

**Dr. Malin Pinsky – Evolution & Fisheries: A Relationship?
Glossary**

TERM	DEFINITION
Adaptation	A trait with a current functional role in the life history of an organism that is maintained and evolved by means of natural selection.
Allele	Alternative form of a gene.
Allelic Richness	A measure of the number of alleles per locus; allows comparison between samples of different sizes by using various statistical techniques (e.g., rarefaction).
Evolution	Change in the inherited characteristics of biological populations over successive generations, due to changes in allelic frequency.
Fitness	The ability to both survive and reproduce, and is equal to the average contribution to the gene pool of the next generation that is made by an average individual of the specified genotype or phenotype.
Gene	The molecular unit of heredity of a living organism.
Genetic Diversity	The total number of genetic characteristics in the genetic makeup of a species or population.
Genome	The entirety of an organism's hereditary information. It is encoded in either DNA or RNA.
Genotype	The genetic makeup of a cell, an organism, or an individual usually with reference to a specific characteristic under consideration.
Heterozygosity	Carrying different alleles for a particular genetic locus, as opposed to homozygous (having the same alleles) or hemizygous (having one allele). <i>Average</i> heterozygosity is a measure of genetic diversity at the population scale and indicates the average proportion of individuals that are heterozygous for a given trait.

Locus	The specific location of a gene or DNA sequence or position on a chromosome.
Meta-Analysis	Methods that focus on contrasting and combining results from different studies, in the hope of identifying patterns among study results, sources of disagreement among those results, or other interesting relationships that may come to light in the context of multiple studies.
Natural Selection	Gradual process by which biological traits become either more or less common in a population as a function of the effect of inherited traits on the differential reproductive success of organisms interacting with their environment.
Phenotype	The composite of an organism's observable characteristics or traits, such as its morphology, development, biochemical or physiological properties, phenology, behavior, and products of behavior.
Population	A summation of all the organisms of the same group or species, who live in the same geographical area, and have the capability of interbreeding.
Population Bottleneck	A population of some minimal size that is the result of some drastic demographic event.
Trait	A distinct variant of a phenotypic character of an organism that may be inherited, be environmentally determined or be a combination of the two.