

Learning Experience 7

Exploring Connections

DAILY MESSAGE/DO NOW

Food webs help to explain the types of relationships organisms have with each other. Brainstorm a list of 5-8 organisms you would need to include in a food web that explains why people aren't going to Dover Island. *Hint: Don't forget the producers.*

HOOK

Last class we learned about relationships in ecosystems and about different time scales. Today we'll learn about another example of complex relationships by reading *Parachuting Cats into Borneo*.

Teacher Prep/Materials

- Experience 7 Presentation & Do Now (electronic)
- Experience 7 - *Parachuting Cats into Borneo* Story
- Print a copy of the *Parachuting Cats into Borneo* story to read to the class

Summary

Students will learn how to represent complex relationships using a concept map with a real life example. Students will begin to construct a team concept map of why fewer visitors are coming to the park in EcoMUVE.

Understanding and Performance Goals

Students will understand how to represent complex relationships using a concept map.

Analyze (15 min.)

Explain that in the EcoMUVE islands, the reason fewer people are visiting Dover Island is not simple. The teams must discover what factors are contributing to the problem. They will learn about a similar mystery that occurred in Borneo.

Tell the story of cats parachuting into Borneo and, after you tell the story, have the class help you construct a concept map that represents the relationships in the story.

The conclusion from the story should be that relationships in ecosystems are complex and that when there is a change in the ecosystem it can often lead to unintended consequences.

Explore (20 min.)

1. Instruct students to create a similar concept map for what they think is happening on Dover and Willis Islands. Ask students to consider whether they need to draw a separate concept map for Dover vs. Willis Island.
2. Expect that students will be able to recognize that a relationship exists between two components of the ecosystem. The resulting concept

Time

40 minutes

Key Vocabulary

DDT

Borneo

Additional Resource

Video: Systems thinking: a cautionary tale (cats in Borneo)

<http://youtu.be/17BP9n6g1F0>

map should look like a web of relationships between the populations.

3. Review the concept maps before the next class to determine which components and connections are represented. Assessment of these concept maps can help the teacher identify any concepts that need additional instruction.

Review, Extend, Apply (5 min.)

In the final few minutes have students turn in their concept maps. Have students share some of their discoveries.