



TRUCKEE MEADOWS PARKS FOUNDATION

AWARENESS • APPRECIATION • STEWARDSHIP

Student Stewards Program: *Truckee Meadows Insect Survey*

Location: *[Name of]* School and *[Name of]* Park

Duration: 3-5 hours per semester or season

Grade: 7th

Students build a trap and learn to identify and count different insects orders (ie: beetles) at different locations at their park. Their observations are recorded and graphed to help establish a baseline for the State Entomologist and Forest Health Specialist.

Question: *What insects are in your park? Why is insect biodiversity important to an ecosystem?*

Key Concepts

- How scientists classify organisms (Taxonomy)
- Experimental design methods
- Species richness and habitat health
- Using organisms as indicators (Biological Assessment)

Activities

- Building a trap to catch different insects
- Identifying the types of insects in your park
- Recording observations on a data sheet
- Graphing and analyzing the collected data
- Pre and post evaluation

During the introductory classroom lesson, the TMPF team member explains who they are, administers a pre-survey, explains the vocabulary words and concepts, builds traps with students, and instructs students on how to determine the different kinds of insects. The lesson in the park involves students collecting, counting, and identifying insects using common and Latin names. The concluding hour entails graphing and analyzing data, meeting a local scientist, and a post-survey.

Standards:

NGSS

- MS-LS4-4
- MS-LS4-6
- MS-ETS1-2
- MS-ETS1-3

ELA

- WHST.6-8.2
- WHST.6-8.7
- WHST.6-8.4

Math

- 7.SP.A.1
- 7.SP.A.2
- 7.SP.B.4

Vocabulary:

- Habitat
- Biodiversity
- Arthropod
- Energy
- Morphology
- Taxonomy