Wild Guardians: Discovering wild bees video guide

Teacher directions:

Before class: Review the video guide for possible stopping points during the video to discuss and reflect. Decide if you want students to discuss as a whole group, in small groups, or with partners using a protocol like Think-Pair-Share.

Before viewing: Students fill out the "Pre-watching activity."

During viewing:

0:28	Ask students, "What words did you use to describe bees in your 'Pre-watching activity?' Did anyone use 'cute?' Why or why not?" • *Students respond by sharing the adjectives they used to describe bees and share their perceptions of insects.* Follow up by asking students, "Why do you think the creator of the video uses the word 'cute?' Do you agree?" • *Students make inferences and share their opinions.*
0:56	Ask students, "What is the relationship between bees and flowers?" • *Students share their background knowledge about pollination and food.*
1:47	Students confirm or revise their understanding of the relationship between bees and flowers using the information in the video.
2:54	Students look closely at the fairy bee. Ask students, "What features do you notice? Why do you think it is called a fairy bee?" • *Students share their observations. Encourage describing words and scientific vocabulary for bee body parts, if known.* • *Students make predictions about why the bee is named this. Fairy bees are very small, so their name comes from their size, but other responses may fit!*
3:09	Ask students, "Why do we take pictures of things? Why is it an important scientific practice?" • *Students share background knowledge about referencing materials later, using features of a camera for small objects, etc.* • *Refer to the Science and Engineering Practices and relate this action to practices such as using evidence, communicating information, etc.*
3:50	Ask students, "What problems do you think bees face today?" • *Students share background knowledge about possible issues in your community.*
End	Ask students, "How can our actions support bees?" • *Students share ideas from the video or their own background knowledge.*

After Viewing:

1. Students review their copy of the “Pre-watching activity” and revise their answers based on the video. Review correct answers and discuss new learning and possible misconceptions. *Answer key provided.*
2. Introduce students to the Seek app by iNaturalist using the handout: “Wild bees: Ways YOU can help.”

Name _____ Date _____

Discovering wild bees video:

Pre-watching activity

Before you watch the video, fill in the questions below. If you don't know the answer, make a prediction that you can confirm or revise after you watch.

Question	Before	After
1. Approximately, how many species of bees are there in the world?		
2. Which of these insects are bees?    *Still images from Discovering wild bees | Wild Guardians episode*		
3. *True or False*: Bees need flowers.		
4. *True or False*: Flowers need bees.		
5. *True or False*: People need bees.		
6. Where do bees live?		
7. What words would you use to describe bees?		

Answer Key

Question	Answer
1. How many species of bees are there in the world?	20,000
2. Which of these insects are bees?	all
3. True or False: Bees need flowers.	T
4. True or False: Flowers need bees.	T
5. True or False: People need bees.	T
6. Where do bees live?	in a variety of places: such as hives, in hollow stems, underground, etc.
7. What words would you use to describe bees?	answers will vary