**Genetic Drift**

Genetic drift along with natural selection, mutation, and migration is one of the basic mechanisms of evolution. The term was proposed by the biologist Sewall Wright and is also known as Sewall Wright Effect. Genetic drift describes random fluctuations in the numbers of gene variants in a population. Genetic drift takes place when the occurrence of variant forms of a gene, called alleles, increases and decreases by chance over time. These variations in the presence of alleles are measured as changes in allele frequencies.

Genetic drift is defined as the variation in the relative frequency of different enotypes in a small population, owing to the chance disappearance of particular genes as individuals die or do not reproduce. Some examples are

* The last green-eyed person in a small town dies, leaving only brown-eyed and blue-eyed people.
* A large group of red poppies exchanges genetic material with white poppies. Over time, white poppies become rarer and rarer while red poppies thrive.
* A wildflower population consisting of blue, purple, and pink flowers is subjected to a mudslide that kills most of the blue ones. As time progresses, blue flowers eventually die out, leaving only purple and pink wildflowers.

Typically, genetic drift occurs in small populations, where infrequently occurring alleles face a greater chance of being lost. Once it begins, genetic drift will continue until the involved allele is either lost by a population or until it is the only allele present in a population at a particular locus. Both possibilities decrease the genetic diversity of a population. Genetic drift is common after population bottlenecks, which are events that drastically decrease the size of a population. In these cases, genetic drift can result in the loss of rare alleles and decrease the gene pool. Genetic drift can cause a new population to be genetically distinct from its original population, which has led to the hypothesis that genetic drift plays a role in the evolution of new species.