

Bug Patrol

Biology professor involves the public in an entomological sleuthing mission.

BY CHELSEA THEIS '08

Roses, beavers, and bluebirds are all commonly found in New York—a good thing, as they are the official state flower, animal, and bird. But the state insect hasn't been, er, spotted in New York in 15 years. The nine-spotted ladybug seems to have disappeared. And IC biology professor Jason Hamilton is working to find out why.

Hamilton has teamed up with Cornell University professor of entomology John Losey not only to find the once-thriving state insect but also to understand why its population decreased so drastically in the last two decades.

The nine-spotted ladybug, also known as the C-9, has been photographed in the Northeast only once in the last 14 years, but may have been seen recently at the edge of the species' former range in Canada. While there was no formal study to provide an estimated population before the C-9's crash in 1987, it was certainly quite common prior to its unexplained decline. Hamilton and Losey decided two years ago they wanted to research this phenomenon. Strong advocates of "citizen science," the two decided to involve the community. "We needed a study to capture people's imaginations and interest," says Hamilton. "It's easy to get people interested with animals. And ladybugs are a charismatic insect."

Over this past summer the two profes-

sors hosted the first of what they hope will be many "Ladybug Blitzes." Via just one newspaper ad and a few mass e-mails, they attracted 25 volunteers.

In two days scouring fields off Hanshaw Road in Ithaca, they caught 800 ladybugs to photograph and catalog at a roadside station. The volunteers ranged from age three up to senior citizens.

Not one of the insects they met was a C-9, but among eight other types of ladybug was one fairly rare species. "This means there is still some diversity in native ladybugs, and not all have disappeared," says Hamilton. "This suggests we might have a chance to find C-9."

The initial excursion gave baseline information on the different species. Hamilton and Losey plan to photograph 30,000 to 50,000 ladybugs in the next few years while expanding the project nationwide.

Why did the species crash? The professors believe the C-9 is not extinct. "It seems very unlikely to me that it could have gone in a few decades from being so common to complete extinction here in New York," Losey says. "It is probably still around, just in low densities."

Hamilton has incorporated the project into his teaching, taking students to Cornell Plantations to catch and document ladybug species. Biology major Zachary Cava '09 has taken two of Hamilton's classes and has participated in the ladybug labs. He says that in recent years much attention has been given to saving iconic animals such

as giant pandas, tigers, elephants, and great apes, but that many people couldn't care less about the demise of a species of spider or other small and seemingly insignificant creature.

"Often," says Cava, "these easily overlooked organisms have the biggest effect on humans. Jason wants students to take with them that every living thing on this planet is worthy of human attention regardless of its assumed 'value' to us. Jason teaches his students to think about the world in ways they never have before."

Hamilton and Losey believe this citizen-participatory research will enhance the community's awareness of the natural world—and that the C-9 will once again thrive in New York, along with the state's other living symbols.



QuickTake

OUTREACH: In September the Ithaca College Gerontology Institute hosted the first Rural Aging Summit. Legislators and other policy-makers worked with concerned citizens to make recommendations for both the state and local levels on issues facing the aging population of rural New York. The strategies written focused on income assistance, transportation, health care, wellness education, employment, housing, and institutional care.



It Pays to Reuse

Ithaca Dining Services and the Resource and Environmental Management Program are hosting a Spot-a-Mug campaign on campus this semester. They select randomly spotted students who are using a refillable mug, and present them with a coupon for a free beverage redeemable at any campus stand. The intent is to reward people for good habits in sustainability and environmental concern.