

TOPIC 3.2

K-Selected r-Selected Species

SUGGESTED SKILL

 *Data Analysis*

5.A

Describe patterns or trends in data.



AVAILABLE RESOURCES

- Classroom Resource > [AP Environmental Science Teacher's Guide](#)

Required Course Content

ENDURING UNDERSTANDING

ERT-3

Populations change over time in reaction to a variety of factors.

LEARNING OBJECTIVE

ERT-3.B

Identify differences between K- and r-selected species.

ESSENTIAL KNOWLEDGE

ERT-3.B.1

K-selected species tend to be large, have few offspring per reproduction event, live in stable environments, expend significant energy for each offspring, mature after many years of extended youth and parental care, have long life spans/life expectancy, and reproduce more than once in their lifetime. Competition for resources in K-selected species' habitats is usually relatively high.

ERT-3.B.2

r-selected species tend to be small, have many offspring, expend or invest minimal energy for each offspring, mature early, have short life spans, and may reproduce only once in their lifetime. Competition for resources in r-selected species' habitats is typically relatively low.

ERT-3.B.3

Biotic potential refers to the maximum reproductive rate of a population in ideal conditions.

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LEARNING OBJECTIVE**ERT-3.B**

Identify differences between K- and r- selected species.

ESSENTIAL KNOWLEDGE**ERT-3.B.4**

Many species have reproductive strategies that are not uniquely r-selected or K-selected, or they change in different conditions at different times.

ERT-3.B.5

K-selected species are typically more adversely affected by invasive species than r-selected species, which are minimally affected by invasive species. Most invasive species are r-selected species.