

## Testimony: SB 345: Pesticides – PFAS Chemicals – Prohibition

**Submitted to: The Senate Committee on Education, Energy, and the Environment**

**Submitted by: Steve McDaniel, McDaniel Honey Farm**

**Position: In Support**

**February 18, 2025**

Dear Chair Feldman, Vice Chair Kagan and Members of the Committee,

I am Steve McDaniel, a certified Master Beekeeper (one of about 150 in the U. S.), and Past President of the Maryland State Beekeepers Association, the Central Maryland Beekeepers Association (CMBA), and the Carroll County Beekeepers Association. I have taught classes in beekeeping for many years at the Anne Arundel Beekeepers Association, CMBA, and other local associations. These groups represent over 2,000 beekeepers throughout the state, but I am testifying from my personal experience. I support **SB 345: Pesticides - PFAS Chemicals – Prohibition** and urge you to please vote for this critically needed bill. SB 345 will protect the health of our honey bees and people from needless PFAS pollution from pesticides that contain PFAS as their active ingredient. As you already know, our food supply—to a critical degree—depends on our pollinators. PFAS pesticides are highly toxic to our honey bees, thereby impacting the health of our food supply.

Our bees are having a difficult time surviving in an environment that is saturated with poisonous chemicals, and PFAS are among the worst. Reports coming in as recently as last week from major commercial beekeepers pollinating almonds in CA tell of high losses, from 50% to 100%, wiping out some major operations and reducing the potential almond crop significantly. Losses of bees are being called “sudden, nationwide, and severe.” A nationwide survey by the Bee Informed Partnership from the University of Maryland found that the annual loss of honey bee colonies in 2023 was 48.4%, the worst ever (10% would be normal). In 2024, the National Agricultural Statistics Service of the USDA put the annual loss at 49%. I would love to have only a 49% loss, as mine last year was 19 out of 20, or 95% mortality, as it has been for most of the last decade, no matter how I try to protect my bees. Most of my neighboring beekeepers have been wiped out. I am stubborn enough to buy new bees every year, when I can get them, though that is expensive. A surviving colony can produce 100 lb. of honey a year, a new one maybe 25 lb. average. At \$15/lb., that's a \$1,125 difference per colony per year, a loss of \$21,375 this year, plus \$3,800 to restock!

A study on the effects of PFAS on bees found that at a microscopically low concentration, 20 parts per billion, PFAS halts all brood-rearing in the colony. Killing the babies kills the colony, because honey bees only live about six weeks, and workers who die off must be constantly replaced. A typical colony of about 50,000 bees loses over 1,000 workers a day to old age. Without new workers coming along, the colony is doomed. The population declines rapidly, and in a few weeks, the colony dies. At slightly higher concentrations, the bees die more quickly, and a colony may not last a day. These toxins do not degrade in the environment; they continue to do damage forever.

PFAS are poisonous to people as well as bees, causing a host of diseases such as cancers, liver disease, and hormone disruption, and they are being sprayed as bug-killers on our food crops, lawns, and in our homes, schools, and hospitals. They do not target a particular problem species but affect all living things and do not break down after use but last practically forever. Theoretically, one treatment should be enough, but they are often used multiple times, such as when applied weekly in communities for mosquitoes. They do eventually wash away into the Chesapeake Bay, where they poison crabs, oysters, and fish and then go into the ocean. PFAS pesticides never should have been approved for use in the first place! For their intended purpose, killing problem insects, there are plenty of other less-toxic and shorter-lasting chemicals that work just as well.

PFAS chemicals will be with us for a long time even if we stop using them tomorrow, but we must stop adding to the problem by spreading them as pesticides every year and especially impacting the future of our food supply by eradicating our pollinators. This is not a conservative or liberal, Republican or Democrat issue, but a simple case of using common sense to protect people's (and bees') health. Please vote for SB 345. Let's make Maryland a healthier place so more of our citizens can live to be 101, as my mother-in-law recently did!

Steve McDaniel