

Hawaiian crickets escape parasite through gene mutations that keep them quiet

The crickets hadn't disappeared. Marlene Zuk would go for nighttime walks and see multitudes of the insects in the light of her headlamp. If anything, there were more of them than before. They just weren't calling out. When she dissected them, Zuk found out why.

Male crickets call with two structures on the backs of their wings—a vein with several evenly spaced teeth (the file) and a raised ridge (the scraper). But on all the silent Kauai crickets, the file was growing at a weird angle and had all but disappeared. Their wings were flat.

This change hobbled their courtship songs, but likely saved their lives. In the 1990s, Zuk's team discovered that the crickets were targeted by a parasitic fly, whose larvae burrow inside them and devour them alive. The flies find the crickets by listening out for their songs and they're so effective that, in the early 90s, they had parasitised a third of the males. In 2002, the cricket population had fallen dramatically, and Zuk thought that they were done for.

But the silent males escaped the attention of the fly. As they bred and spread, they carried the flatwing mutation with them. By 2003, the cricket population had rebounded. And in fewer than 20 generations, they had gone from almost all-singing to almost all-silent. The crickets have become a classic textbook example of rapid evolution.

Read the full, original story: [The Silence of the Crickets, The Silence of the Crickets](#)