

WHAT IS KILLING AMERICA'S BEES?

Objective: Become familiar with the bee industry, Colony Collapse Disorder (CCD), and the role of various stakeholders in America's honey bee and farming industries.

Sequence of the Project

Explore: Read "What is Killing America's Bees" article, watch "Vanishing of the Bees" documentary, and research applicable terminology and business practices to be more familiar with the honey bee and farming industries

Describe: Develop criteria that will be used to assess your projects. Identify the challenges faced by your industry and brainstorm potential solutions.

Demonstrate: As you and your group develop their presentation and solution, keep record of your responsibilities and set short and long term goals for the project

Evaluate: Class-wide discussion to develop a solution that is agreeable to all parties. Group members will rate their classmates on their contributions during the project as well as grade themselves on their project and presentation.

Project Components

- Article questions
- Vanishing of the Bees Class Collaboration Google Doc
- Group Research and Presentation (during presentations, opposing/similar groups record questions or talking points to be addressed during class discussion)
- Project Log for each day given in class to work on project
- Class Discussion
- Self and Group Evaluation

Timing

- Read article, complete Google Doc questions individually (2-3 days HW)
- Intro project and watch Vanishing of the Bees documentary (2 days)
- Class time to further research and develop presentation (partial class time for up to a week)
- Presentations (1-2 days)
- Class discussion (1-2 days)

Presentation and Solution Requirements

- BRIEF background of the problem
- How problem affects your interest group, what is at stake, what could be lost? Why does this matter to the everyday person?
- Solution must include the following components:
 - What must be done by the government (laws or regulations), industry, or citizens to solve the problem?
 - Propose a long term solution that will protect your interest group
 - Propose a short term solution that will protect your interest group until the long term solution can be implemented

Student Reflection: Things YOU can do to help the problem

Stakeholders and Roles (these do not have to be distributed to students, roles and descriptions are in graphic organizer)

Beekeepers: Bees are dying and we need to protect them in order to protect our livelihood.

Similar viewpoints: Consumers, environmentalists, farmers, economists

Farmers: Crops will not be pollinated, we will lose money due to underperforming crops, we will need to raise prices to keep profits sustainable. Not using pesticides will also cause crops to underperform and a raise in prices and decreased quality of food.

Similar viewpoints: Consumers, environmentalists, economist, pesticide companies

Consumers: Diet will be less variable, we want healthy, balanced diets filled with fruits and vegetables at affordable prices.

Similar viewpoints: Beekeepers, farmers, environmentalists, politicians

Pesticide companies: Will lose money if farmers do not buy their pesticides (either systemic or direct application), have nearly unlimited lobbying power)

Similar viewpoints: Economists, farmers, politicians

Environmentalists: Pesticides and monocultures harm the biodiversity of an ecosystem, genetically modified crops can interact unfavorably with endemic species

Similar viewpoints: Beekeepers, farmers, consumers

Economists: Economy is based on job growth and profits of companies, loss of farming, beekeeping, and pharmaceutical jobs can cause collapse of economy

Similar viewpoints: Beekeepers, farmers, pesticide companies

Politicians: Want to please their constituents (everyone) as well as their donors (big companies that fund their campaign), must abide by Constitution and other laws when making new laws

Similar viewpoints: ALL

**The politician standpoint can be the most difficult because they must weigh solutions to satisfy ALL stakeholders. This role can be omitted if there are not enough students OR assigned to more advanced students.