

Bee and butterfly numbers are falling, even in undisturbed forests

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Habitat destruction, pesticide use, and other human impacts are often blamed for the well-documented decline of insects in recent decades. But even in forests where few humans tread, some bees and butterflies are declining, researchers have found. Over the past 15 years, populations of bees shrank 62.5% and those of butterflies dropped 57.6% in a forest in the U.S. southeast. In addition, the number of bee species there fell by 39%, the team reports this month in Current Biology.

Five times between 2007 and 2022, researchers surveyed the insects in three forested areas in the Oconee National Forest in northern Georgia. The sites were relatively undisturbed by humans and didn't have common invasive plants such as Chinese privet.

The team suspects climate change may be warming the region and affecting bee and possibly butterfly survival. Invasive insects may also be to blame, especially for the decline of bees such as small carpenter (above) and leaf-cutting bees, which nest in hollow stems, under loose bark, or inside rotting wood. These species were hit the hardest, the researchers report, possibly because exotic wood-nesting and leaf-cutter bees may outcompete them for nest sites or because their nests fail to protect them against higher temperatures.

Source: https://www.science.org/content/article/bee-butterfly-numbers-are-falling-even-undisturbed-forests