

APES Chapter 10-11 Notes
COVID VERSION
Sustaining Terrestrial & Aquatic Biodiversity

- *ERT-2.B. Describe ecosystem services.*
 - There are four categories of ecosystem services: provisioning, regulating, cultural, and supporting.
- *ERT-2.C. Describe the results of human disruptions to ecosystem services.*
 - Anthropogenic activities can disrupt ecosystem services, potentially resulting in economic and ecological consequences.
- *EIN-2.B. Describe the effect of clearcutting on forests.*
 - Clearcutting can be economically advantageous but leads to soil erosion, increased soil and stream temperatures, and flooding.
 - Forests contain trees that absorb pollutants and store carbon dioxide. The cutting and burning of trees releases carbon dioxide and contributes to climate change.
- *EIN-2.J. Describe causes of and problems related to overfishing.*
 - Overfishing has led to the extreme scarcity of some fish species, which can lessen biodiversity in aquatic systems and harm people who depend on fishing for food and commerce.
- *STB-1.G. Describe methods for mitigating human impact on forests.*
 - Some of the methods for mitigating deforestation include reforestation, using and buying wood harvested by ecologically sustainable forestry techniques, and reusing wood.
 - Prescribed burn is a method by which forests are set on fire under controlled conditions in order to reduce the occurrence of natural fires.
- *STB-3.E. Describe the impacts of human activity on wetlands and mangroves.*
 - Threats to wetlands and mangroves include commercial development, dam construction, overfishing, and pollutants from agriculture and industrial waste.
- *EIN-4.C. Explain how human activities affect biodiversity and strategies to combat the problem.*
 - Habitat fragmentation occurs when large habitats are broken into smaller, isolated areas. Causes of habitat fragmentation include the construction of roads and pipelines, clearing for agriculture or development, and logging.
 - The scale of habitat fragmentation that has an adverse effect on the inhabitants of a given ecosystem will vary from species to species within that ecosystem.
 - Some ways humans can mitigate the impact of loss of biodiversity include creating protected areas, use of habitat corridors, promoting sustainable land use practices, and restoring lost habitats.

Review Videos from 2020 (ignore specific information about the exam from spring, 2020)

[Human Impacts on Ecosystems](#) (also covers topics in chapter 20)

[Human Impacts on Biodiversity](#)

[Clearcutting, Overfishing, Aquaculture & Forestry](#)