Insects Are Too Fascinating to Bug Him



By Lori Ward Bocher

Bugs are getting more respect these days, from the environmental philosophy that we need to coexist

with insects and not wipe them out, to two new Hollywood hits, A Bug's Life and Antz. Phil Pelliterri, an insect diagnostician and distinguished outreach specialist with the Department of Entomology at the University of Wisconsin-Madison, is pleased with this elevated status for his favorite critters.

"From a biologist's perspective, insects dominate the world," he states. "There are so many different species. They've been around a lot longer than we have. If they're that successful, they must be doing something right. If you can take a

step back and get by that normal repulsion people have of insects, you can really admire them. They're absolutely intriguing the way they behave. You never run out of things to study. That keeps it fun."

And fun is what Phil Pelliterri has had on his job for the past 21 years. In a university environment where most people specialize, he is a generalist when it comes to insects. He's seen . . . and heard about . . . and lectured about . . . and answered questions about . . . them all – from crop, garden, turf and ornamental pests, to household varmints, to insects that drive humans crazy.

From garbage truck to lab . . .

Phil was born and raised in Madison, and he worked his way through school by driving garbage trucks for trash removal companies that his father and uncle owned. Rumor has it that watching bugs on garbage trucks led him to a career in entomology.

"Well, that's what I always tease people about," he admits. "To be truthful, I was studying biochemistry as an undergrad at the UW. And I took a course in entomology more as a curiosity, a fun course to take. It was just so intriguing that I immediately converted to an entomology major in my junior year."

Phil received his BS degree in 1975 and an MS degree in 1977 – both in entomology. At that time, the entomology department wanted to set up a diagnostic lab similar to the one in the plant pathology department. "The reasoning, among other things, was that the Extension people were always out in the field in the summer when people sent specimens to the lab. It

would take too long to get an answer, and some of the specimens would actually decay."

Dr. Chuck Koval offered Phil a threemonth position to run the lab for a summer. "Things went well, and there were more things to do at the end of the summer, so I stayed on. Slowly, but surely, they were able to keep it running. Last May, I completed my 20th year here," Phil points out.

He has full responsibility for the diagnostic lab. "I identify insects that come in from around the state," Phil explains. "The number of samples ranges from 1,300 to 2,200, depending on the year. Of those, about 60 percent come in from the

county Extension offices. We really try to promote that avenue first. We're more the backup."





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(800) 321-5325 LESCO Phil admits that most of the time he can identify the insects quite quickly. But there are times when even he is stumped. "Less than 1 percent of the samples I have to send off to the Smithsonian Institution in Washington," he points out. "They have 18 to 20 entomologists on staff, and all they do is identify insects. These people are world experts. They're our backup."

Phil also handles the general phone work for the department. "Last year I got just over 4,000 phone calls," he says, adding that it might be someone asking what bug they have or someone wanting to know about chemicals or the different aspects of pest control.

"In the summer, I don't leave the lab much. I'll average 50 to 55 phone calls and 15 to 25 specimens a day," Phil points out. "And in the winter, when things slow down in the lab, I do lots of lecturing and teaching on campus. I will admit that, by the end of summer, I'm sick of talking on the phone. But then I start teaching, so it's a nice transition. And when I'm sick of giving lectures, then it's about time to get back into the lab and do the phone work."

Officially, his position is 75 percent Extension and 25 percent teaching. He teaches a six-week course in the UW Short Course program, and he teaches environmental toxicology in a couple of courses.

Job brings variety . . .

"And I go out on the road doing Extension meetings," he continues. "One responsibility I've had for quite some time is with what we call 'structural pest control' – the cockroaches, ants and wasps. But, because we've been so short staffed, I've also been out on the road giving turf talks, woody ornamental talks, crop talks, tick talks. Over the years there isn't an area of entomology I have not given lectures on. But that keeps it fun. It's always changing. It's hard to get stale."

Phil has built quite a reputation for himself around the state. "Because I'm here running the lab, by default I often get an awful lot of press – TV, radio and newspaper," he explains. "Last year I did about 50 newspaper pieces, 40 radio shows, and 15 TV slots of one sort or another. So my name is sort of floating around out there. People see the name and chase me down. I even get calls at home."

Luckily, Phil enjoys working with people. "Most of the people I deal with are interested in plants or the natural world to one degree or another, so there's kind of a common bond there," he points out. "And, over the years, I've seen an increasing appreciation of just how interesting and intriguing insects are. It's fun to share information with people who are interested in insects. It's also rewarding when I give people decent information that keeps them from spending money needlessly."

As an entomologist, Phil also works on homicides and law suits. It's amazing what secrets those insects can reveal! He's worked on a few autopsies of human bodies, including some murder investigations. "They call it forensic entomology," he explains. "Because of the way the insects attack dead bodies, you can time how long a body has been exposed by knowing what insects are on the body and how old they are. Maggots are the most important insect for this. They can use that evidence in determining time of death. It's interesting, but I won't say it's my favorite thing to do."

When insects show up where they shouldn't show up, sometimes it results in a lawsuit, and Phil is called in as an expert witness. "People laugh at us, but there are times when we are literally counting the hairs on the feet of certain insects to tell what they are. In these lawsuits, sometimes knowing exactly what insect it is gives us a hint of where it came from. That's what lawyers are most interested in – who's responsible," Phil says.

Sometimes the unexpected . . .

In January, he indirectly got a call from Hollywood. "A woman called who knew someone who knew me," he explains. "She had a daughter whose husband was doing a film in Hollywood. They were wondering what makes



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Dale Parske Agronomist crickets stop making noise. So we talked about that."

Then there are the crazy cases. "Once somebody brought me a piece of chicken and thought there were worms in it," Phil recalls. "It turned out to be the esophagus. If you look at the esophagus, it is ribbed, just like a worm. So it was somewhat valid.

"I've had people bring me samples of things they found in food that you could tell were planted in the food," he continues. "Once somebody supposedly found a whole earthworm in bologna. Well, bologna is cooked and that earthworm was not. There was a rumor that they were putting earthworms in bologna. I got a kick out of that because, at the time, earthworms were going for \$5 a pound and bologna for about \$1.50 a pound.

"There was one incident that was related to turf, although I was more on the sidelines for this one," Phil continues. "Two years ago when the Packers had to import sod for the NFC Championship game against Carolina, that turf had to come from the east coast which has infestations of Japanese beetles. So there was a real concern about bringing that insect into the state. The Department of Agriculture ended up doing the inspections, and they didn't find anything."

There's another beetle that has entomologists sweating bullets right now – the Asian long-horn beetle. "That's an insect from China that was shipped to the U.S. on pallet wood," Phil explains. "There was a problem in New York about three years ago. Now, all of a sudden, it popped up in three sites in Chicago. It attacks maples, ash, locusts, poplar, elm. It just tears trees apart. Usually when insects attack trees, the trees have to be stressed or weakened. But this one doesn't seem to care."

35 new insects in Wisconsin . . .

Since Phil started working in the diagnostic lab more than 20 years ago, he's seen lots of new insects enter the state. "I gave a seminar for the department last winter as I was getting close to my 20th anniversary," he recalls. "Without even trying, I came up with a list of 35 insects that weren't in Wisconsin when I started here 20 years ago. Some are turf pests, like the black turfgrass ataenius. It's a little grub that gets into fairways and greens and causes major problems by eating the roots off the plants."

There are other changes he's seen in 20 years. "We have seen somewhat more of a tolerance for this whole

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idea of pest management and an understanding that not all insects are bad," Phil says. "From a biological standpoint, you're never going to win the war against insects. An 'us vs. them' philosophy is not going to get you very far. Between resistance and new insects and other things, if that's the approach you take, you're definitely going to lose.

"With environmental concerns and other things, we're seeing a change in attitudes," Phil believes. "Can we grow our plants differently to make them less susceptible to insects? Can we select varieties that are less susceptible? The whole philosophy is to coexist a little bit better and make wiser choices.

"Ultimately, what it comes down to is a better appreciation of the natural world and what kinds of balances we need to set up," he continues. "Twenty or thirty years ago, everybody thought we had a magic little chemical that would solve all of our problems. This is a major change – one that has made it more difficult, but is more biologically reasonable in the long run."

Bugs in a new light \dots

Perhaps it's this better appreciation of the natural world that has led to two movies about insects -A Bug's Life and Antz. Phil has seen the former, but is waiting for the video to come out to see the latter. "I'm pleasantly surprised with these movies," he says. "As a purist, an entomologist, I can sit back and say, Well, there's not enough legs or they got this wrong.' And there are a few of those mistakes. But, in general, a lot of what they do in the movies is biologically true. There are lots of little subtleties that I picked up on, so I know they did their homework.

"What I find even more intriguing is that they put insects in a different light," Phil continues. "When I do school programs to youngsters in the first, second or third grades, they're just amazed. I can blow their socks off with some of these giant beetles. Kids, for the most part, really appreciate insects.

"But, in our culture, as you get older, all of a sudden insects have all these weird connotations, like you're a poor housekeeper, things like that," he adds. "Usually they're not true – they're urban legends."

One of Phil's heroes is *The Far Side* cartoonist, Gary Larson. "He does neat stuff with bugs. He makes pretty good humor out of it and still is biologically true," Phil says.

Over the years, Phil has endured jokes and comments about his job. He's often called the Bug Man. "After graduating from garbage trucks, this is probably a step up," he laughs. "It doesn't phase me at all. And, as you can imagine, I have various little insects and insect pictures sitting around the house. That comes with the territory."

When he's out in public, people come to him with

their bug problems. "To be honest, the only people I don' like to answer are lawyers," he admits.

Lifelong native of Madison . . .

Phil has lived in Madison all of his life. He and his family now live 1-1/2 blocks from Odana Hills. His wife, Terri, is an occupational therapist who works in public relations for the Dane County Mental Health Association. Their daughter, Molly, is a freshman at the UW with plans of pursuing some type of science major. And their son, Nick, is 16.

Phil enjoys archery and bow hunting. "This works out pretty well because my work settles down a little in the fall so I can take time off to go throw sharp sticks in the woods," he says about his hunting. "I don't shoot at targets a lot, but my son and I do participate in archery events at the Badger State Summer Games. One of these days I'm going to catch up to him. He's won five metals and I've won three.

"I'm also involved with the Boy Scouts with my son," he continues. "This past summer we went on a two-week back-packing trip in New Mexico and walked 70 miles."

And how many different species of insects do you think he saw on that hike?



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