

Vanishing Honeybees

Pre-Reading

A. Warm-Up Questions

1. Why do we need honeybees?
2. Why is commercial beekeeping a big business?
3. Can the human race survive without natural pollinators?

B. Vocabulary Preview

Match up as many words and meanings as you can.

Check this exercise again after seeing the words in context on page 2.

- | | |
|--------------------------------|--|
| ___ 1. pollinator | a) to provide the amount needed or requested |
| ___ 2. indirectly | b) for the purpose of making a profit |
| ___ 3. dropping like flies | c) the natural environment where a species lives |
| ___ 4. phenomenon | d) the loss of one's sense of direction |
| ___ 5. keep up with the demand | e) one event causes the spread (chain reaction) of related events |
| ___ 6. pesticides | f) the growth and spread of cities |
| ___ 7. commercial | g) chemicals used to keep harmful pests off plants |
| ___ 8. habitat | h) not directly, but still playing a part |
| ___ 9. urban sprawl | i) a species that carries pollen from the male part of a plant to the female part of a plant |
| ___ 10. disorientation | j) a situation or event that is observed with interest |
| ___ 11. ripple effect | k) to be dying off suddenly |
| ___ 12. malnutrition | l) insufficient food and/or water |



Reading

VANISHING HONEYBEES

Pollinating under pressure

1. Did you eat an apple today? Did you enjoy a handful of almonds? Chances are you owe a special thank you to some hardworking honeybees. Honeybees do much more than make honey. They are **pollinators** that directly and **indirectly** help bring food to our tables. According to some bee experts, one in every three bites of food is related to the work of a honeybee.
2. While we've come to rely on honeybees for our food supply, these pollinators have been **dropping like flies** since the late 1990s. The mysterious **phenomenon** of the disappearing honeybee is known as Colony Collapse Disorder (CCD). Even though bee colonies can be replaced by **commercial** beekeepers, it is a very expensive procedure. When colonies are lost year after year, beekeepers are unable to **keep up with the demand**.
3. Bee experts don't know exactly what is causing the rapid decline of honeybees, but most agree that chemicals are largely to blame. The use of pesticides has increased dramatically in recent years. Climate change is another suspect. Extreme weather such as drought can make it difficult for bees to do their job. Loss of **habitat** is another likely cause. **Urban sprawl** results in the loss of forests, fields, and meadows. Habitat loss causes **malnutrition** and **disorientation**. A bee that can't find its way back to its hive is no use to its colony and dies within a matter of hours.
4. Honeybees aren't the only pollinators. Other types of bees and insects, as well as bats and birds, are pollinators. According to various studies, many pollinators around the globe, including various species of bees, are showing signs of becoming endangered. Environmentalists are concerned about the **ripple effect** this could have on the earth. Some fear that the decline of pollinators is a greater threat to the earth than global warming.

“One in three bites of food we eat is directly or indirectly pollinated by honeybees.”

—US bee expert,
Dennis vanEngelsdorp

Comprehension

Discuss these questions in pairs, and write the answers in your notebook.

1. What does the reading say about our food supply?
2. What scientific name has been assigned to the decline of honeybees?
3. According to this reading, what three factors may be contributing to CCD?
4. Why does the reading mention bats?
5. What major environmental concern is mentioned in the conclusion?

Vocabulary Review

Complete the sentences using a vocabulary word from page 1.

You may need to change the word form. More than one option may be possible.

1. Much of the world's food supply is _____ dependent on honeybees.
2. Loss of _____ causes many species to become endangered.
3. A _____ bee will die if it can't find its hive.
4. Many bats, which are also _____, are dying from white-nose syndrome.
5. When a few passengers get the flu, cruise lines must prepare for a _____.
6. The popular toy company could not _____ during the Christmas season.
7. Due to _____, the tropical rain forests are disappearing.
8. The study concluded that many of the ill bees in the colony were suffering from _____.
9. _____ beekeepers transport bees from almond farm to almond farm.
10. CCD is a _____ that many environmentalists are concerned about.

Idioms & Expressions Guessing Game

“BUZZ IN”

In English, the word “buzz” is the sound a bee makes. Bees are busy, so it’s no wonder we use this word in so many English expressions. Here are just a few! Your teacher will shout out an idiom or expression. “Buzz in” if you know the meaning.

- Buzz off!
- hear the buzz
- buzzword
- give someone a buzz
- buzz along
- buzz in
- have a buzz

Discussion

1. Another possible cause of CCD is cell phone towers. Can you explain why this could be a contributing factor?
2. Do you agree with bee experts who think that honeybee loss is a more serious concern than global warming?
3. Recent studies suggest that wild bumblebees are contracting diseases from commercial honeybees. Why is that a major environmental concern?

Critical Thinking

Bee expert Dennis vanEngelsdorp thinks one simple solution to the vanishing bee problem is to reconnect with nature. He says we need to “Make meadows, not lawns.”

Listening

Fill in the blanks as you listen to the recording.

VANISHING HONEYBEES

Pollinating under pressure

1. Did you eat _____ today? Did you enjoy a handful of almonds? Chances are you owe a special thank you to some hardworking honeybees. Honeybees do much more than make honey. They are pollinators that directly and indirectly help bring food to our tables. According to some bee experts, _____ bites of food is related to the work of a honeybee.
2. While we've come to rely on honeybees for our food supply, these pollinators have been dropping like flies since the late 1990s. The mysterious phenomenon of the disappearing honeybee is known as Colony Collapse Disorder (CCD). Even though bee _____ can be replaced by commercial beekeepers, it is a very expensive procedure. When colonies are lost year after year, beekeepers are unable to keep up with the demand.
3. Bee experts don't know exactly what is causing the rapid decline of honeybees, but most agree that chemicals are largely to blame. The use of pesticides has increased dramatically in recent years. _____ is another suspect. Extreme weather such as drought can make it difficult for bees to do their job. Loss of habitat is another likely cause. Urban sprawl results in the loss of forests, fields, and meadows. Habitat loss causes malnutrition and disorientation. A bee that can't find its way back to _____ hive is no use to its colony and dies within a matter of hours.
4. Honeybees aren't the only pollinators. Other types of bees and insects, as well as bats and birds, are pollinators. According to various studies, many pollinators _____, including various species of bees, are showing signs of becoming endangered. Environmentalists are concerned about the ripple effect this could have on the earth. Some fear that the decline of pollinators is a greater threat to the earth than global warming.

Answer Key

LESSON DESCRIPTION:

In this lesson, students read about the environmental concern of the disappearing honeybee. The lesson includes vocabulary review exercises, comprehension questions, discussion questions, and a fun guessing game called "Buzz In."

LEVEL: Int – Adv

TIME: 1.5–2 hours

TAGS: discussion, environment, nature, animals, Earth Day, honeybees, insects

Pre-Reading

A. WARM-UP QUESTIONS

Have students work in small groups or as a class.

B. VOCABULARY PREVIEW

- | | | | | | |
|------|------|------|------|-------|-------|
| 1. i | 3. k | 5. a | 7. b | 9. f | 11. e |
| 2. h | 4. j | 6. g | 8. c | 10. d | 12. l |

If you or your students are confused by the singular or plural use of "phenomenon", check out our editor's blog post on confusing singular and plural words. <https://ellii.com/blog/confusing-singular-plural-forms-phenomenonphenomena-mediummedia>

Reading (and/or Listening)

Read individually, in small groups, or as a class. Discuss the quote. You can also play the listening as your students read along. A gap-fill version of the reading is available on page 5. Help your students with vocabulary and expressions that they are unfamiliar with.

Comprehension

- The reading says that about one third of our food is directly or indirectly reliant on the pollination of honeybees.
- The scientific name assigned to the decline of honeybees is Colony Collapse Disorder.
- The three factors that may be contributing to CCD are chemicals (pesticides), climate change, and urban sprawl.
- The reading mentions bats because these are other pollinators that are in decline.
- Environmentalists are very concerned about the ripple effect that could occur if pollinators continue decline.

Vocabulary Review

- | | | |
|----------------|------------------|-----------------|
| 1. indirectly | 5. ripple effect | 8. malnutrition |
| 2. habitat | 6. keep up with | 9. Commercial |
| 3. disoriented | the demand | 10. phenomenon |
| 4. pollinators | 7. urban sprawl | |

(continued on the next page...)

Answer Key cont.

Idioms & Expressions Guessing Game

Have the students place fake “buzzers” on their desks (any object). Tell them to “buzz in” if they know what an idiom means. Or give the definition or example sentence and have them guess the expression.

Buzz off!: Stop bothering me!

Buzz off! I'm trying to work.

hear the buzz: to hear the gossip or news

Have you heard the latest buzz about the US president?

buzzword: a word (or brand) that is popular right now

“Selfie” was a buzzword in 2013.

give someone a buzz: to call someone

Give me a buzz on Saturday, and I'll let you know if I can come.

buzz along: to continue going quickly without interruption

I was buzzing along, and then suddenly I felt a bump.

buzz in: to hit a “buzzer” (button) on a game show

If you know the answer, buzz in.

have a buzz: to feel a bit intoxicated

I only had one drink, but I still had a buzz.

Discussion

Answers will vary.

Can be done individually or in small groups or pairs.

Critical Thinking

Answers will vary.

Can be done individually or in small groups or pairs.

Listening

1. an apple, one in every three
2. colonies
3. Climate change, its
4. around the globe