into two categories:

- native species are plants and animals that naturally inhabit the area.
- foreign species or introduced species are plants and animals that are not naturally occurring to that ecosystem

Where do Introduced Species Come From?

humans are the main reason why species are transported to a new ecosystem.

- Transport may be on purpose
eg cane toads brought to control cane grubs.
burmese pythons, brought as pets, purposely released.
European bullfrog, brought in as food
- Transport may be on accident
rats came to N. America on boats.
Zebra mussels came in on bottom of boats
- a lot of insects come in with food.

Introduced vs Invasive Species

Many introduced species are not harmful to the new ecosystem.

Some introduced species are classified as invasive species and are damaging to the local ecosystem in some way.

Dangers of Invasive Species

Invasive species can affect native species in several ways:

1. Competition

- Native communities are in balance. Populations are adapted to sharing resources or have established niche.
- Invasive species upset this balance

2. Predation

- Invasive species may be more successful predators than native species
- Native prey may not have defenses against the invasive species

3. Disease and Parasites

- Native species may not have immunity or resistance against invading disease or parasites

4. Habitat Alteration

- Invasive species can make a habitat unsuitable for local species in several ways
 - Change abiotic factors such as:
 - change oxygen content in water.
 - change soil
 - plants can change available water or shade/light levels.
 - Upset local interactions and energy flow
 - change food webs

invasive species
- compete for resources.
- compete for living space
- better or faster at reproducing.

invasive eats lots of things, but has no enemies in their new habitat.

- occupy space.

- reduce biodiversity by outcompeting other organisms

Assignment: Invasive Species Research Assignment