

### IELTs Reading Passage 1 - Bluebells in Britain

Every April and May, Britain welcomes spring with the blooming of bluebells, which appear in patches large and small across the nation. Indeed, almost half of all native British bluebells (*Hyacinthoides non-scripta*) worldwide are found in the UK. These bluebells, with their distinctive scent and colour, thrive in the damp habitat of British woodlands. However, the British bluebell is at risk of extinction, and nowhere more than in London specifically and Southeast England generally, from a Spanish invasion. The Spanish bluebell (*Hyacinthoides hispanica*) has spread quickly through British cities in the last few decades, to the point where virtually all bluebells in London are hybrids (*Hyacinthoides x massartiana*) of the two varieties. Hybridisation is a threat to our native bluebells not only in terms of the sheer number of hybrid flowers in our cities, but also in their appearance, which is very difficult to distinguish from those of the unmixed species, except just after the flowers have opened. At this time, native bluebells will have a distinctively sweet scent, with white pollen and stems leaning to one side; the petals are always a notably deep shade of blue-violet. Compare this to the Spanish bluebell, which features blue pollen and usually stands upright, with petals ranging in colour from blue to pink to white (but never dark blue). A hybrid of British and Spanish bluebells can combine any features of the two, including colour, with one exception: whilst the petals of hybrids can be dark blue, they can never be the blue-violet of the UK species. There is some good news for British bluebells: they continue to dominate non-native bluebells by a rate of 100-to-1 nationwide, as the Spanish variety does not grow well in woodland, limiting the risk of hybridization to urban areas. We should not be complacent, though, as botanists agree that the hybrid bluebell is more common than the Spanish species; thus, it's likely that before long, without intervention, most bluebells in UK cities will show signs of hybridization.

**Questions 1-8 Do the following statements agree with the information given in the reading passage?**

**Write TRUE FALSE NOT GIVEN if the statement agrees with the information if the statement contradicts the information if there is no information on this**

1. Bluebells bloom in Britain in the springtime.
2. Half of all bluebells in the world are found in the UK.
3. British bluebells grow only in woodland.
4. In a few years, the British bluebell will be extinct.
5. Most bluebells in London are Spanish bluebells.
6. Spanish bluebells do not have a distinctive scent.
7. A hybrid bluebell could have white pollen and pink petals.
8. Most hybrid bluebells in the UK are found in forests.

### Passage 2 - Beware of the Danger to Bees

**A** In the last 10 years, the number of beekeepers in the UK has increased dramatically. According to the British Beekeeper Association (BBKA), the rise comes amidst growing international concern for the health of the global bee population. In

2007, the UK government proposed a budget cut that would defund the National Bee Unit, a group within the Department for Environment, Food and Rural Affairs that supports British beekeepers and is involved in the management of threats to bees.

**B** In response to this, the BBKA launched a campaign to save the National Bee Unit, simultaneously drawing attention to the swiftly declining bee population. In the end, the National Bee Unit succeeded in keeping its funding, and the membership of the BBKA more than doubled. There are now around 24,000 amateur beekeepers registered with the association, and that number continues to rise.

**C** At the same time that there has been an increase in the number of beekeepers in the UK, there has been a decline in the number of bees worldwide. Over the last decade, beekeepers in North America, South America, Europe and Asia have reported huge devastations to the bee populations in their hives. In 2007, former MP Lord Rooker predicted that the honeybee might be extinct in Britain within a decade.

**D** Perhaps most troubling is the fact that the cause of this rapid decline has been hard to identify. Scientists point to the varroa mite as one explanation. This virus-carrying parasite preys on bees and has been threatening bee populations since the 1960s. Recently, researchers at Harvard University have argued that insecticides may deserve more of the blame. Neonicotinoids, a range of insecticides used by many farms, can be deadly to bees; they exterminated the entire population of bees in one Chinese province in the 1980s, and were an initial suspect in the phenomenon known as 'colony collapse disorder.'

**E.** Colony collapse disorder occurs when all the worker bees from a beehive previously thought to be well-functioning and healthy suddenly disappear. The phenomenon was first observed by scientists and beekeepers in North America in 2006, in which some beekeepers lost up to 90% of their hives. While pesticides were at first believed to have caused the disappearance of the bees, further research has shown that a combination of two infections - a virus and a fungus - are far deadlier for bees than either would be on its own.

**F** In this study, one hundred percent of collapsed hives were found to have traces of invertebrate iridescent viruses (IIV); however, since these are often found in strong colonies, IIV alone cannot be responsible for colony collapse. A variety of microbes that attack invertebrates were found in most of the collapsed colonies, but most could be eliminated as possible culprits, as they occurred in only a few collapsed hives.

**G** However, one fungus called Nosema, which consists of a single cell and targets bees specifically, was found in most of the collapsed colonies in the study. Scientists determined that Nosema is not likely to predict the likelihood of collapse when found in an otherwise healthy hive, absent any traces of IIV; conversely, the presence of both

Nosema and HIV is a strong indicator of the likelihood of collapse, given the high correlation of the two in collapsed colonies in the study.

**H** Declining bee populations are troubling for a multitude of reasons. Bees directly produce items that humans consume in large quantities, such as beeswax and honey. It is the indirect production of bees, however, that would cause the largest devastation. Virtually everything humans eat depends on pollination, and bees are hugely important to the pollination process. Although cross-pollination is achieved in some cases by wind, insects account for a much larger proportion of plant reproduction, and bees are arguably the most prolific agents of pollen transport among insects.

**I** If bees go extinct, most fruits and vegetables would die off as well. Animals, such as cows and pigs, who consume plants that reproduce with the help of bees would also be affected. The survival of bees, therefore, is tied to our consumption of beef, pork and dairy. The literal 'fruits of the labour' of bees also often become vital ingredients in important medicines. In short, if bee populations disappear, there will be an immensely detrimental impact on the global economy and life as we know it.

**Questions 1-7 The reading passage has nine paragraphs labelled A-I.**

**Which paragraph contains the following information?**

**NB: You may use any letter more than once.**

- 1 An explanation of a phenomenon in which bees disappear
- 2 The impact of bees on other plants and animals
- 3 The fate of the UK agency that protects bees
- 4 Some dangers that bees faced in the 20th century
- 5 Details of the combination of causes that indicate a hive is likely to collapse
- 6 The global decline in the number of bees
- 7 A fungus that is a particular threat to bees