

## SUGGESTED SKILL

 *Concept Explanation*

## 1.A

Describe environmental concepts and processes.



## AVAILABLE RESOURCES

- Classroom Resource > [AP Environmental Science Teacher's Guide](#)
- The Exam > [Chief Reader Report 2017, Q3 & Q4](#)
- The Exam > Samples and Commentary (2017, Q3, 2017, Q4)
- Classroom Resource > [Quantitative Skills in the AP Sciences \(2018\)](#)
- Collaborations with AP > [Loss of Biodiversity](#)

## TOPIC 2.1

# Introduction to Biodiversity

## Required Course Content

### ENDURING UNDERSTANDING

**ERT-2**

Ecosystems have structure and diversity that change over time.

### LEARNING OBJECTIVE

**ERT-2.A**

Explain levels of biodiversity and their importance to ecosystems.

### ESSENTIAL KNOWLEDGE

**ERT-2.A.1**

Biodiversity in an ecosystem includes genetic, species, and habitat diversity.

**ERT-2.A.2**

The more genetically diverse a population is, the better it can respond to environmental stressors. Additionally, a population bottleneck can lead to a loss of genetic diversity.

**ERT-2.A.3**

Ecosystems that have a larger number of species are more likely to recover from disruptions.

**ERT-2.A.4**

Loss of habitat leads to a loss of specialist species, followed by a loss of generalist species. It also leads to reduced numbers of species that have large territorial requirements.

**ERT-2.A.5**

Species richness refers to the number of different species found in an ecosystem.