

《蝉群危机：真菌"操控"下的死亡之舞，新一代蝉群命运堪忧》

Some of the cicadas temporarily overtaking parts of the eastern and southern U.S. are turning into sex-crazed “zombies,” thanks to a fungus that tears off their genitals but drives them to keep mating nonetheless.

一些蝉暂时占领了美国东部和南部部分地区，由于一种真菌撕掉了它们的生殖器，但驱使它们继续交配，它们变成了性欲旺盛的“僵尸”。

Massospora cicadina has been observed in cicadas in more than half a dozen states — both those belonging to Brood XIII, which emerges every 17 years and is concentrated in Illinois, and of Brood XIX, a 13-year group that is distributed across much of the southeast.

这种名为“蝉孢菌”的真菌已被观察到出现在十多个州的蝉身上——这些蝉分别属于每17年出现一次的第十三代蝉群，主要集中在伊利诺伊州，以及13年一度的第十九代蝉群，主要分布在东南部的大部分地区。

This is the first time these two specific broods have co-emerged since 1803 — and it's not the only quirky (or some might say, chilling) fact about them.

这是自1803年以来这两个特定蝉群首次同时出现——而且它们身上还不止这一个奇特(或有些人可能会说，令人毛骨悚然)的事实。

The fungus is easy to spot because it replaces cicada's backends with what looks like a “chalky white gum drop,” according to Matt Kasson, a professor of forest pathology and mycology at West Virginia University.

西弗吉尼亚大学森林病理学和真菌学教授马特·卡森表示，这种真菌很容易识别，因为它用“像粉笔一样白的胶状物”取代了蝉的尾部。

Kasson told NPR last month that the fungus is unique because it does “active-host transmission,” meaning that it keeps the cicada alive — and flying around — even after about a third of its body has been replaced by fungal tissue.

卡森上个月告诉美国国家公共电台(NPR)，这种真菌之所以独特，是因为它可以进行“主动宿主传播”，这意味着即使大约三分之一的蝉体被真菌组织取代，它仍然能让蝉活着——并四处飞行。

“This is the puppeteer — the fungus — pulling the strings on its unsuspecting host,” he said. “It's keeping the host active to attempt to mate to spread the spores.”

“这就是那个操纵者——真菌——在不知情的宿主身上拉线，”他说。“它让宿主保持活跃以尝试交配，从而传播孢子。”

As part of that effort, the fungus also makes cicadas hypersexual. Typically, male cicadas make a loud mating call to attract females, who respond by flicking their wings. Infected males, in their fungus-fueled quest for world domination, will also pretend to be females to mate with other males.

作为这种努力的一部分，真菌也让蝉变得性欲亢进。通常，雄性蝉会发出响亮的交配叫声来吸引雌性，雌性则通过扇动翅膀来回应。被感染的雄性蝉在真菌驱使下，为了统治世界，还会假装成雌性与其他雄性交配。

Their attempts at reproduction, doomed from the start, only fuel the virus' spread, a group of scientists at Chicago's Field Museum of Natural History told NPR in a statement.

芝加哥菲尔德自然历史博物馆的一组科学家在一份声明中告诉美国国家公共电台(NPR)，它们从一开始就注定失败的繁殖尝试只会加剧病毒的传播。

“Eventually, their fungal plug gets ripped open, and they fly around raining down spores, further spreading the fungus,” they wrote. “Some scientists call the cicadas at this stage 'flying salt shakers of death.'”

“最终，它们的真菌塞子会被撕裂，它们飞得到处都是，撒下孢子，进一步传播真菌，”他们写道。“一些科学家将这一阶段的蝉称为‘飞行的死亡盐瓶’。”

Periodical cicadas only live about three to four weeks once they emerge from the ground, so this year's crop will start to dwindle later this month. The fungus, however, will live on.

周期蝉一旦破土而出，通常只能存活三到四周，所以今年的蝉群本月早些时候将开始减少。然而，真菌会继续存活。

“Stage I” infected cicadas pass the disease onto other adults in their same generation, according to the University of Connecticut. “Stage II” cicadas disperse spores into the soil, where they will go on to infect the next generation of cicada nymphs in either 13 or 17 years.

据康涅狄格大学称，“第一阶段”受感染的蝉会将疾病传染给它们同一代的其他成年蝉。“第二阶段”的蝉将孢子散布到土壤中，这些孢子将在13年或17年后继续感染下一代蝉的若虫。

