

An empirical view of speciation and macroevolution

- **speciation is when new lineages are formed by diverging from parent populations; this may be done in many ways**
- **populations that adapt to new environments may shift the range of variability in some features, but this does not consequently reduce variability in new species**
- **speciation may occur as the result of only a few genetic or morphological or behavioral changes**
- **macroevolution is the study of the patterns and processes of evolution *above* the species level**
- **speciation is the “raw material” for the patterns and processes of macroevolution; “macroevolution” is not itself a process, and it does not mean the origin of new forms**