

Describing Populations (p. 104 – 109)

I. Population Size

1. Define the term population size.

Population Size – number of individual organisms present in a given population at a given time.

(p. 104)

What is wrong with the human population?
 - Over population
 - Uneven Money
 - Food Issues (cycle)

Baby Boomers vs.
Baby Bust

(p. 105)

1. Increase

2. Decrease

3. Undergo cyclical changes

4. Remain the same over time

3. Describe the plight of the passenger pigeon population.

(1) Once very abundant in N. America

(2) Trees cut down in Midwest, Canada

(3) Birds exposed, shot for market → 1914 (last pigeon died in Cincinnati Zoo)

4. List two methods used to determine the population size of a species.

1. Representative Sampling

2. Count Animal Tracks or Droppings

II. Population Density

1. Define the term population density.

Population Density – number of individuals within a population per unit area

2. List an advantage and disadvantage of high and low population densities.

High Population Density

Advantage: Easier to group together + find mates

Disadvantage: Competition for resources, Predation, Disease

(p. 106)

Low Population Density

Advantage: More space + resources

Disadvantage: Less mates + companions

III. Population Distribution**1. Define the term population distribution.**

Population Distribution - describes how organisms are arranged within an area
(Population Dispersion)

2. Using X's, draw the diagrams below & give an example of each type of distribution.Random Distribution

X X X
 X XX
 X X X
 X X X

Example :ForestUniform Distribution

X X X X X
 X X X X X
 X X X X X
 X X X X X

Example :Corn FieldsClumped Distribution

X XXX
 XXX X
 X XX
 X X X

Example :Cities**IV. Age Structure & Sex Ratios****1. Define the term age structure.**

Age Structure - the relative numbers of organisms of each age within a population

2. What do age structure diagrams illustrate?

(- show the age structure of populations)

① Pre-Reproductive Age ② Reproductive Age ③ Post-Reproductive Age

↳ predict population growth

3. A bottom heavy age structure diagram indicates stable or declining growth.

rapid

Circle One :

True

False

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4. Define the term sex ratio.

Sex Ratio - proportion of males to females
 (shown on age structure diagrams)

5. What type of sex ratio tends to exist in monogamous societies?

50 : 50 Ratio

(Are humans meant
to be monogamous?)