

Concept 35.1

A population is a local group of organisms of one species.

Defining Populations:

Factors influencing a populations size

- Food -
- Space -
- Weather conditions -
- Breeding patterns -

To study a population ecologists need to define the population's geographic boundaries.

Population Density:

Population density - The number of individuals of a particular species per unit area or value.

$$\text{Population density} = \frac{\text{Individuals}}{\text{Unit area}}$$

Sampling Techniques:

- Quadrats -
- Indirect -
- Mark-Recapture -

$$\text{Total population} = \frac{\# \text{ in first capture} \times \# \text{ in second capture}}{\# \text{ of marked animals recaptured}}$$

- Limits to Accuracy -