Is It Possible to Have a Serious Discussion?
Opining on mechanical beekeeping and the mechanics of moving bees

Another report of mechanical bees has surfaced with fear leading the way, and the only solution proposed is a “Frankenstein pollinator.” “With the mass die-off of bees spelling trouble for agriculture, the world’s largest retailer has filed patents for the use of "unmanned vehicles," or drones, to aid with pollination and crop production.” This is not the first time “robot bees” have been proposed, nor the last time an entity making money off of food production seeks to mechanically control the entire food production process. Even regulators and policy makers have asked, “Isn’t there a mechanical replacement for bees for pollination?”

“No, Virginia. There is no replacement for the pollination services provided for eons by insects, mammal, and avian pollinators.” They are efficient, effective, and some connected directly to specific plants.

Walmart Files Patent for Robot Bees

Autonomous Flying Microrobots Robobees
https://wyss.harvard.edu/technology/autonomous-flying-microrobots-robobees/

The first law of ecology is that everything is related to everything else. Barry Commoner

Hurry up and move!
Recent discussions among commercial beekeepers was “advice” offered by a regulator that beekeepers just need to purchase more equipment so they can move thousands of beehives out of direct and drifting pesticide applications. Per many a pesticide label, and all MP3s, beekeepers have 24-48 hours to “move their bees out of harm’s way.” More equipment: forklifts, truck beds, laborers, make no difference when there is no pesticide free habitat in which to
relocate the bees. Beekeepers should “just move your bees out faster,” but only to hurry up and go where? Beekeepers are the only agricultural stakeholder expected to interrupt their honey crop production, cease pollinating crops and the landscape, and to move their livestock out of harm’s way.

“Today's massive loss of species and habitat will be slowed only when the human community understands that nature is not an inferior to be exploited or an enemy to be destroyed, but an ally requiring respect and replenishment. We are part of the web of life. Many strands already have broken. We must act quickly to repair what we can. Our lives and livelihood depend on it.” United Nations Environment Programme

Another Voice: An insecticide threatens the next silent spring
By Laurel Hopwood

(Published April 1, 2018 in The Buffalo News
http://buffalonews.com/2018/04/01/another-voice-an-insecticide-threatens-the-next-silent-spring/)

A groundbreaking new study exposes a huge threat to the Great Lakes. Neonicotinoid insecticides (neonics) have been found year-round in major tributaries to the Great Lakes. Of great concern in New York is the Genesee River.

Neonics came on the market with great expectation that it caused less toxicity than previously used classes of insecticides. Unfortunately, there’s a dark side.

Neonics have already been been linked with bee die-offs and bird population decline. Why should we care? Losing these pollinators can have a tremendous impact on our food supply. Birds are natural predators of insects carrying disease. The entire ecosystem may be at risk.

Consider water fleas. Not something to chat about at the dinner table. Yet these small aquatic creatures are at risk from neonic exposure and they are an important part of the aquatic food chain. Neonics are the most widely used class of insecticides in the world. They are slow to break down and therefore persist in the environment. They have been found in dust, soil, wetlands, groundwater and foods common to the American diet. The USDA found neonics in 12 of 19 different fruits and vegetables sampled.
Unlike most other pesticides, neonics cannot be washed off of food prior to consumption. Open your window in the summer and dust particles carrying the toxin will most probably enter your living space.

Neonics have been detected in human urine, serum and hair. A distinct concern of human neonic toxicity is a questionable exposure link with Alzheimer's disease and autism. Yet studies are scant linking neonic exposure to human health dysfunction. Meanwhile, the widespread use of neonics in agriculture and urban lawns and gardens is increasing like a runaway train without brakes.

The ecological reviews of neonics are inadequate. EPA registration is based primarily on the data submitted by the companies manufacturing their proprietary pesticides. That's not all. The EPA has failed to assess cumulative, synergistic, and repetitive long-term effects.

Colorado beekeeper Tom Theobald exclaimed, “Neonic seed coatings are exempt from regulation by the EPA, yet the primary neonic applications are used as seed coatings for corn and soybeans. The EPA has excluded this use under the Treated Articles Exclusion – which says that seed treatment is not a pesticide use. It’s outrageous that this has gone unchallenged.”

Dust off your history books. Fifty-six years ago, Rachel Carson authored “Silent Spring” not only to expose the ill effects of DDT, but also to expose how chemistry can disrupt the natural systems. Many scientists claim neonics are leading to the next silent spring. Will we pay attention now, before it’s too late?

Michelle Hladik, Ph. D., lead author of this new study (https://www.sciencedirect.com/science/article/pii/S0269749117344962) has raised a red flag. Now it’s our turn. We can continue to follow the status quo, or we can move forward in a win-win situation for farmers, the ecosystem and the American public. Legislatures can provide economic and educational incentives for farmers to plant organically. Each person can assume personal responsibility by choosing organic lawns, gardens and sustainably grown food.

Laurel Hopwood is a member of the Sierra Club Pollinator Protection Team

Renew your membership, encourage others to become a member, or make a donation today to support our work.

WATCH at https://youtu.be/loXNj9ERAbg
New Science Shows Bee-Killing Pesticides Are Unnecessary on Most Farms
Alternatives are available for neonicotinoid insecticide seed coatings, saving farmers money and better protecting the environment

BY DOUG GURIAN-SHERMAN  | Commentary, ENVIRONMENT, Pesticides 03.28.18

Conventional corn farmers—who grow the ubiquitous grain on 90 million acres (https://www.ers.usda.gov/topics/crops/corn/background.aspx) in the U.S.—are struggling. Since 2014, these farmers have been spending more to produce corn (https://www.ers.usda.gov/data-products/commodity-costs-and-returns/commodity-costs-and-returns/#Recent Costs and Returns: Corn) than they can earn by selling it. Periods of overproduction and low prices are nothing new, but they can hit hard, as some farmers are forced to sell their operations and the largest landowners tend to get even larger, contributing to the hollowing-out of rural America.

To read the complete article go to https://civileats.com/2018/03/28/new-science-shows-bee-killing-pesticides-are-unnecessary-on-most-farms/

Year-round presence of neonicotinoid insecticides in tributaries to the Great Lakes, USA
Michelle L. Hladika, Steven R. Corsi, Dana W. Kolpin, Austin K. Baldwin, Brett R. Blackwell, Jenna E. Cavallin

To better characterize the transport of neonicotinoid insecticides to the world’s largest freshwater ecosystem, monthly samples (October 2015eSeptember 2016) were collected from 10 major tributaries to the Great Lakes, USA. For the monthly tributary samples, neonicotinoids were detected in every month sampled and five of the six target neonicotinoids were detected. At least one neonicotinoid was detected in 74% of the monthly samples with up to three neonicotinoids detected in an individual sample (10% of all samples). The most frequently detected neonicotinoid was imidacloprid (53%), followed by clothianidin (44%), thiamethoxam (22%), acetamiprid (2%), and dinotefuran (1%). Thiacloprid was not detected in any samples. The maximum concentration for an individual neonicotinoid was 230 ng L and the maximum total neonicotinoids in an individual sample was 400 ng L. The median detected individual neonicotinoid concentrations ranged from non-detect to 10 ng L. The detections of clothianidin and thiamethoxam significantly increased as the percent of cultivated crops in the basins increased (r¼0.73, P¼0.01; r¼0.66, P¼0.04, respectively). In contrast, imidacloprid detections significantly increased as the percent of the urbanization in the basins increased (r¼0.66, P¼0.03). Neonicotinoid concentrations generally increased in spring through summer coinciding with the planting of neonicotinoid-treated seeds and broadcast applications of neonicotinoids. More spatially intensive samples were collected in an agriculturally dominated basin (8 sites along the Maumee River, Ohio) twice during the spring, 2016 planting season to provide further information on neonicotinoid inputs to the Great Lakes. Three neonicotinoids were ubiquitously detected (clothianidin, imidacloprid, thiamethoxam) in all water samples collected within this basin. Maximum individual neonicotinoid concentrations was 330 ng L and maximum total neonicotinoid concentration was 670 ng L; median detected individual neonicotinoid concentrations were 7.0 to 39 ng L.

Published by Elsevier Ltd. https://www.sciencedirect.com/science/article/pii/S0269749117344962
Woolworths to stop selling pesticide linked to global bee decline

Australian grocery giant will join Bunnings to withdraw Yates Confidor from sale

Woolworths in Australia has joined a growing list of companies to stop supplying a controversial pesticide linked to global declines in bee populations.

On Tuesday the grocery giant announced it would join Bunnings in pulling Yates Confidor, a class of pesticide which some international studies have found damage the survival of honeybee colonies.

A spokesman for Woolworths said the company would cease selling the product from the end of June.

“We can confirm that we’ll cease the sale of Confidor in Woolworths supermarkets and we’re currently working with the supplier around this decision,” the spokesman said. “We expect the product will no longer be on our shelves from the end of June this year.” READ MORE at https://www.theguardian.com/environment/2018/jan/23/woolworths-to-stop-selling-pesticide-linked-to-global-bee-decline

How to get your Mayor, Governor to declare National Pollinator Week in your community or state.

Many states require in-state requests for events such as Pollinator Week to be officially proclaimed. Thanks to wonderful citizens like you, all 50 states declared Pollinator Week in 2017! As of this printing the following States have recognized National Pollinator Week for 2018: Arkansas, Connecticut, Georgia, Illinois, Iowa, Maine, Michigan, North Dakota, Pennsylvania, Tennessee, Utah, Washington.

How to contact your Governor or Mayor:

1. WRITE
   - Find your Governor's address on the Governor Contact List (http://pollinator.org/assets/globals/State-Governors-Contact-Info-2018.pdf)
   - Use our Sample Letter as a base http://pollinator.org/pollinator-week
   - Be sure to include the Proclamation Text with your letter http://pollinator.org/pollinator-week

2. CALL

   SUGGESTED SCRIPT FOR CALLING GOVERNOR'S OFFICE
   - Hello my name is NAME. Can I speak to the person that handles proclamations?
   - I am calling to follow up on a letter sent by the Pollinator Partnership requesting the governor proclaim STATE Pollinator Week, June 18-24, 2018. The Pollinator Partnership would love to demonstrate STATE’S support for pollinators to its citizens. Please let me know what I can do to move this proclamation forward.
   - Thank you for taking the time to speak with me. Have a great day.

From www.pollinator.org
Submit your comments by April 30, 2018

Glyphosate (N-Phosphonomethyl glycine) is “the most widely used herbicide in the United States.” About 100 million pounds are applied to U.S. farms and lawns every year, according to the EPA.” First registered for use in the U.S. in 1974, more than 750 products contain glyphosate for the “control of broadleaf weeds and grasses.

The Environmental Protection Agency is holding a public comment period concerning human health and ecological risks of the herbicide glyphosate. Please take action today and send a comment to EPA. They must reassess the risk of this pesticide as glyphosate is causing harm to human health and the environment. To submit a comment go to http://pollinatorstewardship.org/?page_id=5999

Distribution of Glyphosate and Aminomethylphosphonic Acid (AMPA) in Agricultural Topsoils of the European Union


Researchers published a large-scale assessment of the distribution of glyphosate and AMPA in European agricultural soils examining the potential spreading of the pesticide by wind and water. The research indicated “that particulate transport can contribute to human and environmental exposure to herbicide residues.” The research concluded:

- AMPA is more “persistent than glyphosate, and the degradation of both compounds is slower at colder and dryer conditions.”
- The “potential erosion-driven transport rates of glyphosate and AMPA could be underestimated.”
- “...it is well known that glyphosate and AMPA strongly adsorb and accumulate in the top centimeter(s) of soil”
- “...pesticide residue transported by wind and water erosion do not necessarily end up in the atmosphere and surface water systems alone; other land and even ocean regions can be reached by such phenomena, with deposition of transported compounds as a result.”

“The presence of glyphosate and AMPA in agricultural soils may not only form a risk for soil health but also a potential risk of further spreading of these compounds across land, water, and air domains. Indeed, besides potential effects on local edaphic communities and on humans, that can be exposed to these substances by inhalation of contaminated dust particles, dermal contact, or ingestion of contaminated surface water, wind and water erosion have the potential to transport contaminants to all the environmental compartments: atmosphere, other soils and surface waters.” “This information should be fully accounted for in reconsidering approval and use of GlyBH. Additional efforts should be made to fully quantify the extent of soil contamination by glyphosate residues in agricultural soils worldwide, and to assess the related risk for humans and the environment.”
Our Members / Supporters

Butterfly Pavilion  https://www.butterflies.org/
People and Pollinators Action Network  http://www.peopleandpollinators.org/
Seib’s Hoosier Honey  http://www.seibshoosierhoney.com/
Strachan Apiaries  https://www.strachanbees.com/
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Empire State Honey Producers Assn.  http://www.eshpa.org/
Smith Farm Pure Honey  www.smithfarmpurehoney.com/
Randy Oliver  http://scientificbeekeping.com/
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Hackenberg Apiaries  http://hackleberrypiaries.org/
Delta Bee Club  http://www.deltabeeclub.org/
Heartland Apicultural Society  http://www.heartlandbees.org/
Beekeepers of Middle Tennessee  http://bomtn.org/
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Kentucky State Beekeepers Association  http://www.kshabeekers.org/
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The Organic View  https://www.theorganicview.com/

The Pollinator Stewardship Council is a 501c3 nonprofit organization; donations are tax deductible.