Population ecology essay sample



Population ecology is the affect of a populations density and extension.

When a group of single species occupy the same general area it is known as a population. This group of species will rely on resources and the same environmental atmosphere. The number of species within a group that occupy the same area or habitat is known as population density. Some ecologists use different types of techniques to estimate the population density. When you separate the individual age group of a species this is known as an age structure. The age structure can provide a history of the populations reproductive success and how it relates to the environment.

Many insurance companies use a table to presume a person's life span is known as life table. The way an insurance company takes a number let's say 93, 735 people out of this amount they figure 100, 000 people who live to be 50 years of age or longer. With this technique it helps them to predict the formation and dynamics of diverse plants and animal species life span. Survivorship curve is what environmentalist use to gather information from a graphically data to average amount of humans who exceed the age of life expectancy to live. The survivorship curve is broken into three parts.

According to the reproduction of how many children they produce and the way the pup is cared for it multiplies their life span into maturity is known as type one curve. Next, comes type three curve this is when they produce several species who multiply many cups their survivor chances are increased due to miss caring for them and can be eaten by predators or other forms of death. Then is type two curve, when their more active in one stage of life than when they get older. When there is a pattern to a populations survivorship it may be known as life history.

The traits may affect an organism's reproduction and survival. If there is a population of species in a certain environment, the outcome may favor their life history. An organism has limited time and energy to fulfill a life expectancy. During a opportunistic life history a plant or animal may have an advantage on certain survivorship conditions. "Some organisms have an equilibrial life history which is a precedent of developing sexual maturity certain plants may have similar life history traits" (Simon, Reece, & Dickey, 2010).

During some population growth models animals are born or welcome themselves into the family. While some other species emigrate out of the family or perhaps die due to illness. Exponential population growth happens in some situations such as a hurricane, fire or even cold weather. Some human activity can be a disturbance of exponential population growth, but no natural environment can sustain growth indefinitely. Intraspecific competition is individuals of the same species battling for the same limited resources.

Density-dependent factor is when a population whose limiting factor effects get intense as the population increases in density. An endangered species is in danger of extinction through a significant portion of their range. When a threatened species are those that are about to become endangered in the future. An invasive species would be a non native species that spread far beyond their original colony to find a suitable habitat. Biological control is when an intentional release of a natural enemy will attack a pest population.

A coevolution is when an adaptation of one species leads to a reverse adaptation of another species. Kudzu is a plant that has overtaken some of the ground in the United States and scientist are trying to find ways they can control the outbreak of this plant. One of the experiments they are trying was using to use a moth and it seems that moth's are attracted to the plant. Insects have been a problem for many of the famers or a person's lawn and while there are chemicals to control the pest it may be harmful to the environment and human's.

When there is a baby born somewhere around the world another human is dying. With the number of people being added to our population there has been a decline since the 1980's. Population growth depends on the size of our world. The overall growth rate of our world population suffered a down ward trend with a difference between births and deaths. To predict a populations future growth there is an age structure formula that scientist use. Population momentum is a result with the increase proportion of women in child bearing age.

A diagram of age structure may indicate a social ondition such as employment, infrastructure, and schools. The increase of the elderly population means that people are living longer. To understand the approach of availability and usage is known as ecological footprint. This footprint estimates the amount of land required to provide a population with some resources that it needs such as food, housing, water, and fuel. Some countries are drawn in proportion with the amount of resources that it uses. Our human population continues to increase in almost every corner of the world.