CHAPTER 4 AND 5 REVIEW

* CHARLES DARWIN- RESEARCH OF GALAPAGOS ISLANDS, FINCHES

STRUCTURAL EVIDENCE

* HOMOLOGOUS STRUCTURE-SHARED ANCESTRY, FORELIMBS
* ANALOGOUS STRUCTURE-IDENTICAL FUNCTION OF STRUCTURE, WINGS
* VESTIGIAL STRUCTURE- STRUCTURE THAT IS NO LONGER USEFUL TO THE MODERN ORGANISMS- TAILBONE, PELVIC BONE, APPENDIX

PATTERNS OF EVOLUTION

* COEVOLUTION- PREDATOR/ PREY PARASITE/HOST
* CONVERGENT EVOLUTION- ENVIROMENT SELECTS TRAITS THAT ARE BEST SUITED FOR THE ENVIROMENT- PORPOISE/DOLPHIN
* DIVERGENT EVOLUTION- TWO SPECIES MORE DISSIMILAR- SPED UP BY ARTIFICIAL SELECTION- DOG BREEDING
* NATURAL SELECTION- TRAITS THAT ARE BEST SUITED FOR AN ENVIROMENT

“DESCENT WITH MODIFICATION, MODIFICATION BY NATURAL SELECTION”

3 MODES OF NATURAL SELECTION

* STABILIZING-INTERMEDIATE FAVORED
* DIRECTIONAL- SMALL OR LARGE IS FAVORED
* DISRUPTIVE- INTERMEDIATE ELIMINATED

P. 89 -SPECIES EVENESS VS. SPECIES RICHNESS- SHANNON WIENER INDEX

P. 91- GENERALISTS VS SPECIALISTS SPECIES

P. 92- NATIVE, NONNATIVE, INDICATOR, FOUNDATION, KEYSTONE SPECIES

CHAPTER

SECTION 5-1 SPECIES INTERACTIONS

* INTERSPECIFIC COMPETITION
* PREDATION
* PARASITISM
* MUTUALISM
* COMMENSALISM
* RESOURCE PARTITIONING- REDUCES NICHE OVERLAP
* P.109-POPULATIONS- CLUMPING, RANDOM, OR UNIFORM
* FORMULA FOR POPULATION CHANGE P. 109
* LOW VS HIGH BIOTIC POTENTIAL
* ENVIRONMENTL RESISTANCE- ALL FACTORS THAT LIMIT A POPULATIONS GROWTH
* CARRYING CAPACITY (K)- BIOTIC POTENTIAL + ENVIROMENTAL RESISTANCE
* P.111 Figure 5-11 and 5-12
* r-SELECTED VS. K SELECTED SPECIES