

INSECTS

SUGGESTED

READINGS

Insects - human's best friends and worst enemies. We are surrounded by more than a million species of insects. Without them, humankind couldn't survive. Some insects destroy crops and carry diseases. Mosquitoes, which carry diseases such as malaria, dengue fever, Ross River, Zika, and West Nile viruses, kill and maim more people each year than any other animal. Others do essential jobs like pollinate blossoms, aerate the soil, decompose dead plant material, or eat other harmful insects, making them essential to the food web. As weather patterns and temperatures change, the distribution and habitat of many insect species are likely to change dramatically. The numbers of bees around the world have been radically reduced due to disease. How does the reduction of some species and relocation of others impact health, agriculture, and horticulture?

Over 1,900 insect species have been identified as suitable for human consumption and animal feed and could assure food security. Incorporating insects into the human food and medical supply indicates the ever-growing importance of insects in the world. Will insects and their products, such as genetically modified mosquitoes or manuka honey help to fight diseases? Will toasted grubs, fried crickets, and other edible insects become important global protein choices?

Theme 1: Insects are Essential

[Fates of Humans and Insects Intertwined, Warn Scientists](#)

[Benefits of Insects to Humans](#)

Theme 2: Food and Medicine

[Drugs from Bugs: Bioprospecting Insects to Fight Superbugs](#)

[Food System Innovations](#)

Theme 3: Insects and the Environment

[Climate Change Projected To Boost Insect Activity and Crop Loss, Researchers Say](#)

[Death of Bees](#)

Theme 4: Insect Innovation

[Controllable Cyborg Beetles for Swarming Search and Rescue](#)

[Dung Beetle Innovations](#)