

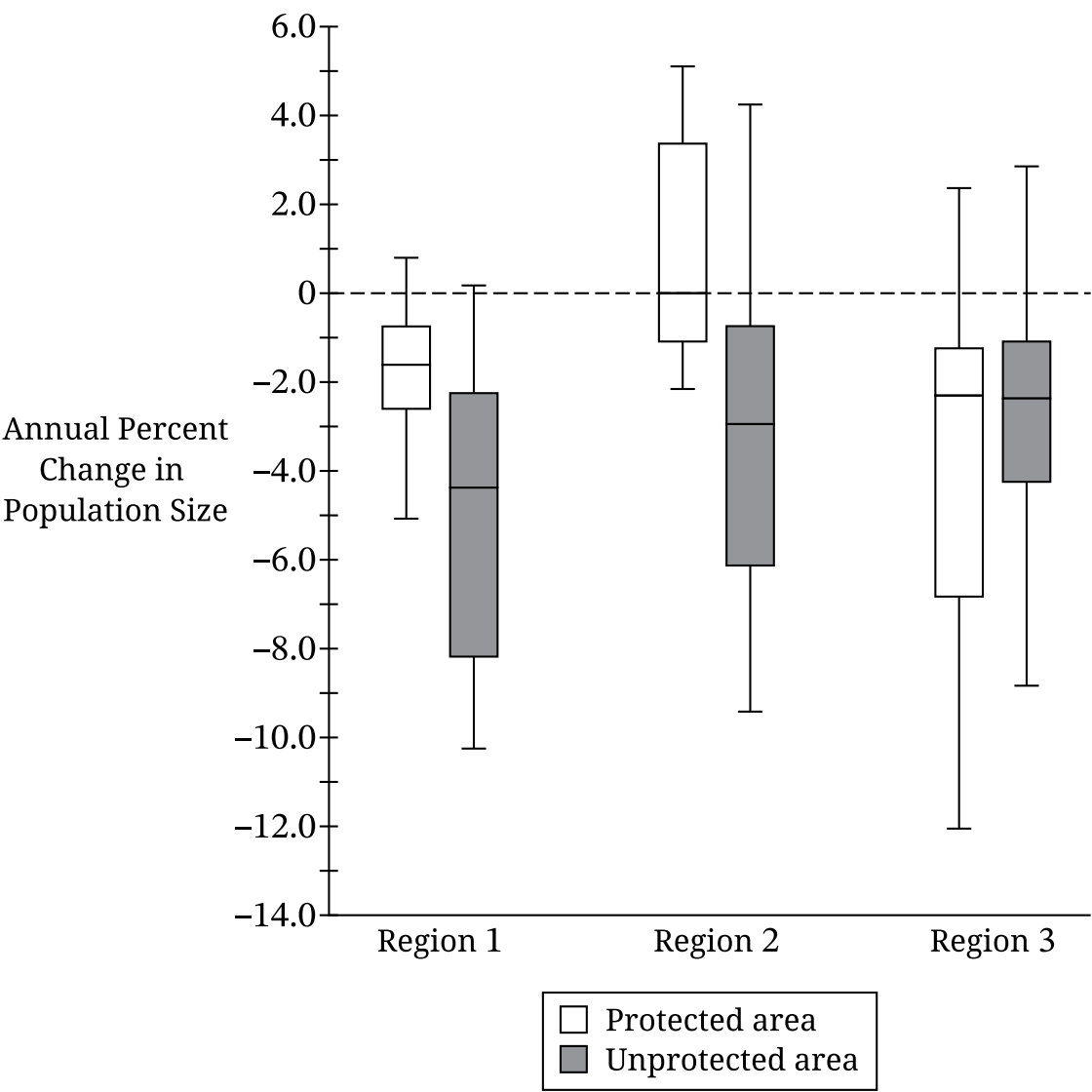
The following information applies to all parts.

6. Many raptors in Africa are top predators and keystone species in their ecosystems. Raptor population sizes have been declining in recent years.

Scientists studied the relationship between the conversion of the raptors’ natural habitat into farmland and the population sizes of raptors in those regions. They compiled raptor population size data from three different regions of Africa: Region 1, Region 2, and Region 3. In each of the regions, the scientists compared the annual percent change in the raptor population size in areas that were protected from farming (protected) with the annual percent change in areas where farming occurred (unprotected). Their results are shown in the box and whisker plot.

type of bird

Median Annual Percent Change in the Population Size of Raptors in Protected and Unprotected Areas



Part A

Based on the box and whisker plot, **identify** the median annual percent change in population size in the unprotected area of Region 2.

Part B

Based on the box and whisker plot, **identify** the region and area that experienced the greatest median annual percent change in population size.

Part C

Researchers hypothesize that if farming is eliminated in Region 2, there will no longer be a decline in the raptor population size. Based on the data in the box and whisker plot, **evaluate** the researchers’ hypothesis.

Part D

Based on the information provided, **explain** why ecosystem resilience in unprotected areas may decline over time.