

McDaniel Honey Farm

Manchester, Maryland

Environment and Transportation Committee Hearing February 4, 2026, 1 pm

Bill No.: HB91 – An Act Concerning Agriculture – Neonicotinoid Pesticides – Prohibitions

Sponsors: Delegates Healey and Ruth

Position: Favorable

My name is Stephen McDaniel. My wife, Angie, and I own McDaniel Honey Farm in Manchester, Maryland. I have been keeping bees since 1979 and am a certified EAS Master Beekeeper.

We are witnessing the wholesale slaughter of pollinators, including honeybees, wild bees, butterflies, moths, and other insects. Last year, there was a massive die-off of honeybee colonies in the U.S., over a million colonies of honeybees, more than half of all the bees in the country.

Other insects are also dying, in an event called the Insect Apocalypse. Worldwide, some 70% of all insects are just gone. Something in the environment has made it too toxic for them to survive.

The word went out last January (2025) that **commercial beekeepers reported astronomical 70% die-offs of their bees (normal loss would be 10%), and some lost 100%**. Many of the colonies lost were being prepared to pollinate the California almond bloom in February, and there were not enough bees left to do the job adequately.¹ Honeybees pollinate some 90 crops in the U.S., about 1/3 of our food supply, and other crops face a similar shortfall in pollination. One beekeeper I spoke with who pollinates watermelons on the Eastern Shore expects that many of his current colonies will not survive the winter, and he will not have enough bees to fulfill the need for bees. The total monetary loss to beekeepers and farmers is incalculable, surely in the billions of dollars.

Most Maryland beekeepers are small-scale producers with fewer than 10 colonies, far less than the 2,000 colonies typical of commercial pollinators. My business, McDaniel Honey Farm, used to keep about 20 colonies year after year, but that has not been possible since 2011, when new insecticides came on the consumer market. In 2012, half of my colonies died mysteriously, many in the summer, with symptoms of pesticide poisoning. Since then, **I have not been able to keep my bees alive, losing 50%, 70%, 90% of my bees**. In 2020, I built up to 26 colonies, hoping to have 20 left in the spring. Only three colonies survived. In 2024, they all died. Last year, by April of 2025, I had two left, and they were weak and unable to produce any honey. Every year, I have to buy bees from a commercial producer to replace dead colonies, and they do not make as much honey as full-sized ones would.²

Pesticides are everywhere, and they affect everything, all insects, all living things, even us.

Neonicotinoids (neonics) such as the ones used to coat seeds are synthetic chemicals designed in labs to be highly toxic to insects, and honeybees are insects. They are deadly to bees, even in microscopic doses. If they do not kill a bee immediately, they affect its immune system, so it succumbs to viruses, weeks or months after exposure. Queens and drones can be sterilized by even minute exposure, leading to the death of the colony, which can no longer raise baby bees.

Neonics are “systemic,” that is, they are coated onto the seeds that farmers plant, absorbed by the roots of the plants and spread throughout the entire plant, including the parts that we or pollinators eat. Imidacloprid is the most widely used neonic. If the seed germinates, **only 20% of the seed coating is absorbed, leaving 80% in the soil, to be absorbed by non-crop plants, where it poisons pollinators**, or to wash away into waterways, where it poisons aquatic organisms such as fish and crabs.

A researcher I know studied another bee die-off a few years ago. When all the test results were in and when he accounted for the toxicity of Imidacloprid, he determined that **of all the hazards affecting bees, Imidacloprid was responsible for over 90% of the risk to bees.**³

As a Master Beekeeper, certified by the Eastern Apicultural Society, and one of about 150 in the U.S., I know how to care for bees successfully, but I cannot keep my bees alive due to the toxic environment. **Over the past 13 years, dying bees have cost me several hundred thousand dollars.** I could have bought a nice house with that!

These toxic neonic seed coatings should be banned now. Please vote favorably on HB 91.

¹2025 almond yields have dropped (2.1-2.3 billion pounds, far less than the 3.0 billion pounds USDA forecast), and prices will rise dramatically, from \$2.20/lb. in July to \$3.00/lb. or more by spring.

²McDaniel Honey Farm is a small business that sells honey at festivals, by mail, and at a few local stores. As a result of bees dying, most of our honey is purchased from other beekeepers. In a good year, an overwintered colony can produce two or three “splits,” nucleus colonies which can be sold for about \$200 each, and 90 lb. of honey, which retails for \$17/lb. or more. Some specialty honeys go for \$20-30/lb.

A perennial colony, then, can produce \$400-600 worth of bees and \$1500-1700 worth of honey, or a total of about \$2000-\$2300 or more, year after year, with little annual expense of less than \$100/colony. Twenty such colonies can make a modest income of \$40,000.

A new colony, under ideal conditions, can make about 50 lb. of honey, no splits, and cost \$165 wholesale. That’s \$850 - \$165 - \$100 = \$585, a far cry from \$2000+. If it rains during the honey flow in May, as happened last year, there may be little honey produced, resulting in a loss.

Rather than having perennial, thriving colonies as I did until 2011, I now have to treat bees as an annual crop to be replaced every year.

³Unpublished results, told to me in confidence with permission to mention it here.