

Why It Matters

- Name three causes of habitat destruction:
 - [Industrial pollution](#)
 - [Mining](#)
 - [Farming](#)
 - [Transporting species into habitats where they had not been](#)
- A change in one [niche](#) is likely to affect other niches and their occupant species.
- Dumping toxins into our lakes and oceans can concentrate in [food webs](#) like mercury in fish.
- A species arises only when there is a great deal of genetic [diversity](#) in a population that matches the opportunities provided by a unique and [unoccupied](#) niche.
- Human activity is [eliminating/removing/destroying](#) many niches by making habitats for our own species. Our [selective breeding](#) of plants and animals creates uniformity in gene pools which decreases the rate of evolution of new species.
- Dr. [Norman Borlaug](#) was the “father of the Green Revolution” and promoted making the land we already use for farming more efficient rather than destroying more ecosystems for farmland.

How We Know

- Farms and lakes that drain from heavily [fertilized](#) farm fields can cause overgrowth of certain plants and limit species [diversity](#).
- After being placed in a warm oven (incubator), bacteria will grow over every part of a culture plate except around discs with antibiotics that are [effective/ineffective](#) at killing the bacteria. Over time [more/fewer](#) antibiotics are losing their effectiveness.
- Rivers carry rich soil that can enrich fields when rivers flood. However, much of this good soil does not settle out until reaching the [ocean](#).
- Name a way to prevent oil spills.
 - [Replace old, leaky pipelines](#)
 - [Avoid human errors in handling oil cargo](#)
 - [Prevent accidents of tankers and barges](#)
 - [Prevent leaks and spills from offshore drilling rigs](#)
- Overfishing can lead to extinction because by decreasing the [population](#), you reduce the chances for successful [reproduction](#).

What We Know

- Deliberate introduction of species into new environments can lead to unintended consequences. These non-native organisms are called [invasive species](#).
- [Goats](#) are an invasive species in the Galapagos Islands that have displaced iguanas and turtles as the primary

plant-eating animals, leaving almost no food for these species.

- While [fertilizer](#) can help crops grow better and help combat starvation, overfertilization can cause plant life to explode. This overgrowth can choke off waterways or rob the water of [oxygen](#) as they rot.
- Overuse of the same antibiotic can act as a natural selection [force](#) that could select for the creation of a new species or strain of bacteria that is [resistant](#) to that antibiotic.
- Overfishing threatens human food supply but also that of other [species](#). For example, the Russian Brown Bear.
- Oil/gasoline ~~is~~[is not](#) a renewable resource.
- Give two examples of endangered species that have recovered after conservation efforts:
 - [American Bald Eagle](#)
 - [Whooping crane](#)
 - [Kemp's Ridley Sea Turtle](#)
- A possibility for reducing fossil fuel use is to add [alcohol](#), made from fermenting grain or crop residues, to gasoline.