

*WHAT IS ECOLOGY ?*

- ▣ Scientific study of the relationship between organism and their environment.
- ▣ Environment includes not only physical but also the biological conditions under which an organism live.
- ▣ Relationship includes interaction

# The major unit of ecology is the ecosystem

- ▣ A system is a collection related parts that function as a unit
- ▣ “eco” part of the word relates to environment
- ▣ The physical component of forest consist of atmosphere, climate, soil and water.
- ▣ The many different plants and animals that inhabit the forest make up the biotic component.

# Ecosystem components form a hierarchy

- ▣ Population
- ▣ Community
- ▣ ecosystem

# Ecology has strong ties to other sciences

- ▣ Biochemistry
- ▣ Genetics
- ▣ Hydrology
- ▣ Physiology
- ▣ Behavior
- ▣ geology

# Ecology use scientific methods

- ▣ To test hypothesis :
- ▣ Field study
- ▣ Field experiment
- ▣ Laboratory experiment

# Experiments can lead to predictions

- ▣ Scientist use the understanding derived from observation and experiments to make models.
- ▣ Model use the understanding gained from the data to predict what will happen in some other place and time.