

Confounding Effects

Finding evidence for selection is confounded by any process that produces a cline in allele frequencies.

- Genetic structure, historical demography, bottlenecks, restricted gene flow, range expansion, etc.
- Statistical strategies **must** correct for these factors to avoid Type I errors.

Summary

- Natural selection acts upon the phenotype, most of which are quantitative in nature.
- The extent to which a phenotype can be inherited is determined by the proportion of the phenotypic variance that can be attributed to genetic sources.
- The pace at which traits may evolve is dictated by both the magnitude of selection as well as the heritability of the trait.