

Chapter 16-2: Evolution as Genetic Change

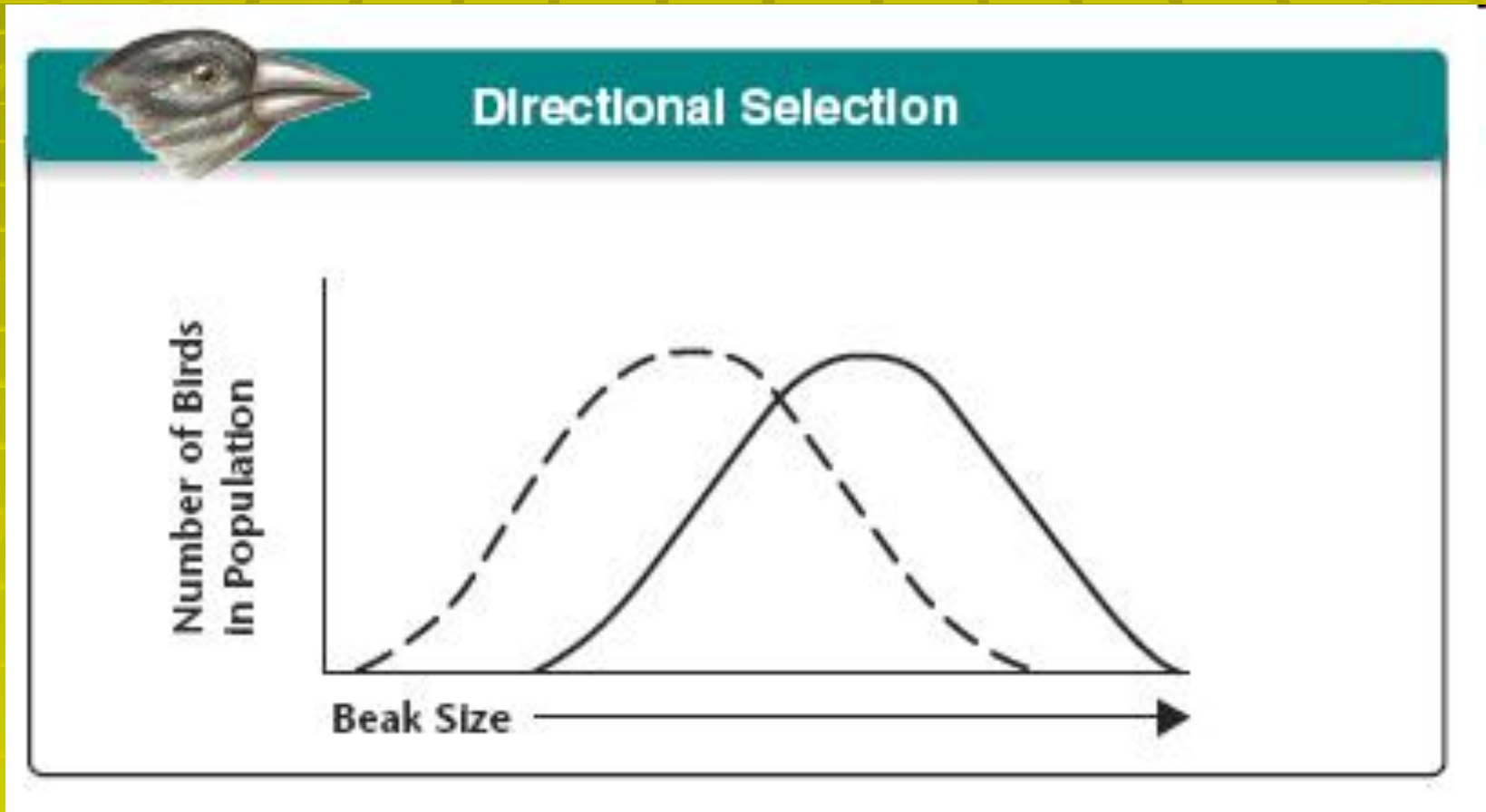
Essential Questions:

- How does natural selection affect single-gene & polygenic traits?
- What is *genetic drift*?
- What are 5 conditions needed to maintain *genetic equilibrium*?

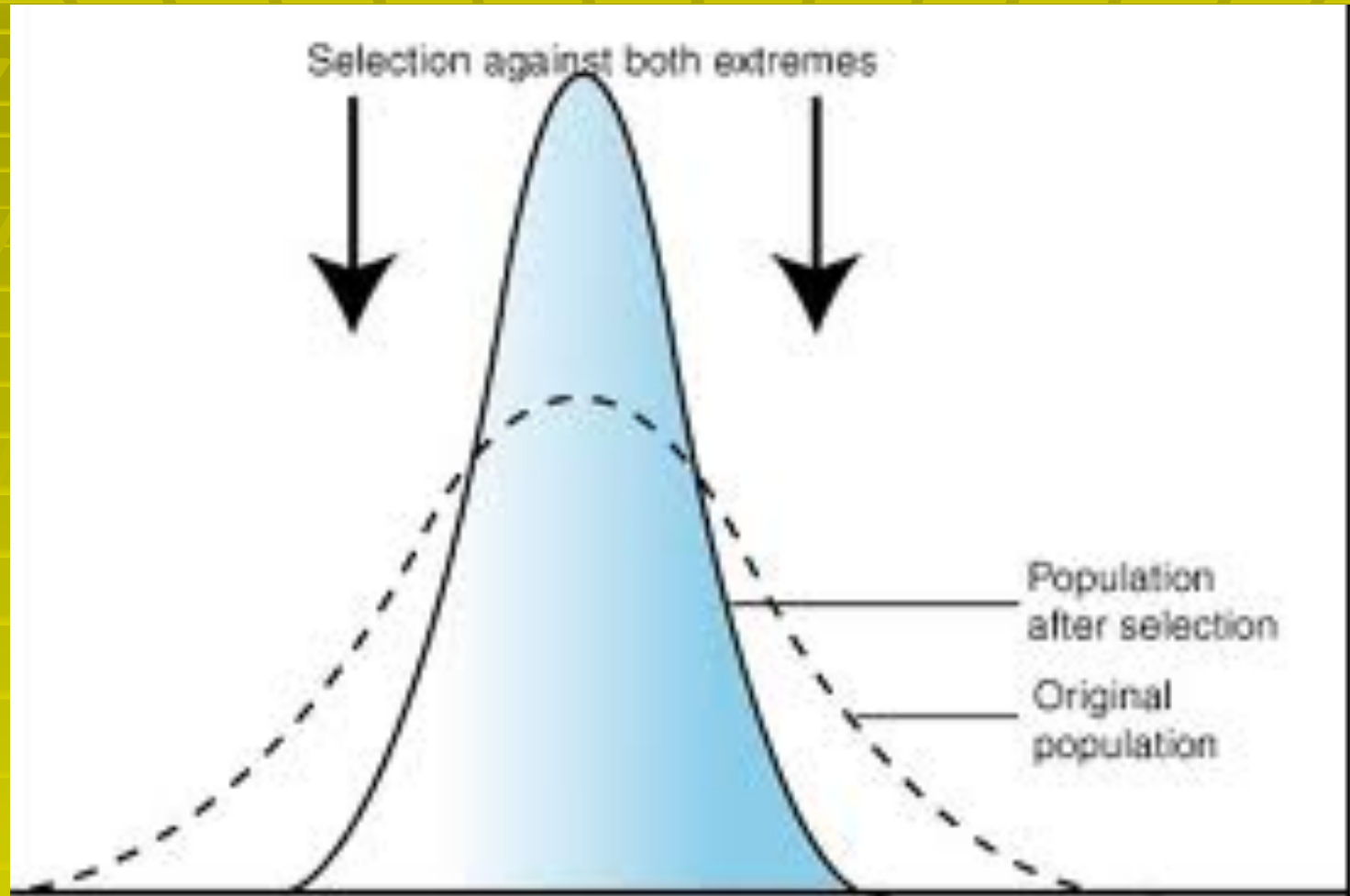
- Natural selection on single-gene traits



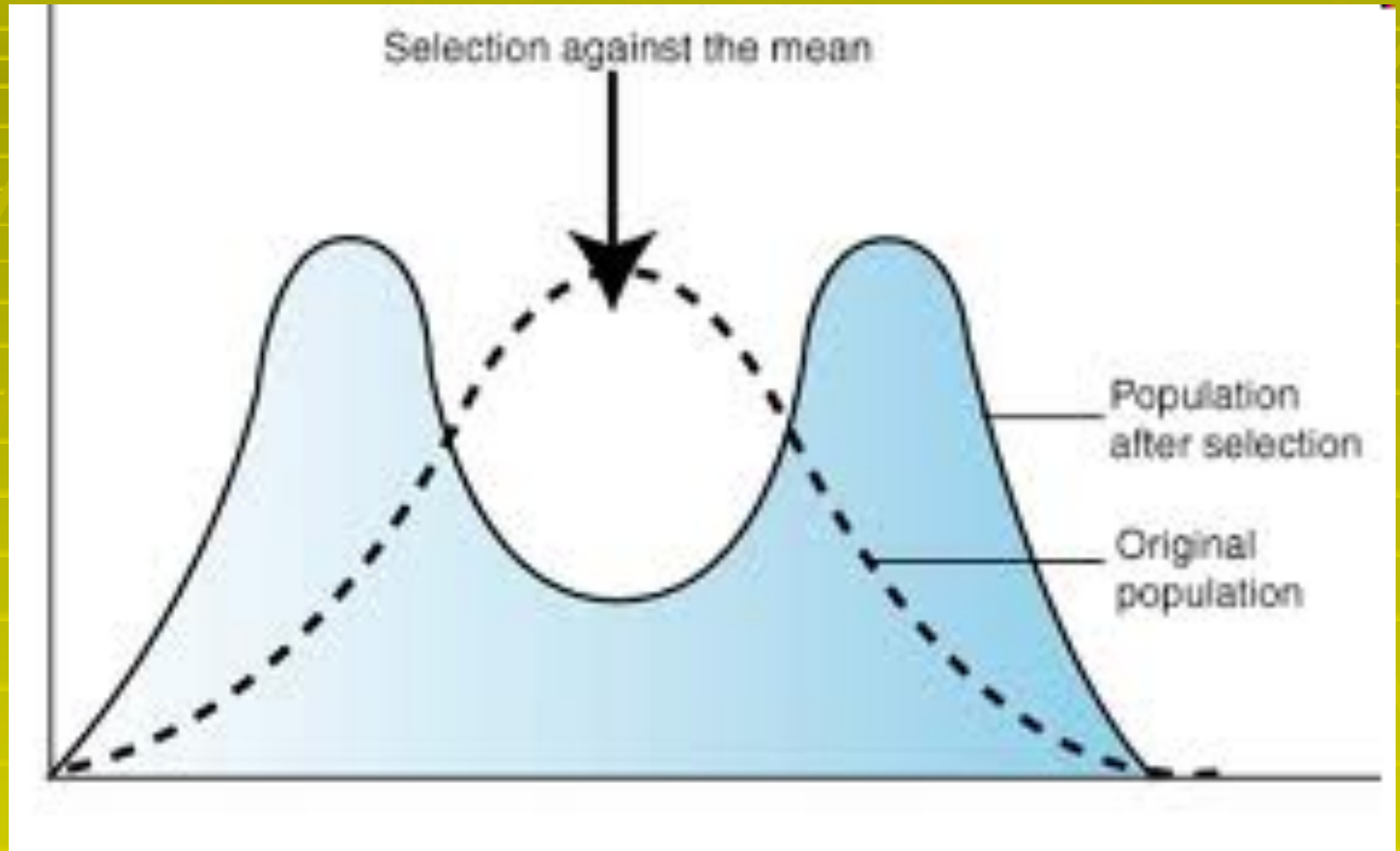
- Natural selection on polygenic traits
 - Directional selection



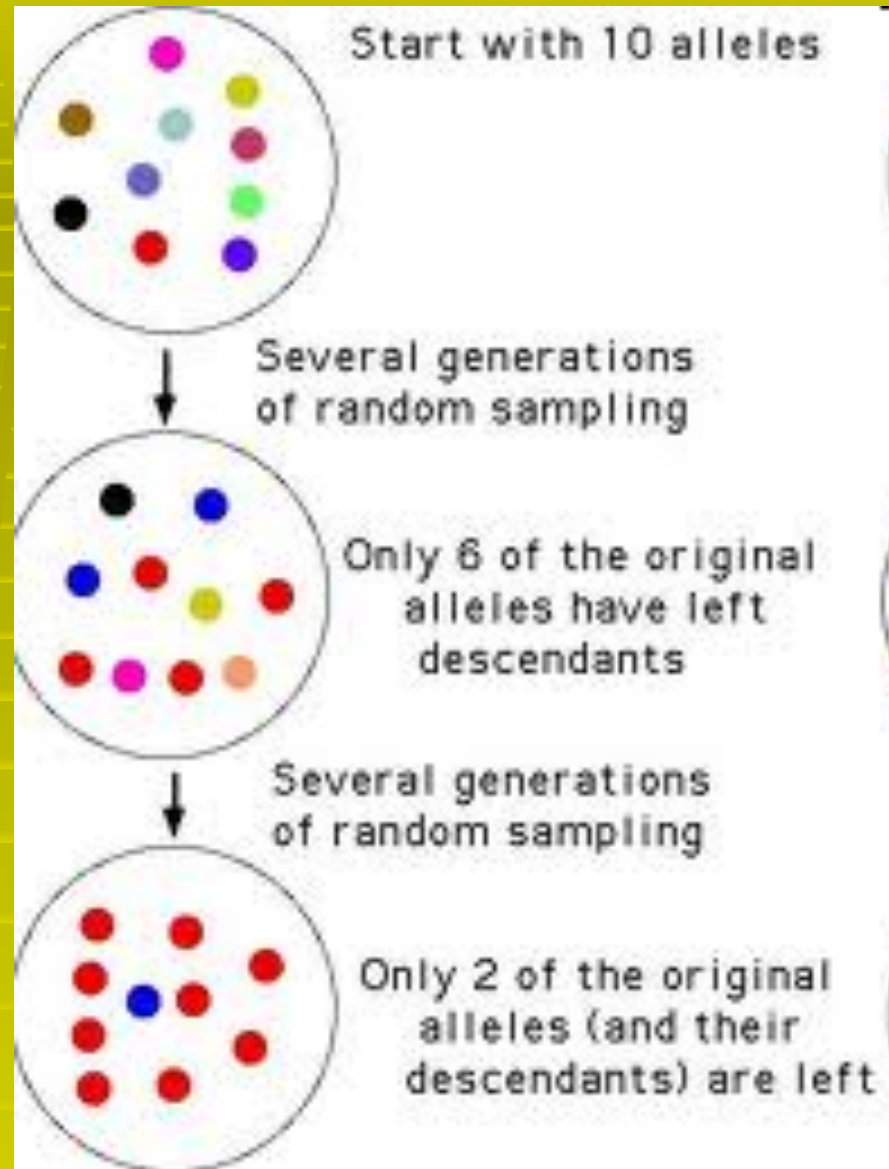
- Stabilizing selection



- Disruptive selection

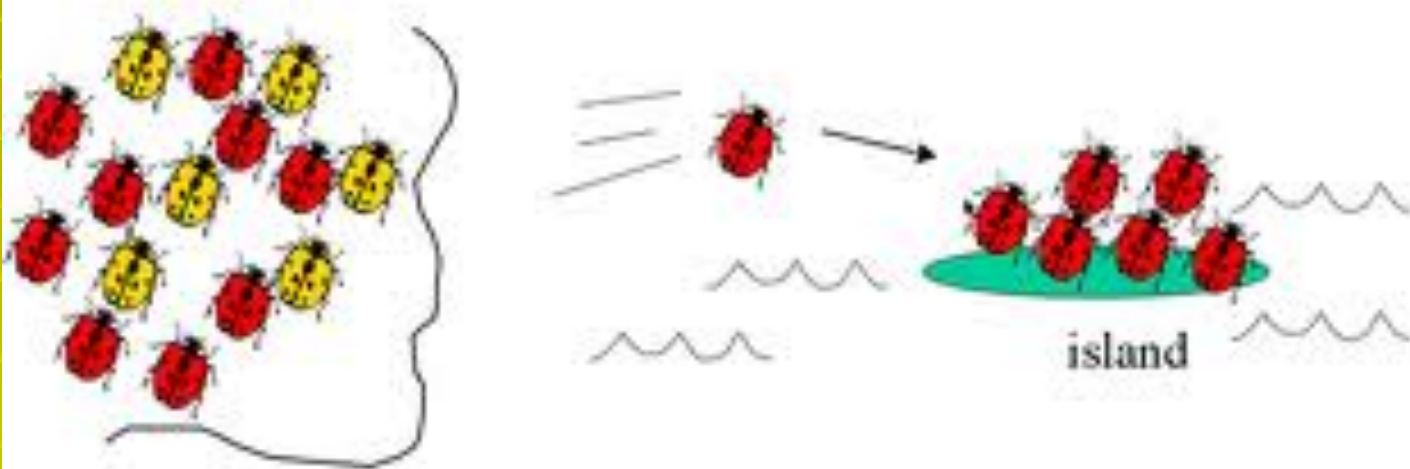


- Genetic drift
 - small pops



- Founder effect
 - Migration causes changes in allele frequency
 - Natural selection not a factor

- founder effect: a few individuals from a population start a new population with a different allele frequency than the original population



- Evolution vs. genetic equilibrium
 - Hardy-Weinberg principle
 - Allele frequencies in a pop. will be constant unless 1 or more factors cause change
 - Random mating
 - Large pop
 - No movement in/out of the pop.
 - No mutations
 - No natural