

Caterpillars attack Elon

Rains bring Orange-Striped Oakworms to campus

Jason Chick

Reporter

Perhaps you've noticed you are not alone on Elon's walkways. And unless you haven't been to class this semester, you've seen the remnants of the collisions between student and caterpillar.

That black caterpillar competing for space on Elon's bricks is an Orange-Striped Oakworm. Amazingly enough, Elon caters directly to their diet — oak trees.

Elon administrators probably never imagined that an infestation of *Anisota senatoria*, the larvae's Latin name, would be eating away at the university's Hebrew meaning — oak.

And though the caterpillars can't strip Elon of its identity, they can ravage the school's prize trees.

A late season—June through October—hardwood defoliator, the oakworm can have large enough populations to clear a forest.

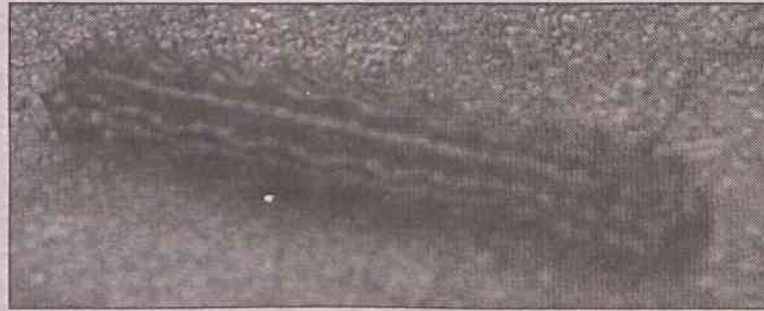
In late June the adult moths emerge from the ground to begin the mating process.

The oakworm is a member of the Royal Moth family. These beauties include the Luna Moth, Buck Moth and Polyphemus Moth.

Our beauty, the Orange-Striped Oakworm Moth, is yellow-red in color; the forewings are orange-purple and tipped with an oblique band and white spot. Females can be twice as large as males and are poor fliers, which is why they can often be found climbing up the trunks of oak trees.

Females lay up to 500 eggs in a cluster on the underside of oak leaves, which hatch in one to two weeks. This hatching spawns an army of hungry oakworms that feasts from July through October.

This species is nearly anonymous at these early stages. The webbing currently seen in the



Jeff Heyer / Photo Editor

An Orange-Striped Oakworm scurries across campus trying to avoid being stepped on by Elon students on their way to class.

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trees is not manufactured by oakworms, but is the home of another species of caterpillars called Tent Caterpillars. Also voracious eaters, they can cause extensive damage to trees.

Once the adult oakworm larvae have had their fill, they venture out of the trees to pupate or spin a cocoon to make the transformation from caterpillar to moth. These adults often cross the path of people—clearly marked these last weeks by the number of casualties—as they journey to their winter resting grounds in the earth.

“Just yesterday while walking to class, I watched students — myself included — stepping over caterpillars and their remains, trying to avoid them,” said sophomore Molly Rice.

The adult will dig three to four inches down into the soil, carve a small cavern, spin a cocoon and spend winter completing the metamorphosis to moth. Their emergence out of the ground the following June will spawn the cycle all over again.

The adult oakworm is 40 to 55 centimeters long with eight orange, longitudinal stripes

marking their body. Small, hard spines protrude from the body, and, although, they are firm, they are not poisonous to people.

However, they can cause catastrophic damage to a population of oak trees. Pesticides are recommended to control large populations of oakworms in order to save prized trees. For smaller infestations, hand-picking the caterpillar works just fine.

Students said they noticed the scent of chemicals in the early morning air these past few days and have seen small yellow pellets at the edge of the pathways.

Landscaping was unavailable for comment on whether or not the treatment was for caterpillar control or simply lawn fertilizer.

So the next time you come across an oakworm making its way along the pathways on campus, you no longer have to deem it the mystery creature.

It's merely on the road to prepare for the second stage of its existence, while you're only on the way to class.

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West Nile virus still raises questions

Seth Borenstein

KRT Campus

DeLAND, Fla. — Jonathan Day suspends a live chicken below a tree as bait to try to catch the creature that has killed more humans than any other animal. He gloats: “They don't stand a chance.”

They are mosquitoes.

Despite his bravado, Day, a top mosquito scientist, knows that in man's long war against them, the little bloodsuckers usually prevail. Mosquitoes kill more humans worldwide in five minutes than sharks do in a year.

Insect-borne diseases have ravaged America and the world time and again for centuries. In decades past, America all but vanquished mosquito-borne malaria, dengue and yellow fever from its territory but mosquitoes always come back with another disease.

West Nile virus was an African disease until 1999, but since then it has spread across much of America, infecting 156 people and killing nine this summer alone. It won't peak until the first week of September.

As alarming and dangerous as West Nile is, scientists like Day say that the ultimate threat to public health is not the disease of the moment — it is instead the delivery system, the eternal, unconquerable mosquito.

History argues that mosquitoes may be tamped down temporarily, their threat contained for a time, but the bugs always come back.

Deadly mosquito-borne epidemics have swept across America many times before. The most recent previous one was in 1975, when St. Louis Encephalitis killed 95 and infected more than 3,000 people.

Day and other specialists worry that even deadlier Japanese encephalitis, Rift Valley fever and Ross River fever may follow West Nile's

path through the United States.

While this year's West Nile epidemic is centered for now in Louisiana, the past triumphs and future hopes of America's annual mosquito battle are grounded in buggy Florida. What follows is a report from the front lines, where scientists waging the battle have modest hopes and much frustration.

Day is a professor at the University of Florida Medical Entomology Lab in Vero Beach, where he predicts future locales of mosquito-borne disease outbreaks, tests the effectiveness of bug repellents and tries to calculate precisely the rate of infections in mosquito populations.

Day, a 50-year-old former marathoner, is well-suited to his work.

One of his earliest childhood memories is standing in his backyard while a plane 250 feet overhead sprayed DDT during a 1956 encephalitis outbreak in his native Massachusetts.

Pressed by growing concern about the rapid spread of West Nile disease, Day and his 9-year-old son, Spencer, interrupted a beach vacation this month to conduct a first-of-its-kind experiment at Hontoon Island State Park, about 45 minutes west of Daytona Beach. Day was trying to find out how many mosquitoes in his area are infected with West Nile.

Day placed a live chicken in a stocking-like bag that forced its feathers down, giving mosquitoes a clearer path to bite the bird. He put the bagged bird into a 5-gallon can equipped with mosquito-trapping funnels. He repeated the process with a second trap. The birds spent prime mosquito-biting sunset and sunrise hours as bait.

In the 20th century, America vanquished malaria and yellow fever with a combination of quarantine, medicine, hygiene, and chemical pesticides. DDT made the biggest difference. But the mosquito always returns, often carrying new diseases.