



SCIENCE & TECHNOLOGY

Drones in New Zealand to Study Threatened Insects

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Scientists in New Zealand are developing **drones** and small radars to follow insects to try to protect threatened **species**.

The new technology involves attaching radars to the insects to follow their movements. The devices connect electronically to drones that will **track** the insects in real-time. The scientists are with the University of Canterbury on New Zealand's South Island.

The team says it hopes the technology will lead to a deeper understanding of the country's troubled insect populations.

The research builds on years of experience in the area of bird **conservation**, in which radio tracking methods have helped to protect many threatened species. But that technology had to be made much smaller for use on insects.

The researchers have now made about 20 small "harmonic" devices that can be attached to insects. The insects can then be tracked over wide areas by drones.

Steve Pawson, from the university's College of Engineering, told VOA that bird-tracking technology is what made the researchers start looking for a similar solution to follow insects.

The information from tagged birds, Pawson said, "really informs conservation **management**."

The same system can help scientists learn more about many different insect behaviors, he added, like how far they move, where they look for food, and even, how long they live.

“If we have that knowledge, then we can **incorporate** it into our decision making and our planning for conservation management operations,” Pawson added.

The researchers plan to begin tests of the system on ground-based insects before moving to the greater complexities of tracking insects in flight. They hope to begin field testing by 2023.

The team says the research could possibly be useful in other scientific fields as well, such as biosecurity or medical imaging.

Among New Zealand’s endangered insects is the widely recognized Wētā. The creatures -- native to the South Pacific -- have large bodies, legs with sharp points and rounded tusks.

Several species of Wētā are under threat from animals that eat them and destruction of the places where they live.

I’m Bryan Lynn.

Phil Mercer from VOA News reported this story. Bryan Lynn adapted the report for VOA Learning English. Katy Weaver was the editor.

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Words in This Story

drone – *n.* a small, unmanned plane

species – *n. biology* : a group of animals or plants that are similar and can produce young animals or plants : a group of related animals or plants that is smaller than a genus

track – *v.* to follow

conservation – *n.* the act of keeping something safe from harm or from being damaged or destroyed

incorporate – *v.* to include something as part of another thing

habitat – *n.* the natural environment of plant or animal
