

Bees used for crop pollination

Takes millions

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Millions arrive in Central Oregon - millions of honey bees that is.

Although honey bees are known for producing honey and beeswax, they also perform another important task which benefits both nature and humans. Bees pollinate gardens, orchards, agricultural crops and wildlife habitats.

Honey bee pollination occurs naturally when each honey bee worker forages for food and travels from one flowering plant to the next in search of pollen and nectar. Honey bees transfer pollen during this process and in turn, they fertilize plants, enabling them to bear fruit or seeds.

Bees make excellent pollinators because most of their life is spent collecting pollen, a source of protein that they feed to their developing offspring.

When a bee lands on a flower, the hairs on the bees' body attract pollen grains through electrostatic forces.

Stiff hairs allow them to collect the pollen into specialized pouches on their legs and then carry it back to their hive.

Bees tend to focus on one kind of flower at a time, which means it is more likely that pollen from one flower will be transferred to another flower of the same species.

Many plants require this kind of pollen distribution, known as cross-pollination, in order to produce viable seeds. Central Oregon produces thousands of acres of hybrid vegetable seed and requires honey bees for pollination.

The business of collecting pollen requires a lot of energy, and so many flowers attract and also reward bees with nectar, a mixture of water and sugars produced by plants.

Just how important are honeybees to the human diet? According to the U.S. Department of Agriculture, these busy workers pollinate 80 percent of our flowering crops which constitute one third of everything we eat.

Without bees, our dietary staples, such as apples, broccoli, strawberries, nuts, blueberries and cucumbers, would not exist, and our beef and dairy industries would suffer if alfalfa were not available for feed.

It is estimated that honeybees pollinate \$14 billion worth of seeds and crops in the U.S. annually.

When pollination is this important, farmers can't depend on native honey bees that may nest near crop fields. That's why farmers contract with migratory beekeepers, who move millions of bee hives to fields each year just as crops flower.

But the bees' importance goes far beyond agriculture. They also pollinate more than 16 percent of the flowering plant species, ensuring that we'll have blooms in our own gardens.

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