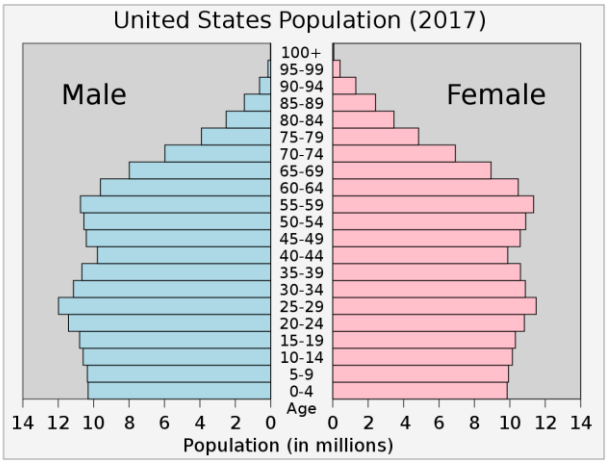
Population Dynamics

Section 2: Human Population



Scientists not only study the populations of animals but also look at the factors that affect human population growth as well. **Demography** is the scientific study of human populations. Scientists examine characteristics of populations and attempt to explain how these populations will change over time. They look at the **birthrate**, or the number of live births per 1000 people in a year, the **deathrate**, or the number of deaths per 1000 people in a year, and the **age structure** of populations to determine growth patterns. The age structure refers to the number of people at each different age level, which helps predict a population's future growth. When a large portion of a population is children, the population is experiencing rapid growth. When there are more adults than children, the population is declining. When the portion of people at different age levels is equal, the population is stable.

Human activities affect the biosphere, particularly through agriculture and development. These further impact the quality of Earth's natural resources including its land and water. Agriculture has had a tremendous effect on the growth of populations. Humans began farming, clearing land, raising animals, and growing fruits, vegetables, and grains. Human society was transformed by the industrial revolution, which added machines and factories to civilization during the 1800s. This had a huge impact on the environment. Discarded wastes from factories polluted the water, air, and soil. As cities became crowded, people moved to the suburbs, which caused stress on plant and animal habitats.

Review:

1. Define demography.
2. Explain what it means when a population is experiencing rapid growth.
3. How do our activities affect the environment?

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