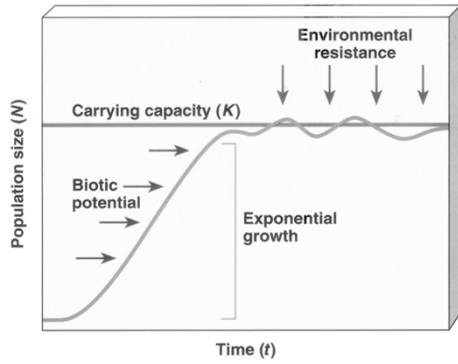
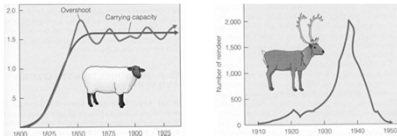


Hint: Memorize this!!!



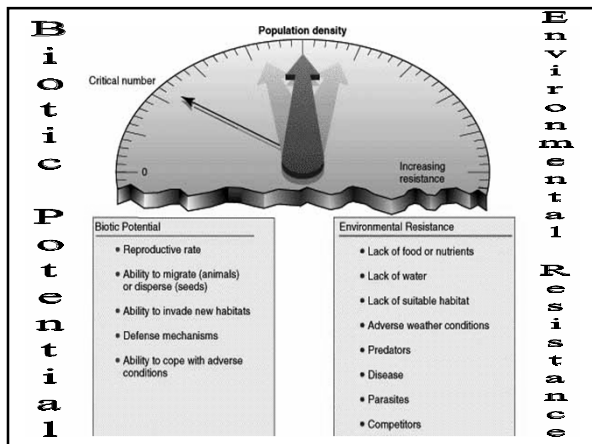
Population Dynamics







CURVES ARE DESCRIBED AS

Population distribution follows various patterns





Species have developed two distinct reproductive strategies to address population structure

 r-strategists  cockroach dandelion	 K-strategists  elephant saguaro
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r-strategists:
 Many small offspring
 Little or no parental care and protection of offspring
 Early reproductive age
 Most offspring die before reaching reproductive age
 Small adults
 Adapted to unstable climate and environmental conditions
 High population growth rate (r)
 Population size fluctuates wildly above and below carrying cap (K)
 Generalist niche
 Low ability to compete
 Early successional species

K-strategists:
 Fewer, larger offspring
 High parental care and protection of offspring
 Later reproductive age
 Most offspring survive to reproductive age
 Larger adults
 Adapted to stable climate and environmental conditions
 Lower population growth rate (r)
 Population size fairly stable and usually close to carrying capacity (K)
 Specialist niche
 High ability to compete
 Late successional species

Species will have characteristics between these two extremes

The Health of a population is influenced by **density-dependent** and **density-independent** factors

In a stable population,

Balanced Herbivory Figure 4-10

