Invasive Species: The Honey Bee

Honey Bees are the animals that we know for providing honey for us, but did you know that these bees didn’t originally come from Australia? This makes the Honey Bees species a form of an invasive species. The European Honey Bee arrived in Australia over 180 years ago by the Ship Isabella. The Bee adapted to the environment very easily and started breeding. Different types of Honey Bees live in most parts of Australia, yet in NSW and Queensland, all of the breeds of Honey Bees live in this part of the country. (Source 1). Honey Bees can be found in many different places, yet commonly in tropical climates.

This food web shows the relationship between the bee and native Australian animals. (Source 2). If the bee was removed from the food web or the population of the bee decreased, these could be the outcomes for other organisms:

- Flowers will have less pollen
- Flowers will also have less sun
- Flowers and also trees may die
- Less is produced and less is provided to consume

If the bee was more popular and was larger in numbers and had a larger population, the outcomes for other organisms include:

- More pollination for flowers lead to more flowers and plants for people
- More honey is being produced and more honey is provided to consume
- Flowers grow at a faster rate

According to the NSW Government, many abiotic factors of Australia have been affected by bees and their presence. Hollow trees have been taken over by bees and they have made hollow trees into a habitat for bees. They have gotten rid of the chance for native species to live in these hollows. Animals such as mammals and birds are dependent on these hollow trees, and at least 20% of birds homes’ have been taken away by bees. Honeybees collect pollen from flowers to produce honey, but they remove 80% of pollen from all floral resources and have been proven to affect the seed set in different types of plants. Bees also affect the economy of Australia and the US, meaning the pollen the bees produce is worth 15 billion US dollars. Many foods such as vegetables and fruits rely on pollination, especially nuts who rely on pollination the most. Bee pollination is worth around 100 species of crops. In terms of managing these animals, attempts have been made to find a long term solution to keeping them under control and under the circumstances that we would like them to be. For now, short term solutions have been put into place for the safety of beekeepers. This method includes traps being loaded with poison within beehives. Even though this method is currently working, worries have been brought up about the position of becoming natural to bees and becoming a concern for the health of beekeepers. Yet, other types of honeybees that make up the European bee species haven't arrived at Australian shores. This has impacted the environment because toxins are being released and exposed to beekeepers and other bee management staff. Bee management has also had an impact economically by having to provide particular hives and positions for this method.

To summarise, Bees are animals that provide much-needed products for consumers and our society would be much different if these animals were removed. Although this is so, Bees can be a threat to our natural environment and can take away things such as habitats from our native Australian animals. This is a concern for the future as Bees and other invasive species are invading Australia and the population of these animals is only growing faster. This leads to more immigrant animals becoming natural animals and our native animals decreasing in population. Overall, even though Bees provide much for our country and we would be very different without them, invasive species as a whole are becoming a problem for Australia.

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