

Activity - Silence of the Bees

<http://www.pbs.org/wnet/nature/episodes/silence-of-the-bees/introduction/38/>

Prior to watching the video, answer questions 1 - 4.

1. Does a species need to have economic value in order to be “valued” in today’s world and afforded protection by our society?
2. Are bees important to humans? Why or why not?
3. Are bees important to ecosystems? Why or why not?
4. What niche do bees occupy and can this role easily be duplicated by man’s own design?

Now watch the video and answer the questions that follow.

1. What is colony collapse disorder and what type of bee does it affect?
2. What fraction of the U.S.'s bees has died?_____
3. What explanations exist for the decline in the bee populations?
4. How many agricultural crops depend solely on bees for pollination in order to produce fruits, vegetables, and nuts?_____
5. Scientists within different countries are researching different hypothesis. What are these scientists concentrating on?

United States:

France

Paris

6. What is responsible for the disappearance of bees in the Southern Szechwan Province of China?
7. How is their pear crop produced?

8. A hive of bees can pollinate _____flowers, a worker can only pollinate how many trees
9. What would the cost be in the United States to replace honeybee pollination with hand pollination by humans?
10. What discovery was made about IAPV and what is it?
11. What fraction of all food consumed is honeybee pollination dependent?_____
12. If the current decline continues, in what year will the United States lose all of its honeybees?_____

Homework:

On a separate sheet of paper, summarize in at least a single, fully-developed paragraph, your personal thoughts on the value of ecological systems and its species' roles within those systems. Do you believe the ordinary citizen fully appreciates the functions performed that we benefit directly from? As a society, should we be concerned about protecting these organisms and at what cost? Also, include some possible solutions to this bee crisis.