

TERMS AND CONCEPTS TO UNDERSTAND AS RELATED TO E.S.

biological evolution	cladogram (a.k.a.	population distribution
natural selection	phylogenetic trees)	random distribution
Charles Darwin	extinction	uniform distribution
Alfred Russell Wallace	endemic	clumped distribution
adaptation/adaptive trait	background extinction rate	sex ratio
maladaptive trait	mass extinction event	age distribution/structure
heritable	K-T event	survivorship curves
mutation	community	demographer
nucleotide	ecosystem	immigration
genome	population ecology	emigration
recombination	community ecology	growth rate
directional selection	ecosystem ecology	exponential growth
stabilizing selection	habitat	limiting factor
disruptive selection	epiphyte	carrying capacity
artificial selection	habitat selection and use	logistic growth
biodiversity	niche	density dependent factor
species	specialist	density independent factor
population	generalist	K-selected species
speciation	population dynamics	R-selected species
allopatric speciation	population size	ecotourism
sympatric speciation	population density	

AFFIXES

allo= to separate

sym= together

patric= country

Key Concepts:

1. Be able to explain the process of natural selection and support with evidence; compare and contrast to artificial selection.
2. Recognize the roles of speciation and extinction in biodiversity. Be able to explain factors which influence changes in biodiversity.
3. Reflect on video watched in class- "Extinctions"- don't overlook any notes you took during the video. You should know the five major extinction events- roughly when they occurred and causal theories, especially the Permian extinction and K-T extinction, but also know what was wiped out.
4. Know how populations are described (characterized) and be able to predict what will happen to a population as its dynamics change.
5. Be able to identify challenges to protecting biodiversity and provide reasons it is important to protect it.