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## A Flat You Can't Repair

## By Bryn Nelson

t 55 miles per hour on the Northern State Parkway, the identifications must be made swiftly and decisively. Raccoon. Squirrel. Raccoon. Uh, squirrel? Call it a URP.

For the uninitiated, URP stands for "Unidentified Road Pizza," at least ac-cording to Brewster Bartlett, also known as Dr. Splatt. A ninth-grade science teacher at Pinkerton Academy in Derry, N.H., Bartlett began the Road-Kill Project 10 years ago as a way to engage students from different states in an unorthodox, online lesson — at www.edutel.org/roadkill — by observing nature from the roads they travel on every day.

Roger Knutson, a retired professor of ecology at Luther College in Decorah, Iowa, aimed for a similar level of enlightenment with his tongue-in-cheek guide, "Flattened Fauna: A Field Guide to Common Animals of Roads, Streets, and Highways."

"I consider it a lighthearted and educational way of approaching a subject that people wouldn't pay attention to if you approached it any other way, Knutson says. After all, as he puts it: "This is how most people see the natural world, which is in flattened pieces on the highway.

Long Island's roads lend themselves particularly well to such observations. Like the video game Frogger, our expressways, parkways, highways and turnpikes have become deathtraps for anything foolish enough to cross the road, whether mammals, birds, reptiles or amphibians.

Mammals, in particular, have become unfortunate ambassadors for all those who failed to get to the other side. If properly submitted to the RoadKill Project, for example, the casualties observed by a reporter along Suffolk County's Sunrise Highway on a sunny October morning would have totaled five raccoons, two squirrels and one URP. The tally along a portion of Nassau Coun-tria North and State D ty's Northern State Parkway on a partly cloudy morning one month later would have included seven squirrels, two raccoons and eight URPs.

Researchers say similar opportunities for roadside ecology increase at two distinct times every year.

"One of them is in the spring when there are young birds and animals that are uncertain of what the environment holds and how to avoid it," Knutson says.

The second spike arrives in the fall, when deer and other animals are distracted by the breeding season and winter preparations, activities that in-crease both travel times and distances. During the height of deer breeding season in mid-November, officials at Brookhaven National Laboratory in Upton tallied five deer-related accidents in and around the lab in a single day.

Long Island roads are deathtraps for animals, especially in spring and fall



This raccoon, like many other fauna, became another Long Island Expressway victim.

Apart from the need to cross between divided habitats, animals sometimes seek out the roadway itself. Reptiles come to bask in the warmth of the concrete and asphalt. Birds swoop down for the abundant insects thrown to the edges by passing cars. Scavengers arrive to dine on the roadkill. It's often a one-way trip, however, courte-

sy of another passing car. Animals may be dissuaded from attempting a daytime crossing by the sight of a large, fast-moving object hurtling toward them. Not so with nocturnal animals, Knutson says.

"There is nothing in the evolutionary history for nocturnal animals that prepares them to deal with a sudden bright light coming from a certain di-rection," he says. The result is often a "deer in the headlights" effect, during which the animal is too dazed to move out of the way in time.

Long Island communities, at least on the East End, have a vested interest in deer casualties because of their direct association with car accidents and the potential for serious injuries. Insurance companies have shared the concern: A recent insurance industry-funded study estimated that more than 1.5 million deer-related traffic accidents occur in the United States every year, resulting in 154 human deaths and

\$1.1 billion in damage. But recording the fates of smaller victims may yield additional signposts such as population fluctuations or new arrivals. After a "huge" acorn crop in 2001, Dr. Splatt's research assistants recorded a spike in squirrel roadkill for 2002. Officials in Indiana have based that state's raccoon trapping season on their own roadkill counts. And Tim Green, the natural resources manager for Brookhaven National Lab, has verified a small local population of skunks mainly on the basis of his roadside finds, while similar observations demonstrated the presence of river otters visiting the North Fork from Connecticut.

The involvement of schools from multiple states in the RoadKill Project has added a bit of regional perspective. Students in Florida reported flattened armadillos among their roadside finds. Kentucky schoolchildren reported that dogs were the main road kill victims in that state.

And the winner — er, loser — in New Hampshire?

'The gray squirrel," Bartlett says. "It's about 50 percent of our creatures killed.'

fter a decade of monitoring, the numbers can really add up. His community of Derry, for example, averages about 200 dead animals found on 70 miles of roads during the project's annual eight-week tabulation period. As Bartlett notes, however, the yearly counts are probably far too low.

"We get them in the morning, before they're picked up by the Department of Transportation," he says. "But they're also getting picked up by predators." Others may crawl off into the nearby woods before they die.

Which brings up another vexing question.

What we're looking at now is, what do you do about it? What can we do to prevent roadkill?" Bartlett says. The Federal Highway Administration's Critter Crossings online project describes some potential answers reached by officials in several states, such as erecting roadside barriers, constructing wildlife crossings beneath busy roads, and improving warnings for motorists along nown wildlife travel corridors.

For the foreseeable future, however, Long Island motorists will have plenty of opportunities to guess the identity of whatever it was they just sped by, URP or otherwise.

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