New Information on Neonicotinoids



A recent meeting held at the Booth Library featured a panel discussion about neonicotinoids (neonics), a class of neurotoxic insecticides which have become the most widely used pesticide in the US and around the world. Their devasting effects on bees and insects as well as birds and other wildlife were highlighted. In fact, these neonics are being cited as the new DDT, well known for being responsible for plummeting bird populations in the 1960's, foreshadowed by Rachel Carson's book "Silent Spring".

A very reputable organization, the Xerces Society, has done calculations based on laboratory testing that show neonics to be between 1000 to 7000 times more toxic to bees than DDT, depending on the routes of entry (contact or ingestion). This is a startling statistic which has huge implications for bees that are necessary for pollinating 80% of flowering plants, both agricultural crops and also for plants which support habitats for many wildlife species.

Birds are also at risk as one kernel of a neonic-coated seed is enough to kill a songbird. The Connecticut Audubon Society reports that over the last 50 years, North America has lost about 30% of its birds, due in part to the overuse of pesticides.

Additionally, insects in general are affected by neonics, either lethal or debilitating consequences. Concern for insects is important when we realize that insects support the food chain for many other species.

We know that through photosynthesis plants convert sun energy into plant life, providing food for many species. But not for all species. Think of baby birds, fish, reptiles and amphibians that do not eat plant material. Luckily, insects are the missing link and without them many species would not exist, nor would they in turn act as food for animals higher on the food chain. Thus, insects must be protected for the existence of many forms of wildlife.

Adding to the toxicity statistic for neonics, are two facts which magnify their potential for harm. First, neonics are systemic, meaning that the pesticide is present in all parts of the treated plant. Not only are insects at risk from eating any part of the plant, but also_the soil near the plant and even the air around the plant can become contaminated.



Secondly, neonics are very water-soluble. They can, and do, enter adjacent waterways and even ground water. A recently released study from UConn documents that neonics have been found in some Connecticut waterways at levels that are above the acceptable benchmark for aquatic macroinvertebrates. Such levels will have negative effects on these aquatic insects as well as species higher up the food chain. You can find the UConn study as well as more information about neonics at <u>www.Ctpesticidereform.org</u>.

What you can do: First, check with your lawn care professional to make sure that neonics are not being applied to your lawn (sometimes used for grub control). Effective and safe alternatives are available. Secondly, HB-6916, An Act Concerning the Use of Neonicotinoids, is currently being considered by the Connecticut General Assembly. In the spirit of Rachel Carson, please support this bill which would limit uses of neonics in our state. Please contact your Newtown representatives, Rep. Mitch Bolinsky (860-240-8700), Sen. Tony Hwang (860-240-8800), and Rep. Martin Foncello (860-240-8700) to let them know of your support. This article first appeared in The Newtown Bee in February 2025.