

Ecology

What are the 3 aspects of a population?

- Populations, dispersion, and size of populations

Population size – number of individuals that a population contains based on birth, death, immigration, and emigration

Population dispersal – spatial distribution of individuals

What are the 3 types of dispersal?

Clumped, random, uniform

Population density – measures how crowded a population is

Population dynamics – changes in populations (birth rate) (death rate)

Survivorship curves – probability that members will survive to certain age

What are the 3 types of survivorship curves?

Type 1, type 2, type 3,

Population growth – amount by which a population changes over time. dependent on birth, death, immigration, and emigrations

Density dependent – changes environment depending on the density. Limited meat only affects areas with high density

Density independent – changes environment not matter how dense the population is. A fire will hurt everyone, no matter two people, or 2,000

Exponential growth – population increases steadily like a J

Logistic growth – builds on exponential but accounts for limiting factors like a S

What is human impact?

Pollution, human resource use, over-depletion, global warming, acid rain, biological magnification

Competition – organisms compete for limited resources -/-

Parasitism – one benefits, the other is harmed +/-

Mutualism – both benefit +/+

Commensalism – one is helped, other is not affected

Mimicry – harmless species imitates a harmful species

Biodiversity – how many different species in an environment

Dominant species – most abundant

Keystone species – have large effects on ecosystem

Succession – change over time

Primary succession – begins lifeless, pioneer species make the soil better, slow growth

Secondary succession – existing community is cleared but soil is still good, rapid growth

Climax community – final stage of natural succession