

Exponential Growth

Under ideal conditions:

1. the **biotic potential** of a population is the maximum rate at which it can increase
2. **exponential growth** occurs - the population increases by the same percent from one time period to the next.

- In nature, there are always limits to growth. A population will reach a size limit imposed by a shortage of one or more of the **limiting factors** of light, water, space and nutrients.
- **Carrying capacity** represents the highest population that can be maintained for an indefinite period of time by a particular environment.
- When a population grows exponentially at first, and then levels off to a stable number near the carrying capacity, it is called **logistic growth**. Logistic growth is much more common in nature than long-term exponential growth.
- **Natural Capital** - refers to all the natural resources on which people depend upon and includes resources we use to produce manufactured goods.

Exponential Growth -> "J"Curve

Logistic Growth -> "S" curve

