

Lesson Plan

Plant Pests

Book: *Famine Weed*

Series: Invasive Species

Level: Navigator

Objective

To help students understand the effects that invasive plants have on humans.

Supplies

- *Famine Weed* book
- Access to the PBS Learning Media video “Invasive Plants”:
<https://www.pbslearningmedia.org/resource/45a5e688-a214-4c92-ae98-d4fa2d62c6ea/spot-on-science-invasive-plants/>
- Paper and pencils

Before the Activity

Read through the *Famine Weed* book, or assign it to students to read on their own. Pull up the PBS Learning Media video in your web browser.

Activity

There are many different ways that a plant can be invasive. As a class, watch the “Invasive Plants” video from PBS Learning Media. Have students take notes addressing the following questions:

- What makes a plant invasive? (Answer: It’s not from the area originally, and it causes harm in some way.)
- In what ways can invasive plants harm an ecosystem? (Answer: An invasive plant can harm human health through toxins or other mechanisms, lower the diversity of other plants by competing with them, cause economic damage as people have to pay money to fix the problems the plant creates, change how the local ecosystem works, grow so densely that no native plants can grow with it, and be difficult to get rid of.)

Next, have students write a five-sentence paragraph in response to the following prompt:

- How do invasive plants affect humans?

In their paragraphs, students should include a thesis statement that answers the prompt. They should include three supporting sentences that include details from the book and/or the video to support the thesis statement. Finally, students should end with a summarizing concluding sentence. Collect students’ paragraphs at the end of class.

Evaluation

Use the following sample paragraph to award students up to 6 points:

- 1 point for a clear thesis statement that responds to the prompt
- 1 point for each supporting sentence that includes details from the book or video
- 1 point for an original summarizing concluding sentence
- 1 point for writing that is relatively free of grammatical and spelling errors

Sample Paragraph:

Invasive plants can harm humans through health, food, and economic impacts. Some invasive plants, such as giant hogweed, can harm humans by releasing toxins that are dangerous to them. Other invasive plants, such as famine weed, compete with the crops that humans eat; as the crops die out, humans have less food. Similarly, by taking over the areas where humans plant crops, invasive plants also affect humans economically: people lose the profits they would have made from selling crops, and they spend money to get rid of the invasive plants. In these ways, invasive plants have negative effects on humans.

Standards

This lesson may be used to address the Common Core State Standards' reading standards for informational text, grade 5 (RI 5.1), and writing standards, grade 5 (W 5.2), and the National Science Education Standards' Content Standards C and F, grades 5–8.