

# Teacher's Companion: Cherry Tree Stress Observation & Education Datas

This Teachers Companion guide is designed to help instructors and horticulture educators integrate the Cherry Tree Stress Observation Dataset into classroom or field-based learning. The dataset offers practical insights and student-focused activities for exploring cherry tree health monitoring using real-world methods.

Each observation topic includes a difficulty level, activity idea, and visual example to support diverse learning objectives. The dataset can be used for lessons in precision agriculture, environmental science, botany, or agricultural technology.

## How to Use This Dataset in the Classroom

- Assign small groups to investigate different stress indicators (e.g., canopy, root, sap flow)
- Have students create journal entries based on daily checklist tasks
- Use the visual examples as templates for drawing or diagramming field observations
- Compare collected data to real-world orchard case studies or research
- Include weather or soil sensor data for STEM data integration

## Sample Lesson Activity: Canopy Observation

Objective: Teach students how to visually assess cherry tree canopies for signs of biotic and abiotic stress.

Materials Needed:

- Printed or digital canopy checklist
- Clipboards or field notebooks
- Digital cameras or smartphones

Procedure:

1. Review the canopy checklist with students.
2. Assign each student or team to a specific tree or image.

3. Instruct students to document size, shape, leaf color, and abnormalities.
4. Back in class, compare findings and discuss patterns across trees.
5. Wrap up with a Q&A about environmental impacts on canopy health.

*Source: TraverseBayFarms.com (educational material provider)*

*License: For educational and non-commercial use only*