## Year 3 Knowledge Organiser Science – Sustainability: Animal Vulnerabilities with a focus on bees

| Key vocabulary |  |                           |  |
|----------------|--|---------------------------|--|
| ecosystem      | A community of living organisms (plants, animals, and microbes) in conjunction with the non-living components of their environment (air, water, and soil). | sustainable               | Practices that meet the needs of the present without compromising the ability of future generations to meet their own needs. |
| endangered     | A species of animal or plant that is seriously at risk of extinction.  | pollination               | The process of transferring pollen from one flower to another so it can grow fruit and seeds.                                |
| habitat        | The natural home or environment of an animal, plant, or other organism.  | animal<br>vulnerabilities | Weaknesses or susceptibilities that animals have in facing environmental challenges.   |
| threats        | Factors that have the potential to harm an organism, population, or ecosystem.   | pesticides                | Chemical substances used to kill pests, especially insects.  |

## **Animal Vulnerabilities**



Some animals are vulnerable because of changes in their habitats.

Deforestation: When trees are cut down, animals lose their homes and food sources. This makes it hard for them to survive, and many animals might even disappear from those areas.

Pollution: Pollution from things like plastic, chemicals, and waste harms habitats by making the land, water, and air dirty. This can make it unsafe for animals to live and grow there.



Climate Change: Climate change causes

unusual weather, like extreme heat, storms, and rising sea levels. This can destroy habitats and make it hard for animals to find food and shelter

## **Pollination**

Pollination is an essential part of a plant's life cycle. Bees play a crucial part. They visit a variety of plants, helping them to make seeds and fruits. Which helps help farmers grow more fruit and vegetables. This means more food for us!



Over the past 15 years, colonies of bees have been disappearing, and the reason remains unknown. Referred to as

'colony collapse

disorder', billions of

some regions, up to

90% of bees have

disappeared!

honeybees across the

world are leaving their

hives, never to return. In

When honeybees share information about the best food sources, they perform their 'waggle dance'. When the worker returns to the hive. it moves in a figure-of-eight and waggles its body to indicate the direction of the food source.

## Fact

Bees

Honeybees must gather nectar from two million flowers to make one pound of honey.

Bees can see ultraviolet light, which helps them locate nectar in flowers.

Fact