

BAD ECOLOGY TAKE REVENGE ON INSECTS

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Global warming – we are so used to hearing this phrase that for us it is almost a part of life that most of us have stopped paying attention to. Since 2007, an average of 30 % of all bee colonies worldwide dies every winter. Worst of all, we ourselves are to blame for the bee deaths. Human activities, including land development, electromagnetic pollution, and the use of neonicotide pesticides make it very difficult for honeybees to reproduce. In the spring, male bees fly to gathering places, so-called air rooms, where thousands of young bees gather from miles away to show themselves. Each bee seeks to mate with a week-old female bee, who is destined from birth to make her own hive. During mating flights, queens collect genetic material that they will use to fertilize eggs for the rest of their lives. On a lucky day, a queen can lay 2,000 eggs. Neonicotinoids, the world's most common class of agricultural pesticides, act as a bee contraceptive. Pipers exposed to concentrations of neonicotinoids produced 39 % less live sperm and were more likely to give birth to dead sperm. The European Union imposed a total ban on these chemicals in early 2018, and other countries are working to phase them out. One more problem to be considered is food. Bees need a variety of food to be healthy. But between industrial fields and wide urban landscapes, it's hard to find good flowering plants. It is their loss, both in number and variety, that reduces the nutritional resources that bees can use. Honeybee hives with unimproved backyard pastures are much better and more viable than hives surrounded by corn or soybean farms. Hives in the best areas have a greater summer baby boom, averaging 2,000 to 4,000 more offspring than hives in the worst areas. Also a problem is most human technology. Experiments have been done on the early life stages of bees, studying the possible effects of power lines on learning, memory and movement. Honeybees exposed to low-frequency electromagnetic fields like those emitted by power lines were less efficient and flew more erratically.