



Name: _____ Date: _____ Group: _____

The Bee Crisis

Lexile 983L

- 1 Occasionally seen, bees are often a pesky insect that buzzes around trying to sting us, or so we humans think. At times, it may seem that bees are not needed in ecosystems, but this is not the case. Bees help humans to have fruits, vegetables, cheese, milk, and almonds to name a few. Bees are the secret farm workers of an ecosystem as they pollinate a variety of plants that produce food for humans.
- 2 However, humans have a reason to be concerned as each year, more bees disappear. According to a Time Magazine article published on April 25, 2015, titled, *You Asked: Are the Honeybees Still Disappearing*, three factors are contributing to the honeybees reduced population. One being the varroa mites which attach to the bees, suck their blood, and then transfer disease to other bees. The second being pesticides used on large farms or in gardens to keep other varmints from ruining a crop.
- 3 The third reason has more to do with improper nutrition due to a lack of a variety of pollen from an array of plants. Bees are crucial to plant reproduction and plants are also essential to bees nutrition and strength. Bees need a variety of different pollens to grow into strong and healthy workers. Before human population took over plant and animal environments, meadows were filled with pollen packed wildflowers. However, they are now filled with mowed lawns and limited flowers filled with pollen. Essentially, humans are creating environments that are green deserts for bees.
- 4 Flowers need pollen to reproduce and bees are a great carrier of that pollen as they need the pollen for nectar which makes honey. When bees land on the stamen of the flower, or sperm of the flower, they gather pollen from the flowers anther. The pollen often sticks to the pollinators by way of static electricity as bees can sense the electric field around flowers.
- 5 When a bee flies from flower to flower, the pollen they collect is transported with them and may land on the pistil part of the flower which contains the ovary. The stigma is an often sticky-top portion of the pistil that collects the pollen. As pollen grains stick to the stigma, they begin to grow pollen tubes down the style and toward the flower's ovary. These pollen tubes allow for transportation of sperm to the ovule where fertilization occurs. Once the sperm fertilizes the egg, a seed grows which is protected by a flower or fruit.
- 6 As bees are dying off, more concern is raised to the ecosystems that rely on them to help pollinate crops that supply food to plants, animals, and humans. Beekeepers are having to give their colonies pollen supplements as well as split their colonies so that they can fill new colonies with eggs laid by the queen. It was once a practice to replace the queen bees in a colony every two years. However, today, a queen bee dies about halfway through the summer and nobody is exactly sure why.



- 7 In order to halt this concern from growing, humans should plant flowers and avoid any type of pesticides or chemical treatments if possible. If humans want to continue to reap the benefits of flowers reproductive system, then they need to do something to help those insects that are crucial to the food supply.



- 1 The author developed the writing using a problem solution organization. What piece of text evidence supports why the author chose this text organization?
- A Flowers need pollen to reproduce and bees are a great carrier of that pollen as they need the pollen for nectar which makes honey.
 - B The third reason has more to do with improper nutrition due to a lack of a variety of pollen from an array of plants.
 - C However, humans have a reason to be concerned as each year, more bees disappear.
 - D However, today, a queen bee dies about halfway through the summer and nobody is exactly sure why.
- 2 Which of the following statements is true?
- A Pesticides are the main reason for the declining bee population.
 - B Human effects on the environment has had a profound effect on the bee population.
 - C Ecosystems can thrive without colonies of bees.
 - D Bees can create honey without flowers.



- 3 What central idea can be inferred from the passage?
- A What central idea can be inferred from the passage?
 - B Bees are at risk for extinction if the environmental conditions continue.
 - C Bees are the main pollinators for flowers and are needed to help grow food for humans.
 - D Bees are the main pollinators for flowers and are needed to help grow food for humans.
- 4 What evidence does the author provide that helps the reader interpret his/her point of view toward the issue presented?
- A Occasionally seen, bees are often a pesky insect that buzzes around trying to sting us, or so we think.
 - B Bees help us have fruits, vegetables, cheese, milk, and almonds to name a few.
 - C As bees are dying off, more concern is raised to the ecosystems that rely on them to help pollinate crops that supply food to plants, animals, and humans.
 - D If humans want to continue to reap the benefits of flowers reproductive system, then they need to do something to help those insects that are crucial to the food supply.
- 5 Based on context, a “varmint” means _____.
- A a despicable, annoying person
 - B a pesticide used on crops
 - C an insect that pollinates crops
 - D an objectionable or undesired animal