Title: Becoming a School Tree Tender

Author(s):
Elizabeth Miller
Pace High School
milleree@santarosa.k12.fl.us

Abstract: The film Tree Tender helps us realize that small changes in our personal lives and households can lead to large impacts if we work together. By raising awareness of our negative impact on global biodiversity, we can develop solutions to slow extinction rates and improve habitat quality. In this activity, students will design an achievable project involving school-wide waste reduction or campus quality/biodiversity improvement. After research, budgeting, and design, groups will present their project idea to the class. The class will vote on the best-suited project for the campus. The project with the most votes will have the opportunity to present their idea to administration for implementation for the year.

Subject, Grade, Level:
Grades 8-12
Biology (On-level, Honors, AP)
Environmental Science (On-level, Honors, AP)

Learning objectives:
• Students will discover ways in which they can reduce their daily impact.
• Students will create solutions to reduce waste.
• Students will design solutions to address the issue of excessive resource use.
• Students will design and organize a campaign to persuade their fellow students to change a current wasteful behavior.

Timeframe:
Three 50 minute class periods

List of materials:
Device for research.

Method/Mode for presentation (powerpoint, sway, poster, model)
Procedure and general instructions (for instructor).

*Background:* Students should have an understanding in biodiversity, pollution, methods of waste reduction, habitat restoration or improvement, etc.

*Day 1:* The activity can begin with a class discussion on areas of concern or room for improvement around the school. This can include ideas like increasing recycling, reducing one-use plastic utensils in the cafeteria, reducing plastic bottle waste, reducing energy, composting, organic gardening, etc. After whole group brainstorming, students should work in groups of 2-3 to identify the problem they would like to focus on and devise a solution. Students should work through these steps:

- **Issues:** Identify issues that are both problems and opportunities. How can students address these issues?
- **Research:** Investigate the facts about the issues students choose to address. How can students uncover the facts? What resources are needed? Will a budget be involved?
- **Players:** Identify and communicate with people who hold the key to working with these issues. Discuss concerns, values, beliefs, and needs. Form partnerships!
- **Solutions:** Explore possible ways to address the issues and solve the problems. Formulate an action plan.

*Day 2:* Groups should finalize plans/designs/budgets. Create a presentation. Regardless of method (powerpoint, poster, model, speech, graphic, brochure), presentation should be a 3-4 minute campaign for their idea.

*Day 3:* Presentations. After all groups have presented, the class will vote on the idea that suits the school best. This project will be presented to administration to be discussed for implementation.

**Student Instructions:**

[https://docs.google.com/document/d/1fZiYZTaRtO0I08H-Jx Fon1L8hpo8_xoxMPha8gPdNIs/edit?usp=sharing](https://docs.google.com/document/d/1fZiYZTaRtO0I08H-JxFon1L8hpo8_xoxMPha8gPdNIs/edit?usp=sharing)