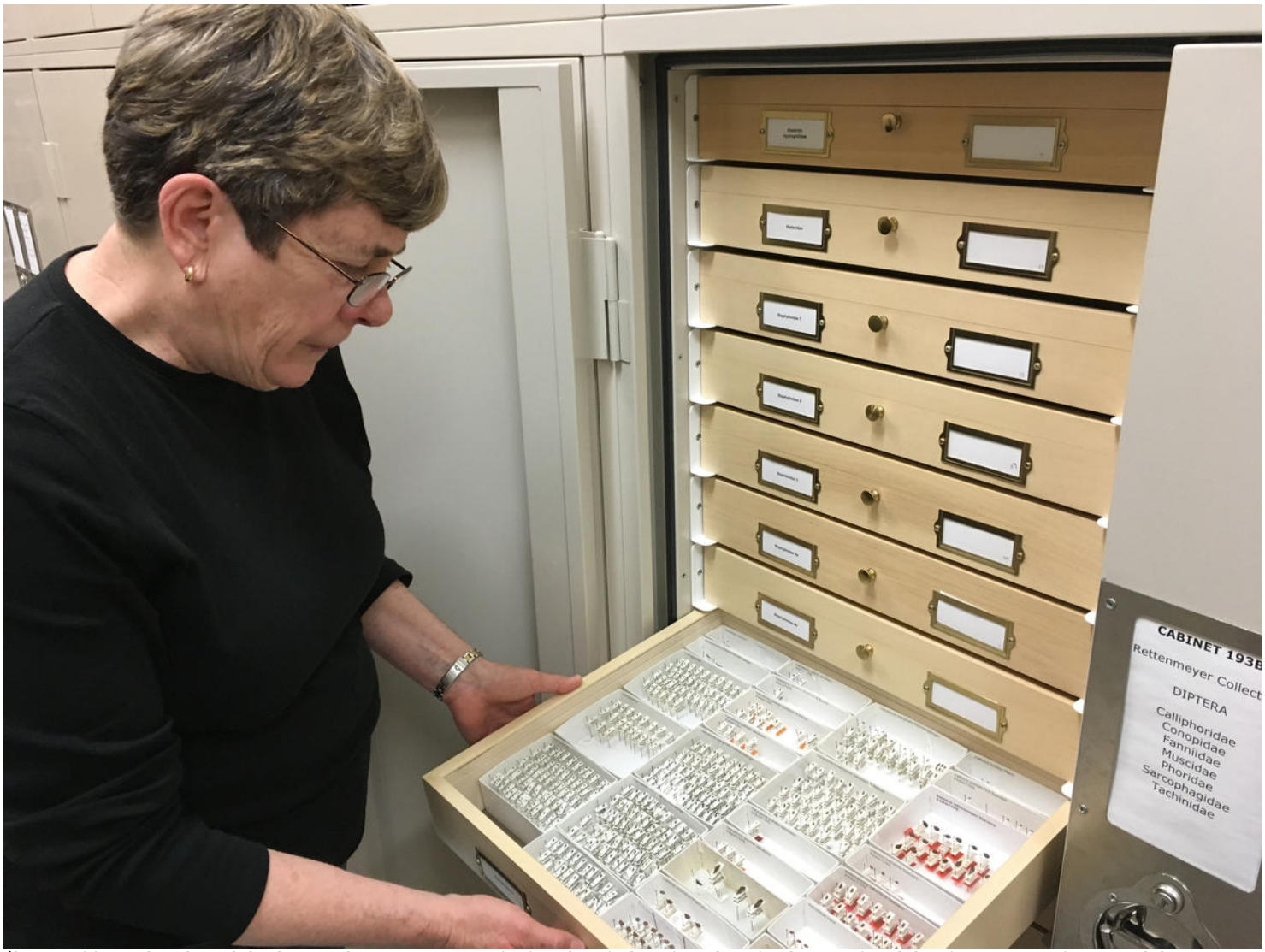
At UConn, Millions Of Army Ants Represent A Lifetime's Work

By DAVIS DUNAVIN (/PEOPLE/DAVIS-DUNAVIN) • APR 18, 2016



(http://mediad.publicbroadcasting.net/p/wshu/files/styles/x_large/public/201604/ants_dd_160418.j

Dr. Jane O'Donnell is a collections manager in the Ecology and Evolutionary Biology Department at UConn, where she oversees the university's collection of ants, insects and parasites. Here she shows a tiny sample of the department's hundreds of thousands of South American army ants, collected over 50 years by the late UConn biologist Carl Rettenmeyer

and his wife Marian.

CREDIT DAVIS DUNAVIN / WSHU

Listen
3:15

University of Connecticut biologist Carl Rettenmeyer and his wife Marian spent 50 years studying the army ants of South America's rainforests -- tough, aggressive insects who move in swarms across the rainforest floor. In that time, they collected about two million army ants, along with the animals that live alongside army ants.

When the Rettenmeyers went to the rainforest, they'd grab every species they could find -- from the butterflies and lizards who fled from the army ants' approach to the microscopic mites who lived on the army ants' mouths and antennae.

"If you can imagine being in the jungle and watching hundreds of thousands of ants parade by on the forest floor, and picking some of these things out from the ants as all this is happening, it's pretty amazing," says Dr. Jane O'Donnell, who manages the University of Connecticut's insect collection.

When Rettenmeyer died in 2009, his basement was full of hundreds of thousands of army ants and other insects, all pinned in boxes or preserved in jars. Since then, the university has moved all those insects to a huge room full of rows and rows of cabinets.

Earlier this month the university got a $500,000 grant from the National Science Foundation to document every specimen, take its picture and put it online. That online collection will be available to scientists and the public.

"By preserving this, with any luck these specimens will last for many generations in the future," O'Donnell says. "And new eyes will come along, and they'll see things that maybe even the Rettenmeyers didn't see."

If it sounds unlikely that we might be able to see anything important in a tiny insect half a world away, consider that the insects in this collection provide a lot of services we don't see: recycling dead animals, eating plants and cleaning up the environment. But the army ant's habitat is shrinking. Some of the insects in this collection might not be around much longer, or they may be gone already.

“There might come a point where we realize, probably a little too late, that all these things, even from the tiniest mite to ants to elephants, everything’s interrelated,” O’Donnell says. “And we keep throwing the pieces away, sooner or later, something really bad’s gonna happen.”

Putting the collection online is one way to preserve some of those pieces. O’Donnell says the university plans to have the collection online by 2017.

TAGS: CONNECTICUT (/TERM/CONNECTICUT) UCONN (/TERM/UCONN)

CPB Report (http://wshu.org/cpb-report)

Contest Rules (http://wshu.org/contest-rules)