

## Your windshield as a science exhibit

by Michael Stetz

That long car drive to your favorite getaway spot can be a grueling experience. Kids go: "Are we there yet?" 34,987 times - before you even clear the first rest stop. Every time you fill the tank, your heart breaks. Public restrooms? They can take your breath away.

A LASTING IMPRESSION - Wanna play guess the dead bug on the windshield? One Florida researcher plays the game by inspecting the windshields of Greyhound buses. CNS Illustration by Cristina Martinez Byvik. But here's a fun, exciting game the whole family can play as you motor along:

Guess the dead bug on the windshield.

A bit of red gunk in the splat means it was a female bug.

The biggest splats are normally female moths.

The smallest? They're called biting midges and it's hard to feel for these guys. Tiny, tiny, tiny flies, they go for our blood.

Mark Hostetler, a University of Florida professor, actually figured all this out through tenacious research that included inspecting the windshields of Greyhound buses as well as driving around with a net on top of his car to catch insect body parts that bounced off his windshield.

Hostetler knows splats.

If he were to take a gander at your windshield after a long drive, he could tell you what bugs you wiped out. And all about the varying characteristics of said bugs.

He wants you to understand bugs.

Dig bugs.

Because without bugs ...

"They are connected to everything - think of all the fruits, nuts, crops and vegetables with flowers - pollinated by insects," Hostetler said.

In Southern California, moths are mostly likely to gunk up our windshields, said Hostetler, who toured the West as part of his research for his 1996 book, "That Gunk on Your Car: A Unique Guide to Insects of North America."

Butterflies are also splattered there, he said.

Black flies, too.

"My main goal is get people to talk about insects," Hostetler said. "We don't understand them. We kind of fear them."

So he wants people to become interested in them by checking out splats on their windshields, which he still does himself. Children love this. Most have yet to develop a phobia about bugs. Hostetler's own two children, ages 7 and 2, love bugs, of course.

But as people age, something happens. As soon as we see a bug we roll up the newspaper or start running, full speed.

It doesn't have to be that way, Hostetler said. He suggests keeping his book - you can get a used one on Amazon.com for as little as \$1.64 - in the glove compartment. When a bug gets nailed, you can pull out the book and try to identify the splat with the kids.

It's a bonding experience.

Hostetler is a serious academic whose main work centers on urban wildlife conservation.

But this gig has made him a star. He even has an endorsement deal with Prestone, which makes something called Prestone Bug Wash.

Hostetler is the Peyton Manning of bug guys.

The bolt of inspiration for Hostetler's unusual research came one day when he stopped at a Florida gas station. A nearby driver was complaining about all the dead bugs splattered on his windshield. He asked Hostetler - out of exasperation - just what the deal was.

Hostetler spent the next few minutes explaining to the driver what kind of bugs he was nailing. They were love bugs and they are big in Florida. These small black flies swarm and batter cars.

Hostetler began researching the windshield/bug splat phenomenon. He discovered that the big, flat windshields on Greyhound buses were perfect petri dishes, so to speak.

Avoiding bugs when you're driving a car is about as difficult as avoiding Paris Hilton in a tabloid. Some insects are drawn by car lights. Still others are attracted by the smell of the exhaust. Or they simply are out and about looking for food or hot insect partners.

If you're worried that our driving habits and the increasing number of cars on the road are hurting the insect population, think again.

There are quite a few of them. One estimate: About 170 million per living person.

Or a heck of a lot of potential splats.

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