



Birds and the Founder Effect

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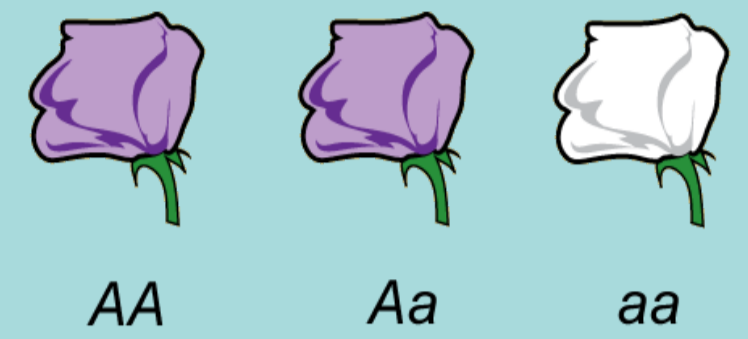
GENETIC DRIFT

Randomness can lead to big changes in **genotype**

GENOTYPE: complete set of genetic material



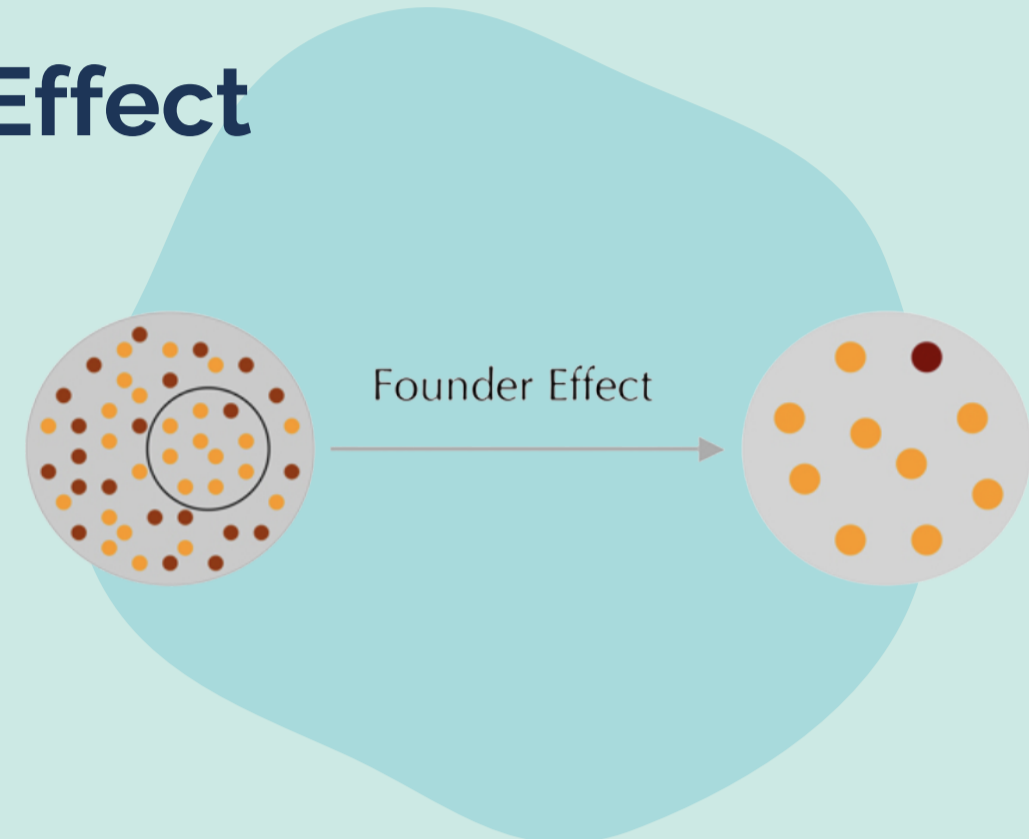
PHENOTYPE: characteristics that are observable



Genetic drift affects smaller populations. A specific kinds of genetic drift is called **founder effect**.

Founder Effect

Founder effect occurs when a specific trait is more prevalent in a new population because the founding members happen to have an abnormally high percentage of that trait.



Founder Effect can be observed in the bird population of Ocobock Island

A small population of birds moved from the mainland to Ocobock Island.



Mainland



Ocobock Island

Ocobock Island Birds

Mainland birds were a healthy mix of colors, mainly yellow, blue, and black. Randomly, the migrated birds only contained some blue and yellow birds, the new occupants of Ocobock island..



Year 0



Year 1



Year 5



Year 10

Over time, **blue** became the dominant color over the **yellow** in the bird population, eventually making **blue** the **only color prevalent** in the Ocobird population on the island, differing from the colorful variation of the mainland.

Eventually, Ocobock birds became known for their vibrant blue appearance. Since there was no other bird colors remaining in the population, the genetic variation of the Ocobock birds, not just in color but other alleles as well, was greatly reduced. Regardless, although a product of the founder effect, the Ocobock bird population live happy and healthy lives!

Works Cited:

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