

Q: Name 3 characteristics that make a species more vulnerable to extinction.

A: Small populations, specialized to a certain area or resource, narrow mating seasons.

Q: A J shaped curve represents what type of growth?

A: Exponential Growth.

Q: An S-shaped curve represents what type of growth?

A: Logistic Growth

Q: What is the maximum number of individuals that can be supported by an ecosystem on a long term basis.

A: Carrying Capacity

Q: Availability of food, water, mates, shelter, suitable breeding sites, temperature, disease, and predators are all examples of ?

A: Limiting Factors

Q: An insect only eats blackberries from Arkansas. What type of species is this?

A: Specialist

Q: How do you calculate population growth rate?

A: $(\text{Births} + \text{Immigrants}) - (\text{Deaths} + \text{emigrants}) / \text{Total population}$

Q: A species that is large in size, long lived, exhibit parental care, and reproduce later in life are also know as what type of species?

A: K-Selected

Q: A species that is small in size, fast developing, have many small offspring, and do not care for their young is an example of what type of species?

A: R-Selected

Q: What latitudes produce the highest biodiversity?

A: Near the EQUATOR

Q: What are the major causes of biodiversity loss?

A: Habitat alteration, invasive species, pollution, overharvesting, and climate change

Q: Zebra mussels most likely made their way from their home by traveling in ballast water taken on by cargo ships. They compete with native species and clog water treatment facilities and power plant cooling systems. This is an example of a what?

A: Invasive Species

Q: The Siberian Tiger has been isolated between the Sikhote-Alin Mountains. It's population is declining. This is an example of what theory?

A: Equilibrium Theory of Island Biogeography

Q: According to the equilibrium Theory of Island Biogeography the bigger the island the greater the _____?

A: number of species

Q: Temperature and vegetation change as you travel south because of ?

A: Increase in mean temperature and annual precipitation.

Q: A clownfish lives in a sea Anemone, the clownfish has a protective place to live and the sea anemone feeds off the fish's waste. What type of relationship is this?

A: Mutualism

Q: Once vegetation has been cleared to expose soil, erosion may become progressively more severe if the forces of water or wind surpass the rate of vegetative regrowth. What type of feedback loop does this represent?

A: Positive feedback loop.

Q: When decomposers in an aquatic system consume enough oxygen to cause oxygen concentrations in bottom waters to plummet, suffocating shrimp and fish it is known as what?

A: A dead zone

Q: What process is characterized by nutrient overenrichment, blooms of algae, increased production of organic matter, and subsequent ecosystem degradation?

A: Eutrophication

Q: The energy or the organic matter stored by plants after they have metabolized enough for their own maintenance is known as the net primary productivity. How is it calculated?

A: Net Primary Productivity = Gross Primary Productivity – respiration.