

www.**Breaking News English**.com

Ready-to-use ESL/EFL Lessons by Sean Banville

"1,000 IDEAS & ACTIVITIES FOR LANGUAGE TEACHERS"

The Breaking News English.com Resource Book

<http://www.breakingnewsenglish.com/book.html>

Are cellphones killing honeybees?

<http://www.breakingnewsenglish.com/1105/110516-honeybees.html>

Contents

The Article	2
Warm-ups	3
Before Reading / Listening	4
While Reading / Listening	5
Listening Gap Fill	6
After Reading / Listening	7
Student Survey	8
Discussion	9
Language Work	10
Writing	11
Homework	12
Answers	13

THE ARTICLE

From <http://www.BreakingNewsEnglish.com/1105/110516-honeybees.html>

It's a fact that the world honeybee population is in decline around the globe. Scientists have various possible explanations as to why, including cold weather, genetically-modified crops, and viruses. They have now added mobile phones to the list of possible bee killers. Swiss researchers have done a study on what is known as Colony Collapse Disorder, a phenomenon in which worker bees desert the hive, never to return. This situation leads to the end of the colony because the queen bee runs out of food. Lead researcher Daniel Favre says his study shows a relationship between the growing use of cellphones and declining bee populations. Favre notes that earlier studies failed to find any such link and thus accepts his findings are "highly controversial".

Favre's study analyzed bee sounds in five healthy beehives in two different places in Switzerland. He recorded the bees' sounds with mobile phones in the hive. The bees were monitored when the mobile phones were active and inactive. Scientists analyzed the sounds of the bees and discovered they weren't disturbed by mobile phones that were inactive or on standby. However, active and ringing cellphones confused the bees and caused them to fly away from and leave the hive. The study says "the behavior of the bees remained perturbed for up to 12 hours after the end of the prolonged mobile phone communication," Favre writes. "This observation means that honeybees are sensitive to...electromagnetic fields generated by the mobile telephones."

WARM-UPS

1. HONEYBEES: Walk around the class and talk to other students about honeybees. Change partners often. Sit with your first partner(s) and share your findings.

2. CHAT: In pairs / groups, decide which of these topics or words from the article are most interesting and which are most boring.

fact / honeybees / explanations / GM crops / phenomenon / colony / cellphones / analyzed / bee sounds / scientists / disturbed / fly away / communication / sensitive

Have a chat about the topics you liked. Change topics and partners frequently.

3. IN DECLINE: Why are so many species in decline? Complete this table with your partner(s). Change partners and share what you wrote. Change and share again.

Possible reasons	Why could this harm animals?	How do we stop the decline?
mobile phones		
GM crops		
airplanes		
the use of paper		
industrial fishing		
the fur trade		

4. FEWER BEES: Students A **strongly** believe mobile phones are the reason why bee numbers are shrinking; Students B **strongly** believe not. Change partners again and talk about your conversations.

5. USEFUL: Which of these are most useful to us? Rank them and share your rankings with your partner. Put the most useful at the top. Change partners and share your rankings again.

- bees
- dogs
- ants
- cockroaches
- leeches
- cats
- butterflies
- lizards

6. COLONY: Spend one minute writing down all of the different words you associate with the word 'colony'. Share your words with your partner(s) and talk about them. Together, put the words into different categories.

BEFORE READING / LISTENING

From <http://www.BreakingNewsEnglish.com/1105/110516-honeybees.html>

1. TRUE / FALSE: Read the headline. Guess if a-h below are true (T) or false (F).

- | | |
|---|-------|
| a. The numbers of honeybees around the world is shrinking. | T / F |
| b. One possible explanation is global warming and a hotter climate. | T / F |
| c. There is a phenomenon whereby worker bees abandon their hive. | T / F |
| d. The study in the article supports earlier ones into cellphones and bees. | T / F |
| e. Researchers studied the sounds of bees when near mobile phones. | T / F |
| f. Bees were disturbed by both active and inactive cellphones. | T / F |
| g. Ringing cellphones caused the bees to come back to the hive. | T / F |
| h. The researcher said active cellphones affected bees for up to 12 hours. | T / F |

2. SYNONYM MATCH: Match the following synonyms from the article.

- | | |
|------------------|-----------------|
| 1. fact | a. debatable |
| 2. in decline | b. connection |
| 3. desert | c. observed |
| 4. relationship | d. reality |
| 5. controversial | e. investigated |
| 6. analyzed | f. shrinking |
| 7. monitored | g. distressed |
| 8. found | h. abandon |
| 9. perturbed | i. vulnerable |
| 10. sensitive | j. discovered |

3. PHRASE MATCH: (Sometimes more than one choice is possible.)

- | | |
|-------------------------------------|---------------------------|
| 1. the world honeybee population is | a. beehives |
| 2. possible explanations | b. any such link |
| 3. worker bees desert the hive, | c. controversial |
| 4. earlier studies failed to find | d. and leave the hive |
| 5. his findings are highly | e. never to return |
| 6. five healthy | f. as to why |
| 7. inactive or | g. electromagnetic fields |
| 8. caused them to fly away from | h. in decline |
| 9. the bees remained perturbed for | i. on standby |
| 10. honeybees are sensitive to | j. up to 12 hours |

Are cellphones killing honeybees? – 16th May, 2011

WHILE READING / LISTENING

From <http://www.BreakingNewsEnglish.com/1105/110516-honeybees.html>

GAP FILL: Put the words into the gaps in the text.

It's a (1) _____ that the world honeybee population is in decline around the globe. Scientists have (2) _____ possible explanations as to why, including cold weather, genetically-(3) _____ crops, and viruses. They have now added mobile phones to the list of possible bee killers. Swiss researchers have done a study on what is (4) _____ as Colony Collapse Disorder, a phenomenon in which worker bees desert the hive, never to (5) _____. This situation leads to the end of the colony because the queen bee (6) _____ out of food. Lead researcher Daniel Favre says his study shows a relationship between the (7) _____ use of cellphones and declining bee populations. Favre notes that earlier studies failed to find any (8) _____ link and thus accepts his findings are "highly controversial".

runs

known

various

such

return

fact

modified

growing

Favre's study (9) _____ bee sounds in five healthy beehives in two different places in Switzerland. He (10) _____ the bees' sounds with mobile phones in the hive. The bees were monitored when the mobile phones were active and inactive. Scientists analyzed the (11) _____ of the bees and discovered they weren't disturbed by mobile phones that were inactive or on (12) _____. However, active and ringing cellphones (13) _____ the bees and caused them to fly away from and leave the hive. The study says "the (14) _____ of the bees remained perturbed for up to 12 hours after the end of the prolonged mobile phone communication," Favre writes. "This observation means that honeybees are (15) _____ to...electromagnetic fields (16) _____ by the mobile telephones."

confused

sensitive

recorded

standby

analyzed

generated

behavior

sounds

Are cellphones killing honeybees? - 16th May, 2011

LISTENING – Listen and fill in the gaps

From <http://www.BreakingNewsEnglish.com/1105/110516-honeybees.html>

It's _____ honeybee population is in decline around the globe. Scientists have various possible explanations as to why, in _____ cluding cold weather, genetically-modified crops, and viruses. They have now added mobile phones _____ bee killers. Swiss researchers have done a study _____ Colony Collapse Disorder, a phenomenon in which worker bees desert the hive, never to return. This situation _____ the colony because the queen bee runs out of food. Lead researcher Daniel Favre says his study shows a relationship between the growing use of cellphones and declining bee populations. Favre notes that earlier studies failed to find any such link and thus accepts his findings are "_____".

Favre's study analyzed bee _____ beehives in two different places in Switzerland. He recorded the bees' sounds with mobile phones in the hive. The bees were monitored when the mobile phones were active and inactive. Scientists _____ of the bees and discovered they weren't disturbed by mobile phones that were _____. However, active and ringing cellphones confused the bees and caused them _____ leave the hive. The study says "the behavior of the bees remained perturbed for up to 12 hours _____ prolonged mobile phone communication," Favre writes. "This observation means that honeybees are sensitive to...electromagnetic _____ the mobile telephones."

AFTER READING / LISTENING

From <http://www.BreakingNewsEnglish.com/1105/110516-honeybees.html>

1. WORD SEARCH: Look in your dictionary / computer to find collocates, other meanings, information, synonyms ... for the words 'honey' and 'bee'.

honey	bee
--------------	------------

- Share your findings with your partners.
- Make questions using the words you found.
- Ask your partner / group your questions.

2. ARTICLE QUESTIONS: Look back at the article and write down some questions you would like to ask the class about the text.

- Share your questions with other classmates / groups.
- Ask your partner / group your questions.

3. GAP FILL: In pairs / groups, compare your answers to this exercise. Check your answers. Talk about the words from the activity. Were they new, interesting, worth learning...?

4. VOCABULARY: Circle any words you do not understand. In groups, pool unknown words and use dictionaries to find their meanings.

5. TEST EACH OTHER: Look at the words below. With your partner, try to recall how they were used in the text:

<ul style="list-style-type: none">• fact• cold• known• leads• growing• such	<ul style="list-style-type: none">• healthy• recorded• disturbed• fly• 12• sensitive
--	---

STUDENT HONEYBEES SURVEY

From <http://www.BreakingNewsEnglish.com/1105/110516-honeybees.html>

Write five GOOD questions about honeybees in the table. Do this in pairs. Each student must write the questions on his / her own paper. When you have finished, interview other students. Write down their answers.

	STUDENT 1 _____	STUDENT 2 _____	STUDENT 3 _____
Q.1.			
Q.2.			
Q.3.			
Q.4.			
Q.5.			

- Now return to your original partner and share and talk about what you found out. Change partners often.
- Make mini-presentations to other groups on your findings.

Are cellphones killing honeybees? – 16th May, 2011

HONEYBEES DISCUSSION

STUDENT A's QUESTIONS (Do not show these to student B)

- a) What did you think when you read the headline?
- b) What springs to mind when you hear the word 'bee'?
- c) What do you think about what you read?
- d) What do you know about honeybees?
- e) Do you think cellphones are a danger to anything?
- f) Do you ever believe reports that mobile phones can damage our health are true?
- g) What other reasons could there be for honeybees declining in number?
- h) What's Colony Collapse Disorder?
- i) What would happen to the world if bees really decline in number?

Are cellphones killing honeybees? – 16th May, 2011
More free lessons at www.BreakingNewsEnglish.com

HONEYBEES DISCUSSION

STUDENT B's QUESTIONS (Do not show these to student A)

- a) Did you like reading this article?
- b) What should we do if Favre's findings are true?
- c) What would life be like without mobile phones?
- d) Would you like to do research like this?
- e) Should governments take this report seriously and do a proper study into the dangers of cellphones?
- f) What other ways are we disturbing nature with our lifestyles?
- g) Are Daniel Favre's findings really so controversial?
- h) What three adjectives would you use to describe this article?
- i) What questions would you like to ask Daniel Favre?

LANGUAGE – MULTIPLE CHOICE

From <http://www.BreakingNewsEnglish.com/1105/110516-honeybees.html>

It's a (1) _____ that the world honeybee population is in decline around the globe. Scientists have various possible explanations (2) _____ to why, including cold weather, genetically-modified crops, and viruses. They have now added mobile phones to the list of possible bee killers. Swiss researchers have done a study on what is (3) _____ as Colony Collapse Disorder, a phenomenon in which worker bees desert the hive, (4) _____ to return. This situation leads to the end of the colony because the queen bee (5) _____ out of food. Lead researcher Daniel Favre says his study shows a relationship between the growing use of cellphones and declining bee populations. Favre notes that earlier studies failed to find any (6) _____ link and thus accepts his findings are "highly controversial".

Favre's study analyzed bee sounds in five healthy beehives in two different places in Switzerland. He recorded the (7) _____ sounds with mobile phones in the hive. The bees were monitored when the mobile phones were active and inactive. Scientists analyzed the sounds of the bees and discovered they weren't disturbed (8) _____ mobile phones that were inactive or on (9) _____. However, active and ringing cellphones confused the bees and (10) _____ them to fly away from and leave the hive. The study says "the behavior of the bees remained perturbed for (11) _____ to 12 hours after the end of the prolonged mobile phone communication," Favre writes. "This observation means that honeybees are sensitive (12) _____ ...electromagnetic fields generated by the mobile telephones."

Put the correct words from the table below in the above article.

- | | | | | |
|-----|----------------|--------------|--------------|-------------|
| 1. | (a) real | (b) truthful | (c) honest | (d) fact |
| 2. | (a) as | (b) has | (c) was | (d) is |
| 3. | (a) knew | (b) known | (c) knowing | (d) knows |
| 4. | (a) ever | (b) even | (c) never | (d) event |
| 5. | (a) walks | (b) jogs | (c) runs | (d) sprints |
| 6. | (a) some | (b) such | (c) so | (d) this |
| 7. | (a) bees knees | (b) bees | (c) bee's | (d) bees' |
| 8. | (a) by | (b) of | (c) for | (d) as |
| 9. | (a) layby | (b) standby | (c) passerby | (d) nearby |
| 10. | (a) created | (b) cursed | (c) cased | (d) caused |
| 11. | (a) along | (b) across | (c) up | (d) down |
| 12. | (a) to | (b) on | (c) at | (d) by |

Are cellphones killing honeybees? – 16th May, 2011

WRITING

From <http://www.BreakingNewsEnglish.com/1105/110516-honeybees.html>

Write about **honeybees** for 10 minutes. Correct your partner's paper.

HOMework

1. VOCABULARY EXTENSION: Choose several of the words from the text. Use a dictionary or Google's search field (or another search engine) to build up more associations / collocations of each word.

2. INTERNET: Search the Internet and find out more about honeybees and their declining populations. Share what you discover with your partner(s) in the next lesson.

3. HONEYBEES: Make a poster about honeybees. Show your work to your classmates in the next lesson. Did you all have similar things?

4. CELLPHONES: Write a magazine article about the declining honeybee populations. Include imaginary interviews with cellphone users and some honeybees.

Read what you wrote to your classmates in the next lesson. Write down any new words and expressions you hear from your partner(s).

5. LETTER: Write a letter to a honeybee expert. Ask him/her three questions about declining honeybee populations. Give him/her three solutions to the problem. Read your letter to your partner(s) in your next lesson. Your partner(s) will answer your questions.

ANSWERS

TRUE / FALSE:

- a. T b. F c. T d. F e. T f. F g. F h. T

SYNONYM MATCH:

- | | |
|------------------|-----------------|
| 1. fact | a. reality |
| 2. in decline | b. shrinking |
| 3. desert | c. abandon |
| 4. relationship | d. connection |
| 5. controversial | e. debatable |
| 6. analyzed | f. investigated |
| 7. monitored | g. observed |
| 8. found | h. discovered |
| 9. perturbed | i. distressed |
| 10. sensitive | j. vulnerable |

PHRASE MATCH:

- | | |
|-------------------------------------|------------------------------|
| 1. the world honeybee population is | a. in decline |
| 2. possible explanations | b. as to why |
| 3. worker bees desert the hive, | c. never to return |
| 4. earlier studies failed to find | d. any such link |
| 5. his findings are highly | e. controversial |
| 6. five healthy | f. beehives |
| 7. inactive or | g. on standby |
| 8. caused them to fly away from | h. and leave the hive |
| 9. the bees remained perturbed for | i. to 12 hours |
| 10. honeybees are sensitive to | j. electromagnetic fields up |

GAP FILL:

Are cellphones killing honeybees?

It's a (1) **fact** that the world honeybee population is in decline around the globe. Scientists have (2) **various** possible explanations as to why, including cold weather, genetically-(3) **modified** crops, and viruses. They have now added mobile phones to the list of possible bee killers. Swiss researchers have done a study on what is (4) **known** as Colony Collapse Disorder, a phenomenon in which worker bees desert the hive, never to (5) **return**. This situation leads to the end of the colony because the queen bee (6) **runs** out of food. Lead researcher Daniel Favre says his study shows a relationship between the (7) **growing** use of cellphones and declining bee populations. Favre notes that earlier studies failed to find any (8) **such** link and thus accepts his findings are "highly controversial".

Favre's study (9) **analyzed** bee sounds in five healthy beehives in two different places in Switzerland. He (10) **recorded** the bees' sounds with mobile phones in the hive. The bees were monitored when the mobile phones were active and inactive. Scientists analyzed the (11) **sounds** of the bees and discovered they weren't disturbed by mobile phones that were inactive or on (12) **standby**. However, active and ringing cellphones (13) **confused** the bees and caused them to fly away from and leave the hive. The study says "the (14) **behavior** of the bees remained perturbed for up to 12 hours after the end of the prolonged mobile phone communication," Favre writes. "This observation means that honeybees are (15) **sensitive** to...electromagnetic fields (16) **generated** by the mobile telephones."

LANGUAGE WORK

- 1 - d 2 - a 3 - b 4 - c 5 - c 6 - b 7 - d 8 - a 9 - b 10 - d 11 - c 12 - a