

Fire ant colonies seem to be down dramatically

April 4 2012, By David Fleshler

The red imported fire ant, one of the most horrifying of the foreign species that have established themselves in the United States, appears to be in retreat.

Pest control companies in South Florida report fewer calls and scientists say the number of colonies has dropped sharply. It's a rare piece of good news for a region that has seen infestations of <u>Burmese pythons</u>, Muscovy ducks and <u>feral hogs</u>.

Scientists say the evidence so far is compelling but anecdotal. Over the next two months, U.S. <u>Department of Agriculture</u> scientists will be crisscrossing Florida and Georgia to inspect the number and size of mounds, with an additional month to analyze the data and draw conclusions about the status of these invaders from South America.

But so far, signs point to fewer colonies. Two heavily studied sites near Ocala that once bristled with multiple-queen colonies - a sign of a vigorous and numerous ant population - are now dominated by colonies with single queens and a lot fewer ants, said Sanford Porter, a USDA research entomologist. In Broward County, scientists have marked a reduction of nearly 90 percent in <u>fire ant</u> mounds in suburban swales. No similar statistics were available for Palm Beach and Miami-Dade counties.

"In South Florida, the red imported fire ant has declined considerably in the last 20 years," said William Kern, associate professor of entomology



at the University of Florida's Institute of Food and <u>Agricultural Sciences</u>. "While still present, the number and density of colonies has greatly decreased."

The ants, whose name derives from the pain inflicted by their venom, arrived by ship in either Pensacola or Mobile, Ala., sometime between 1933 and 1945. Even among stinging insects, their habits are horrifying.

They swarm stealthily onto their prey - and once a few hundred are there - sting all once, a technique that accounts for their successful attacks on large mammals, including people, with fatal attacks documented on nursing home patients. In floods, they will form a ball of ants around the queen and float, with a constant exchange of ants at the bottom so they don't drown, and swarm suddenly onto whatever building or animal they bump into.

They kill baby sea turtles, newborn calves that don't get off the ground fast enough and ground-nesting birds. They're attracted to dirty laundry and electrical equipment, shorting out circuits and traffic lights. They cause an estimated \$600 million damage every year.

Pest control companies, for whom red imported fire ants had been a reliable moneymaker, say service calls have plummeted.

"It's better, depending your point of view," said Al Hoffer, owner of Al Hoffer's Pest Protection in Coral Springs, which serves all of southeast Florida. "Worse for me, better for everybody else. Don't get me wrong, we're still seeing them. But the frequency of calls has gone down by about 50 percent."

Christopher Cavanagh, vice president and general manager of Petri's Positive Pest Control Inc., which operates in Broward and Palm Beach counties, said calls have dropped from several a week to one or two a



month. "There have been times when it was much more of a problem," he said. "In the 1980s and '90s it was more of an issue. From the homeowner's point of view, they're not nearly the problem they used to be."

Efforts to control these vicious insects involved an appropriately lurid parasite: various species of brain-eating flies. Imported from Brazil and released throughout the southeastern United States, phorid flies pounce on the ants and inject eggs, from which the larva hatches and eats the ant's brain. These flies have established themselves throughout Florida and are among several possible reasons suggested by scientists for the ant's decline.

Rudolf Scheffrahn, professor of entomology at the University of Florida, credited competition from other ant species, as well as possibly disease, other competitors and phorid flies. Kern suggests pathogens and competition from the big-headed ant, a tropical invasive species that's a "voracious insect eater" but that doesn't sting people. Porter suggests changes in climate, disease and phorid flies.

The flies have been distributed throughout South Florida, and scientists plan to introduce more species of them because each species attacks a different-sized ant. No one expects the flies to eradicate the ants, but scientists say the constant threat of air attack will keep the ants in their bunkers, making it more difficult for them to spread.

"These parasites have been doing very, very well in spreading through the infected area," said Robert K. Vander Meer, chemist and research leader for the Imported Fire Ant and Household Insects Unit at the USDA's Center for Medical, Agricultural, and Veterinary Entomology in Gainesville. "They are everywhere the ants are."

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Citation: Fire ant colonies seem to be down dramatically (2012, April 4) retrieved 7 May 2024 from https://phys.org/news/2012-04-ant-colonies.html

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