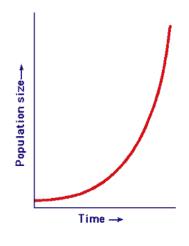
Population Dynamics

- **Population:** the number of individuals of a particular species in a given location and time
- **Exponential Growth:** a population increase that follows an exponential curve, the population increases faster as the population increases



Limiting Factors: abiotic (or biotic) factors limit a population because food, water and shelter etc. resources are limited, unrestricted growth is not possible

- **Carrying Capacity:** the size of a population that can be supported by the given resources in its ecosystem
- **Equilibrium:** a state where the birth rate and death rate of a population becomes the same and therefore the population does not change, in balance

In practice, what happens when a new species is introduced to an area with abundant resources, the **population** of the species will increase **exponentially**, since, initially, there are no imposed limits on the population. In time the population will begin to consume available resources and the population will stabilize, since it cannot exceed the **carrying capacity** of its environment. This will result in a **logistic grown curve**, and an **equilibrium** is reached.

