

ENGAGE

WITH CWF



5 QUESTIONS FOR CAROLYN CALLAGHAN

'Neonics' and Other Pesticides

Dr. Carolyn Callaghan is a Senior Conservation Biologist with the Canadian Wildlife Federation with a focus on terrestrial wildlife. She is CWF's lead on the neonicotinoids issue. With the recent Health Canada proposal to ban one type, there have been a lot of questions. Callaghan explains why this matters.

HOW LONG HAS THE CANADIAN WILDLIFE FEDERATION BEEN RAISING AWARENESS OF THE DANGERS OF PESTICIDE USE?

CWF was founded in 1962, and almost immediately we began urging governments to investigate the effects of biocides. These toxins were designed to kill organisms, and CWF was concerned about the effects on wildlife. We urged governments to impose regulations on the sale of biocides to reduce threats to wildlife. CWF also urged governments to establish suitable diagnostic and recording standards for identifying and recording human illnesses or deaths caused by biocide poisoning in Canada. At the time, little was known about the effects of toxins such as pesticide on wildlife.

In subsequent years, CWF continued to urge governments to increase research into the harmful effects of these chemicals. In 1972, Canada banned the use of a particularly harmful pesticide called DDT, which caused the thinning of eggshells in birds such as the bald eagle. Unfortunately, impacts of this pesticide persisted, to the extent that in the 1980s, the bald eagle population of southern Ontario was nearly wiped out by industrial chemicals and pesticides. CWF stepped up to help save the species.

In the 1990s, neonicotinoid pesticides were introduced because many insects were becoming resistant to common pesticides. Neonics are derived from nicotine, which is a neurotoxin that affects brain function. While originally thought to be safer than their forerunners, neonics are

systemic, which means they are absorbed by plants when applied to seeds, soil or leaves. The chemicals circulate through the plant's tissues, killing the insects that feed on them.

CWF continues to campaign against the use of neonics, as we are very concerned about their impacts on many species, including pollinator populations, birds, aquatic invertebrates and earthworms.

HEALTH CANADA RECENTLY PROPOSED A BAN ON ONE TYPE OF NEONIC PESTICIDE KNOWN AS IMIDACLOPRID. WHAT'S CWF'S PERSPECTIVE ON THIS BAN?

CWF supports the ban. This is a big step in the right direction. Imidacloprid is one of the most widely used pesticides and has been found in aquatic environments in Canada at concentrations of up to 290 times the acceptable level for aquatic invertebrates. This is very concerning, and proposing a ban on its use is the

appropriate decision given the evidence of harm. These pesticides seep into streams and lakes from farmers' fields and kill aquatic insects, many of which are an important food source for fish as well as birds once the insects hatch into flying adults.

IF THE IMIDACLOPRID BAN IS IMPLEMENTED, WILL WILDLIFE BE SAFE?

Unfortunately, eliminating one pesticide is not enough. A lot of other dangerous pesticides are putting wildlife at risk. In fact, imidacloprid is one of nine neonicotinoids pesticides currently being used in Canada. Health Canada is launching special reviews of two other neonicotinoids (clothianidin and thiamethoxam). These pesticides have become infamous for affecting pollinators around the world. CWF would like to see Health Canada do more to protect biodiversity from neonicotinoid pesticides. They are toxic. They are retained in soil. They are water soluble. They are absorbed by plants. These impacts are acute and chronic. There is solid scientific evidence of serious harm to wild bees, hoverflies, butterflies, lacewings, flower bugs and earthworms. There is also some evidence of harm to vertebrates such as birds and bats. Routes of contamination include dust generated during drilling of dressed seeds, contamination and accumulation in soils, run-off into waterways, and uptake by non-target plants via their roots or dust deposition on leaves.

BESIDES BANNING PESTICIDES, WHAT ELSE CAN GOVERNMENTS DO TO HELP?

While protection of the environment is paramount, the Canadian Wildlife Federation also wants assurance that throughout the banning process there is support for farmers, some of whom may feel that the proposed ban will reduce their options to deal with pests. Agricultural departments across Canada should support farmers by ensuring that there are safer alternative options and that farmers receive training in integrated pest management. This is designed to reduce use of pesticides by scouting for crop pests in the field before any spraying happens and ensuring that beneficial pest predators are supported in farm fields. The Next Policy Framework, the next phase of an agricultural policy that is coordinated by federal, provincial and territorial governments, is an excellent opportunity to address this deficiency. The policy provides \$3.5 billion in program funding, and CWF believes that some of that funding should be used to support farmers in providing for wildlife and habitat on farmland.

WHAT CAN THE PUBLIC DO TO HELP?

- The public can join CWF in supporting the pesticide bans. The public also has to be very careful as consumers of gardening products. Many bedding plants, seeds and flowers have been treated with neonic pesticides.
- Look for gardening items that CWF has certified wildlife friendly, such as our pollinator plant kits.
- Plant native species of flowers.
- Beware of wildflower seed packs that might contain invasive species or pesticide-treated products.
- Share this story with your friends, neighbours and social media networks.

STAY ACTIVE

CELEBRATE CANADA 150 WITH A NATURE SELFIE

We're taking Canada's "nature selfie," and we want you in the picture. CWF and its partners are presenting BioBlitz Canada 150, a series of events supported by the Government of Canada being held across the country to celebrate Canada's 150th. Come take part and help us take inventory of the flora and fauna in each area. Events are taking place throughout the summer, so visit BioBlitzCanada.ca to find out about activities in your area, how you can plan your own bioblitz and how to share your wildlife sightings by downloading the iNaturalist app.

SPEND A NIGHT UNDER THE STARS

Connecting Canadians to the great outdoors is what the CWF Great Canadian Campout is all about. This year, as we inspire Canadians to reconnect with the sense of awe they feel while immersed in nature, we hope to encourage Canadians across the country to experience the sense of wonder to be found while camping. For all your camping resources, be sure to check GreatCanadianCampout.ca before you head out to discover Canada, one campsite at a time!

TAKE ACTION

WHAT IS YOUR PLASTIC FOOTPRINT?

Did you know that nearly 80 per cent of ocean pollution is caused by human activity on land? When all our bottle caps, plastic-wrap pieces and shampoo bottles make their way into our waterways, they pollute the habitat of thousands of species. And that's a bad thing for wildlife—animals like the beluga, the leatherback sea turtle and the Steller sea lion. This year for Rivers to Oceans Week, June 8 to 14, the CWF is challenging Canadians to make some household changes to reduce their plastic footprint. Learn more at RiverstoOceans.ca.

CHECK YOUR MAILBOX—THERE COULD "BEE" SOMETHING SPECIAL THERE

Canada's pollinators play a critical role in our well-being. We rely on these small creatures to make sure we have food on the table, an active economy and, of course, a healthy ecosystem. But sadly, they are at risk because of declines in the diversity of flowering plants, the widespread use of pesticides and climate change. CWF is asking Canadians like you to help them out. Check your mailbox for a personalized, pollinator-themed notepad and address label package. Be one of the first 50 to donate \$50 or more, and you can opt to receive an exclusive pollinators kit, which includes a hummingbird feeder, native plant seed, a gardening planner and brochure, and a micro-spade and fork set from Lee Valley Tools.

HAVE A GREEN THUMB? PICK UP A CWF POLLINATOR PLANT COLLECTION

Want to attract more pollinators to your garden? Plant using the CWF pollinator plant collection from Medallion Plants. Each of the five distinct plant collections is tailored to provide a feast for bees, butterflies and songbirds. Buy yours this spring and help support CWF pollinator programs. For a full list of national retailers, visit CanadianWildlifeFederation.ca/pollinators.