

News Article
July 11, 2006
Roger C. Vines
County Extension Coordinator



Super-sized Yellow Jacket Nests?

Recently the following article appeared on the Alabama Cooperative Extension Web page. This was an interesting article and so I thought I would share it. Apparently an unusual phenomenon is going on with yellow jackets – super sized nests and often above ground. Yellow jackets normally make a small nest in the ground, similar to a hornets nest, but underground and only about the size of a basketball. However, now several “super nests” have been found state-wide.

Until recently, an insect expert could go an entire career without seeing more than a couple of yellow jacket nests larger than a basketball --- until now. In fact a few years ago I did see one in Coosa County. It was a huge nest in a cow pasture along the banks of a small creek. This nest was partially underground but also covered the top of the ground like a large blanket. It was amazing.

This year, entomologists with the Alabama Cooperative Extension System have encountered something previously unimaginable --- 16 super-sized yellow jacket nests throughout southern and central Alabama. The size of these nests is like nothing they’ve ever seen.

“The nests I’ve excavated in the past were no larger than a basketball,” said Dr. Charles Ray, an Extension entomologist and research fellow with Auburn University’s Department of Entomology and Plant Pathology. “None of the 16 or so nests I’ve seen are nearly that small. Everyone I’ve talked to about this has never seen anything like it.”



The largest he's personally seen so far filled the interior of a weathered 1955 Chevrolet parked under a shed in Elmore County. "And that's when they drove large vehicles," Ray stressed. One nest abandoned barn in Pike

encountered in an County was roughly the size of a Volkswagen Beetle.

Equally astonishing, Ray says, are the numbers of yellow jackets buzzing around in these nests. "A typical nest consists of two or three thousand workers and one queen," he said. "With these large nests, we may have as many as 100,000 workers." One mammoth nest in South Carolina contained roughly a quarter million workers and as many as 100 queens. Ray fears some of these nests may not even reach maximum size until late July or August.

One other finding has intrigued Ray and other researchers: the presence of satellite nests in close proximity to the large nest. No one is sure why these smaller satellite nests occur, though Ray speculates they may be prompted by space limitations in the large nests. One thing is certain: The presence of these super-sized nests throughout the state presents a potentially serious human threat, especially later in the season.

"This is the time of year when yellow jackets are readily evident but very busy and not terribly aggressive," Ray says. "But it's very possible that later in the year, as these nests begin to decline, the insects will become more aggressive."

Treating these nests is difficult at best due to the fact that unlike normal-sized nests, they have multiple entrances. No one should attempt to treat a nest this size. A far better alternative, Ray says, would be to contact a certified pest control operator.

Ray also encourages homeowners and others who encounter one of these super-sized nests to contact their local Extension office. He and his fellow researcher, Dr. Xing Ping Hu, an Extension entomologist and Auburn University associate professor of entomology and plant pathology, are trying to collect as much data as they can from these nests to gain a clearer picture of what is causing them and how they're best treated.

For now, Ray and fellow entomologists can only hazard a guess as to the causes behind this freak of nature. "It's speculated --- and, again, this is only speculation --- that the very mild winter has allowed these nest to survive," he says. "Rather than starting spring with a single queen --- as yellow jackets traditionally do --- these nests are starting with possibly a couple of thousand workers and possibly multiple queens."

Even so, Ray concedes that this is little more than an educated guess. "We're not really sure how this multiple queen thing works. It could be that the daughters of the original queen don't leave the nest or that the queens have developed some way to cooperate."

The likelihood that this year's mild winter is the primary factor behind this quirk of nature raises yet another question: Could global warming play a role? "At this point, this is wild speculation on our part, but it's an idea that pops in one's mind," Ray said. "It's not beyond the realm of possibility."

So if anyone finds such a "super nest", give us a call at the Extension Office in Rockford at 256-377-4713.