

Theories about the Rate of Speciation:

A) Gradualism

- **Gradualism-** New species arise over vast periods of time for which there are slow somewhat constant allelic changes to the original species
- Proposed by Darwin

B) Punctuated Equilibrium

- **Punctuated Equilibrium-** New species arise very fast over short periods of geological time
- That rapid speciation is followed by stasis (equilibrium)- vast periods of time with no evolution
- Evolution occurs by fits and spurts
- Proposed by Gould and Eldridge

C) Perfectly Adapted Species

- Evolution does NOT lead to perfectly adapted species because NO species is perfectly adapted
 - Environments change
 - Selection pressures change