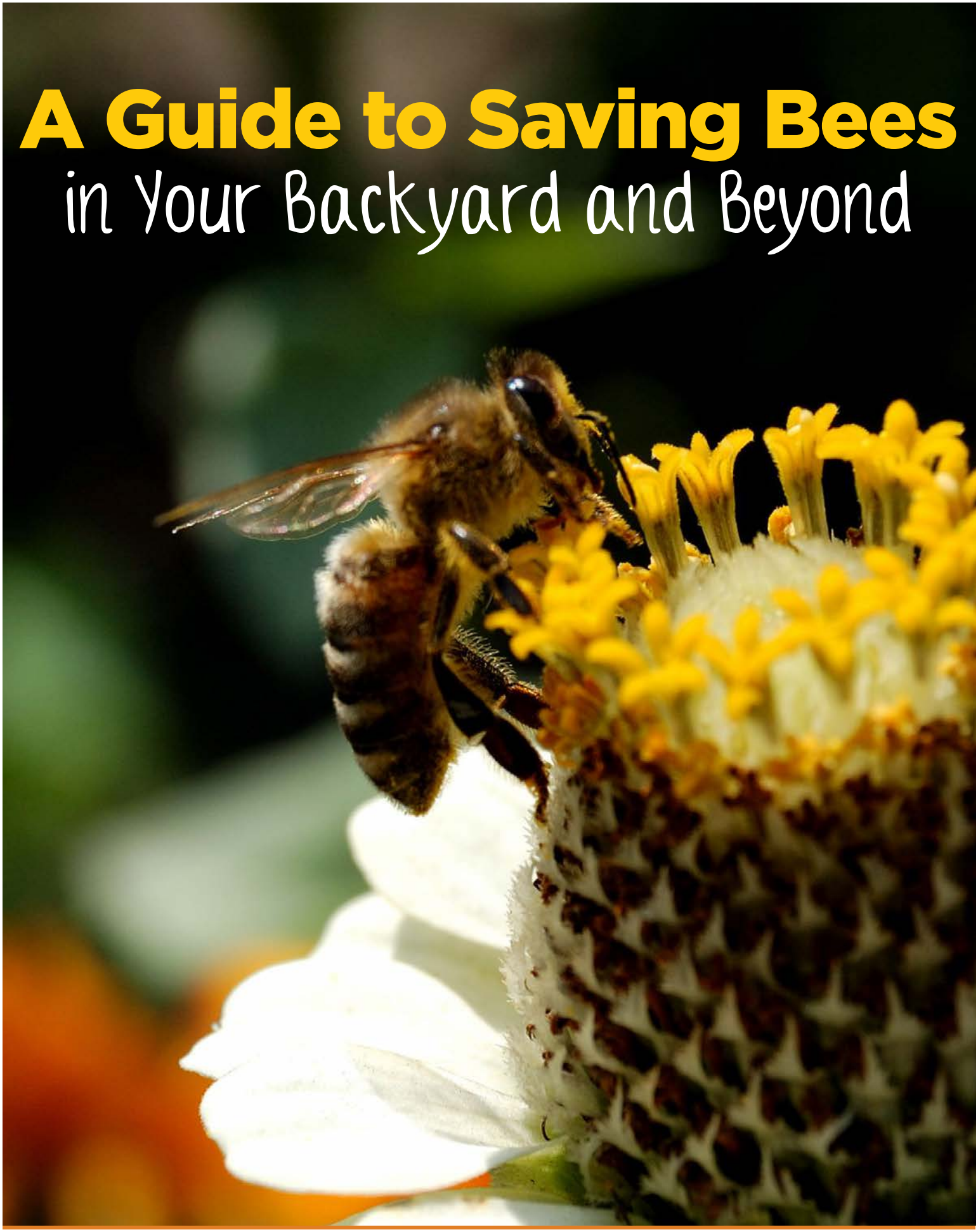
A Guide to Saving Bees
in Your Backyard and Beyond



BeeAction.org

Friends of the Earth

About Friends of the Earth:

Friends of the Earth – U.S., founded by David Brower in 1969, is the U.S. voice of the world's largest federation of grassroots environmental groups, with a presence in 74 countries. Friends of the Earth works to defend the environment and champion a more healthy and just world. Through our more than 40-year history, we have provided crucial leadership in campaigns resulting in landmark environmental laws, precedent-setting legal victories and groundbreaking reforms of domestic and international regulatory, corporate and financial institution policies. **www.FoE.org**

Friends of the Earth's BeeAction Campaign is working to protect bees and other pollinators that are critical to food production and healthy ecosystems. **www.BeeAction.org**

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INTRODUCTION

Bees across the country are dying off at an alarming rate. Not only will this impact our entire food system, but the delicate ecosystems on which our world depends. The bees need your help.

While federal regulators and policy-makers have been slow in taking action to protect bees, we can take action in our communities and be part of the solution to the bee crisis now. We can create safe places for bees, help garden retailers commit to bee-friendly plants and products, and educate our friends, families and communities about this important issue and how they can take action.

We are already seeing some progress on this issue, from the local to the national level. Now, we need your help to keep this momentum going.

In this simple toolkit, you will learn more about what is happening to bees, the reasons for these problems, and a range of ways you can help to reduce the use of bee-toxic pesticides and increase bee-friendly habitat in your community.

Whether you write a letter to your garden store, organize a film screening, or work to pass a bee-friendly resolution in your city, you will be helping to protect these critical pollinators!

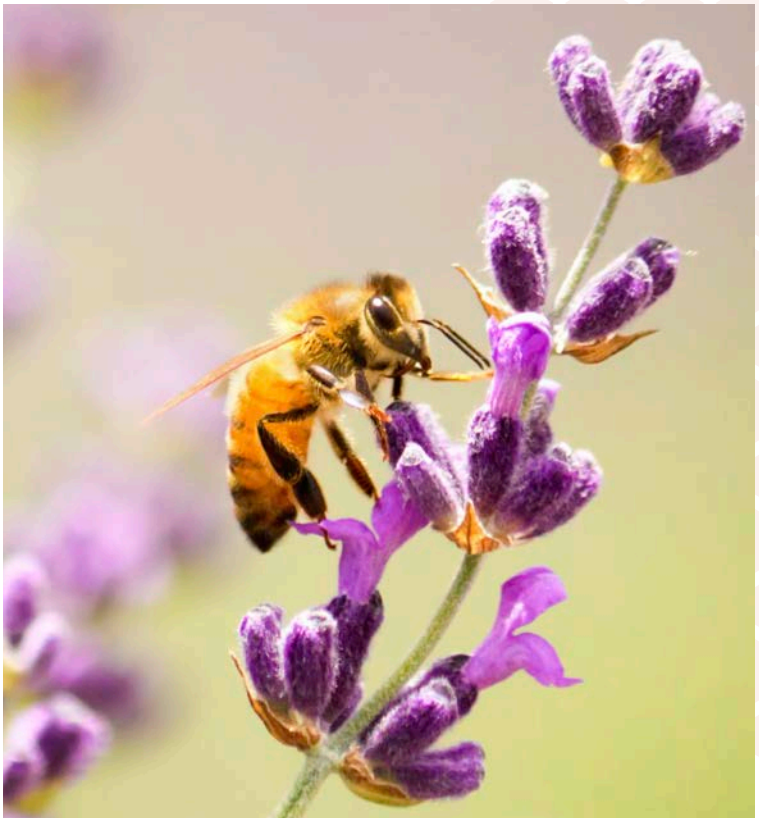
BACKGROUND

Bees are essential for growing food. One in every three bites of food we eat, from almonds to soybeans to strawberries, is pollinated by bees— but they're in big trouble.

In the mid 1990's, beekeepers in France, and later in the U.S. and elsewhere, experienced high colony losses — both overwintering losses and colony collapse during the spring and summer, when colonies should be thriving. In locations throughout the U.S., beekeepers noticed their colonies mysteriously collapsing. This phenomenon has been dubbed "Colony Collapse Disorder," or CCD.

Since 2006, beekeepers have lost an average of 30 percent of their hives annually (normal rates are 5-10 percent), with some beekeepers losing all of their hives and many leaving this industry entirely. Almond farmers, berry farmers and others in the United States are facing shortages of the bees they need to pollinate their crops, and the cost to farmers of renting bees for pollination services has increased by up to 20 percent.

Pests, diseases, loss of habitat, and changing climate have all contributed to global bee die-offs, but a growing body of science points to the most widely-used insecticides on the planet, neonicotinoids (neonics), as a leading driver of global bee declines.



While most insecticides are toxic to pollinators, the neonicotinoid family of insecticides stands apart from the rest. These pesticides can kill bees outright and low levels of exposure can impair foraging abilities and navigation; disrupt learning, communication and memory; and suppress the immune systems of bees, making them more vulnerable to disease and other stressors.

Research has also shown that neonics are harming beneficial organisms including wild bees, birds, bats, butterflies, dragonflies, lacewings, ladybugs, earthworms, small mammals, amphibians, and aquatic insects—putting food production and the environment in jeopardy.

The widespread agricultural use of neonicotinoids is a common exposure pathway for bees. However, cosmetic use of these pesticides in home gardens, lawns, and landscapes may be an important contributing factor in declining bee and wild pollinator health. Many of the "bee-friendly" seedlings and plants sold to unsuspecting consumers in nurseries and garden stores across the U.S. have been pre-treated with neonicotinoids at much higher doses—up to 120 times more- than are used on farms. These nursery plants carry neither a list of pesticides used, nor a warning that they could harm pollinators. While we might be trying to help the bees in our own gardens, we may in fact be poisoning them!

Some places have taken action. The European Union imposed a two-year ban on these toxic pesticides, and after a campaign by Friends of the Earth England, Wales and Northern Ireland, major home and garden retailers in the UK pledged to stop selling neonics. In the U.S., cities, states, universities, and other institutions have taken steps to restrict neonics. More than twenty nurseries, garden centers and landscaping companies, including the two largest home improvement stores in the world — Home Depot and Lowe's — are taking steps to eliminate neonics from their supply chains.

The primary manufacturers of neonic pesticides, Bayer and Syngenta, have been lobbying nonstop to end the ban in the European Union and prevent regulation in the U.S., where the EPA has delayed action until 2016-2019. Representatives John Conyers (D, Mich.) and Earl Blumenauer (D, Ore.) introduced a bill to give our bees a fighting chance. The "Saving America's Pollinators Act" will suspend the use of neonics until a full review of scientific evidence indicates they are safe and a field study demonstrates they do no harm to bees and other pollinators. In June 2014, President Obama announced a federal strategy to protect pollinators and called on the EPA to assess the effect of pesticides, including neonicotinoids, on bees and other pollinators within 180 days.

Bees are "canaries in the coal mine" and their rapid decline signals that our current industrial agriculture system, based on monocultures that require increasingly heavy use of ever more toxic pesticides, is having disastrous consequences.

The time is now

With the EPA and Congress slow to act, we need to raise our voices to keep neonics out of our own backyards and beyond to protect our food system and environment.

Together we can have a huge impact. With your help we will move major garden retailers, including True Value and Ace Hardware, to stop selling neonics and plants treated with them. We will also convince cities, states and other large purchasers of neonics, such as hospital systems and universities, to commit to not purchase or use neonics. This will decrease the use of toxic bee-killing pesticides, protecting bees and other pollinators, creating a safer food system, and help pressure the EPA and Congress to take action.

HOW TO USE THIS ACTION KIT

Here are ways you can take action in your community to help provide bees with safe havens and to keep toxic bee-killing pesticides out of garden stores and backyards.

Step 1: Print out the action kit, which includes:

- Tips for bee-friendly gardening
- Letter to garden retail stores
- Guide to taking action in your community

Step 2: Choose an action to take from the action kit. Write a letter to your local garden retail store, asking them to commit to not selling products and plants containing neonics. Send a letter to your local newspaper and educate your community about bees. Organize a fun event! Get creative!

Step 3: Let us know what you do! Email us: **beeaction@foe.org**

Step 4: Mail or email us any commitments from your local garden retail store and any signed petitions:

BeeAction Campaign
Friends of the Earth
1100 15th Street, 11th Floor
Washington, DC 20005

Step 5: Contact us if you want to make your city, municipality or school a safe place for bees and we'll walk you through the steps and provide resources to make it happen.

TAKE ACTION BEYOND YOUR GARDEN

Take action and build momentum in your community. Below are a few things you can do to protect bees and other pollinators, our food system and our environment.

Talk with your family, friends, and colleagues. Make your support visible by getting a letter in the newspaper, talking with people at farmers markets and social gatherings. Spread the word!

How can I get involved?

There are many ways to get involved, ranging in commitment. Here are some ideas:

- Letters to the newspaper.
- Get your local garden retail stores and nurseries to commit to not sell plants pre-treated with neonics or products containing neonics.
- Organize a fun event to raise awareness about bees and collect petition signatures.

Write a letter to the editor or op-ed

Newspapers are still excellent ways to find public affairs information and spread information to masses of people. Op-eds and letters to the editors are wonderful opportunities to speak directly to the public about an issue, respond to a recent event or issue covered by the publication and to shape the debate. They are short, but can have big impacts.

How to submit a letter to the editor (LTE) or an op-ed:

- Choose a newspaper target. You can submit your LTE or an op-ed to only one newspaper.
- Follow the instructions for submitting an LTE or an op-ed on the newspaper website. Be sure to include your contact info: name, address and phone number.
- Call the following day to find out if the letter will be published.
- If the LTE or op-ed is rejected, alter the letter and submit it to another newspaper. Timing is everything!

Tips:

- Keep it short: 150-200 words. Write in short paragraphs. Op-eds may be longer (500-800 words).
- Points should be concise and specific.
- You're most likely to get published if you react to a recent publication. Respond quickly.
- Focus on one main point with a compelling argument and use important facts to back up your opinion.
- Make it personal. Include why you care about the issue or connect it to your local community.

Write a Blog Post

A blog can be a great way to project your voice on the web and spread awareness about an issue. Don't have a blog? Start one for free at Wordpress.com or Tumblr.com.

Tips:

- Be short and concise – 100-500 words with a clear topic and focus. Be sure to cite sources.
- Be creative! Add in your own pictures, videos or graphics.
- End with a call to action. Let others know what they can do.

Ask Your Garden Store to Commit to Not Sell Bee-Toxic Pesticides

Present the letter and executive summary of our Gardeners Beware report located at the end of this kit to the store manager of your local garden store or to the manager of your local Ace Hardware or True Value.

How to talk to store managers or grounds managers:

Talking to store managers at garden stores or grounds managers can lead to real changes in company policies. Retailers really do care what their customers think. Face-to-face discussions with the managers are the most direct and effective ways to send your message straight to the corporate office.

Request a meeting:

- Speak to the manager in person so you can explain why their store should commit to not sell neonics and neonics-treated plants.
- Identify yourself as a valued customer in their store.
- Be polite and friendly. You are a customer and a member of the community, and the stores want to hear about what their customers think.

Ask the company to commit to not sell plants or products containing neonics:

- Prepare by reading the sample question and answer sheet and fact sheet in this toolkit so you're ready to answer questions they might ask. Let them know you will follow up in two weeks. Do follow up for their response and then let us know what they say! Be prepared to answer questions. If their response is negative, be ready to gather petitions or organize an action to show their customers demand it.
- Approach nursery/garden supply chain stores such as Ace Hardware and True Value (local independent stores are great too, but chain stores have bigger purchasing power).
- Direct managers to **www.BeeAction.org** or have them e-mail questions to **beeaction@foe.org**.

What to bring:

- A letter to the company and a copy of the executive summary of Gardeners Beware (2014): Bee-toxic pesticides found in bee-friendly plants sold at garden centers across the U.S. and Canada.

Let us know how it went:

- E-mail us at **beeaction@foe.org** to let us know how it went or if you have any questions.
- If they commit to stopping their sale of neonics and plants pre-treated with neonics, we'll feature them on our website and give them good publicity. View a list of neonic-free nurseries at **BeeAction.org**.

Table and petition to get stores to commit to not sell bee-killing pesticides

Petitioning is a great way to reach a large number of people through face-to-face contact. It's perfect for education, and helps recruit new volunteers. Use the sample petition in this packet and tailor it to target a specific store manager, administrator, or other decision maker.

Where to table:

- You want to table or petition where there will be sympathetic people who care about gardening, bees, food systems, etc. You can either plug into an existing event (farmer's market, gardening fair, seed swap), or approach an establishment separately (church, health food store or college campus).
- Contact the store or establishment beforehand to ask where petitioning or tabling is allowed.

What to bring:

- Visuals! Make your table decorative (sign, photos, etc), or if petitioning without a table, wear brightly colored clothes. You want to draw people to you.
- Clipboard with blank petitions and plenty of pens.
- Campaign materials (bee-friendly gardening tips, petition for store/institution, fact sheet, flyer).
- Method of swapping contact information of local organizers and folks you talk to in order to stay in contact.
- Snacks and water.

Sample script: "We're here today to collect signatures to send to_____ retailer, asking the store to commit to not sell or buy plants and products containing bee-killing pesticides. Would you take a second to sign?" Most folks say yes, but if someone says no, you can say, "Okay, here is some information about the issue (hand them a fact sheet or flyer). Please visit the website if you're interested."

Tips:

- Have a short and energetic opening
- Explain the petition before the person signs
- Be concise with questions and answers
- Collect contact information to stay in touch
- Encourage more enthusiastic supporters to get involved.
- If you don't know an answer, it's ok. Direct people to **beeaction.org** or have them e-mail questions to **beeaction@foe.org**.

Organize an event

Build a base of leaders to help you out. Change happens when people demand it and helping foster new leadership for your cause makes an even bigger impact. Public events are great ways to be visible, attract media coverage and gain support. Options for events are endless. Make sure you enlist the help of a few friends when putting together an event — and take photos!

Examples (but don't stop with these!):

- Petition delivery to retailer: This is a great way to engage the people who signed your petition, to generate media, and let the store/institution know their customers support bee-friendly gardening without toxic pesticides. Have fun chants, a short educational speaker, and then have a couple of people go inside the store to present the petitions to the manager.
- Rally or "swarm-in" at a local nursery or big box garden retailer. Dress up as bees to make the event even more fun!
- Organize a tour of bee-friendly gardens. Bring the decision-maker, nursery manager or school grounds manager on a tour of a few gardens with bee-friendly plants or with beekeeping operations. Let them sample some local honey.
- Host a film screening and discussion afterwards. Use the film as an opportunity to gain support and recruit for your campaign.
- Hold a breakfast, lunch, brunch or dinner party for the bees! Offer the guests two options. One plate will be full of food pollinated by bees and the other won't have any items pollinated by bees. See if they can guess the difference and then have a discussion about the importance of bees to our food and ecosystem. Wrap up by recruiting folks for your campaign and having them sign petitions.

FREQUENTLY ASKED QUESTIONS AND ANSWERS

What are neonicotinoids?

Neonicotinoids, manufactured by Bayer CropScience and Syngenta, are related to the tobacco toxin nicotine and are the fastest-growing class of insecticides in history. The neonicotinoid imidacloprid—introduced in 1994—is the most widely used insecticide in the world. Neonicotinoids are systemic and persistent, lasting for months to years in the soil, permeating the entire plant. They are released in pollen, nectar and dew. Because they cannot be washed off food, it is likely we are eating them daily. Neonics are widely used in agriculture and in lawn and landscaping products, household pesticides and pet products. They are used as seed treatments on more than 140 crops. Virtually all corn, and a majority of wheat, soy and canola seeds planted in the U.S. are pre-treated with neonicotinoids.

How are neonicotinoids bad for bees?

While most insecticides are toxic to pollinators, neonicotinoids stand apart from the rest, posing both immediate and long-term risks. Neonicotinoids are capable of killing bees outright, attacking their nervous systems. Low levels of exposure can decrease bees' abilities to forage, navigate and communicate, hinder their memory, suppress their immune systems and increase their vulnerability to diseases and pests. Neonicotinoids aren't just harming honeybees. Science shows they're impacting, bats, butterflies, birds, wild bees, dragonflies, ladybugs, mammals and aquatic amphibians. Some neonicotinoids can be 5,000-10,000 times more acutely toxic to bees than DDT. Just one seed coated with neonicotinoids can kill a song bird.

Bees have been dying for a long time, how do we know neonics are the problem?

While pests, diseases, loss of forage and habitat and changing climate are contributing to bee declines, mounting scientific evidence has found neonicotinoids are a key factor in global bee die-offs and it's a factor we can do something about now. The EPA granted conditional registration to the neonicotinoid clothianidin in 2003 without a required field study on pollinator impacts. This requirement has yet to be met and clothianidin remains one of the most commonly used insecticides more than a decade after the EPA found it had insufficient basis for registration requirements. Numerous additional data gaps exist for clothianidin, thiamethoxam and other harmful neonicotinoids. Prior to the EU restriction, France, Germany, Italy and Slovenia implemented their own restrictions on neonics. Since these restrictions went into effect, overwinter colony losses have dropped from approximately 30

percent to 13.6 and 14.1 percent in France and Germany, and reached a low of 5.3 percent for Italy during the 2012-2013. A global body of independent scientists—the Task Force on Systemic Pesticides—reviewed over 1, 212 peer reviewed papers published in the last five years, including industry-sponsored ones, and are calling for immediate regulatory action to suspend neonicotinoids to avoid a second "Silent Spring."

How do we know neonics won't be phrased out for worse pesticides?

At the moment, neonicotinoids are being applied as seed treatments to more than 140 crops and to garden plants — with no warning to consumers or growers. As a result, it's nearly impossible for farmers or consumers to opt out of using them. These plants and seeds are treated before it is determined whether pests are even a problem. A growing body of science shows crop yields remain the same when neonics aren't used. Instead of different pesticides, we need to shift to sustainable, organic farming. Organic farming supports 50 percent more pollinator species than conventional, chemical-intensive agriculture, according to a recent Oxford University meta study. Around the home, it's possible to practice bee-safe pest control. If pests pose a problem, use alternative approaches, such as providing habitat to attract beneficial insects that prey on pest insects. If pest pressure is too high, insecticidal soaps or oils and other eco-friendly pest control products can be used.

If we don't use pesticides, will we have a food shortage?

Many agrochemical companies such as Bayer, Monsanto, Syngenta and Ortho claim that their pesticide-drenched seeds and products are necessary to solve the world's food crisis. However, the developing world isn't facing a food shortage. The UN reports roughly

one-third of food (1.3 billion tons annually) produced for human consumption is lost globally, mostly in the West. Although some countries are experiencing a food crisis, using chemical-intensive farming methods will not lead to greater food security. Another recent UN study reports organic farming practices would be more effective at feeding the world. The study found yields more than doubled when organic or near-organic practices were used, outperforming traditional and chemical-intensive conventional farming. Organic agriculture offers many benefits — including improved soil fertility, resistance to drought and better water retention. Our corporate-controlled, chemical intensive food system is responsible for our pollinator crisis and degraded environment. By shifting to organic agriculture, we'll be better equipped to support our environment and feed the planet.

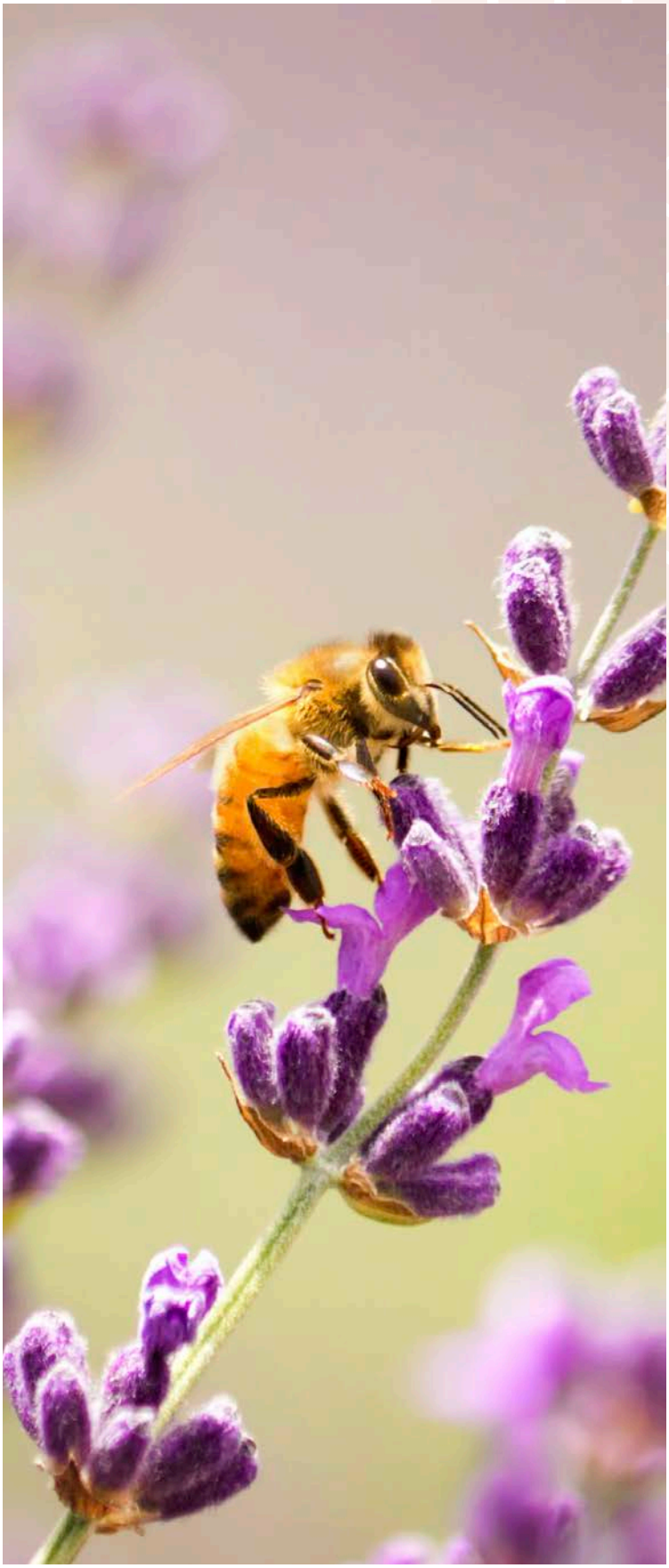
Will we be able to manage pests if we don't use pesticides?

Absolutely. For agricultural uses, studies show yields don't change when neonicotinoids are not used. In garden and landscaping maintenance, use alternative approaches like providing habitat to attract beneficial insects that prey on pest insects in your garden. If pest pressure is too high, use insecticidal soaps or oils and other eco-friendly pest control products. For more tips and links to more resources for pollinator and eco-friendly gardening, visit **www.BeeAction.org**.

How can I take action?

Join the Friends of the Earth's BeeAction campaign and sign our petition to garden retailers asking that they stop selling neonicotinoid-treated plants and products that contain neonicotinoids. Raise your voice locally by letting your local nursery manager know that you will only purchase plants free of neonicotinoids. Ask the manager to communicate your request to their corporate headquarters and suppliers who grow the plants they sell.

Purchase organic plants and starts or grow your plants from untreated seeds in organic potting soil for your home vegetable and flower gardens. Avoid the use of systemic bee-toxic pesticides in your garden and use alternative approaches such as providing habitat to attract beneficial insects that prey on pest insects in your garden. Do not buy products that contain neonicotinoids. If you have these products at home, dispose of them properly or take them back to the store where you bought them. Contact your Member of Congress and encourage them to support the Save America's Pollinators Act. Contact President Obama and urge him to take action on bee-toxic pesticides before it's too late. To learn more, find resources, and take action to save bees, visit **www.BeeAction.org**.



FACT SHEET

Bees in Trouble

Bees are essential in producing one out of every three bites of food we eat.[1, 2] In fact, 71 of the 100 crops that provide 90 percent of the world's food—from almonds to tomatoes and strawberries—are pollinated by bees[3] and honeybees, contributing nearly $20 billion to the U.S. economy[4] and $217 billion to the global economy.[5,6] Unfortunately, evidence is mounting that the health and productivity of these critical pollinators, along with many wild pollinators, is declining rapidly.[7, 8]

In the mid 1990s, beekeepers in France, then in the U.S. and elsewhere experienced high colony losses, both overwintering losses and colony collapse during the spring and summer, when colonies should be thriving. In locations throughout the U.S., beekeepers noticed their colonies mysteriously collapsing, with adult bees disappearing and leaving the queen, honey and developing larvae in the nearly empty hives. This phenomenon has been dubbed "Colony Collapse Disorder" or CCD.[9,10]

Since 2006, beekeepers have lost an average of 30% of their hives (normal rates are 5-10 percent), with some beekeepers losing all of their hives and many leaving this industry entirely.[11] Almond farmers, berry farmers and others in the United States are facing shortages of bees necessary to pollinate their crops, and the cost to farmers of renting bees for pollination services has increased by up to 20 percent.[12]

Key Factor: The world's most popular insecticide

Pests,[13] diseases, loss of forage and habitat[14] and changing climate[15] have all been identified as possible contributing factors to unsustainable bee losses. However, a strong body of science has implicated a class of systemic insecticides known as neonicotinoids (neonics), manufactured primarily by Bayer CropScience and Syngenta —used on 140 crops,[16] for cosmetic use in gardens and landscapes and as termite and flea treatments — as a leading driver of bee declines. While most insecticides are toxic to pollinators, the neonicotinoid family of insecticides stands apart from the rest. These pesticides can kill bees outright and low levels of exposure can impair foraging abilities and navigation;[17] disrupt learning, communication and memory; [18] reduce fecundity and queen production; [19] and suppress the immune systems of bees,[20] making them more vulnerable to disease and parasites.[21]

New research has also shown they are harming beneficial organisms including wild bees, birds,[22, 23] bats, butterflies, dragonflies, lacewings, ladybugs,[24, 25] earthworms, small mammals, amphibians, and aquatic insects,[26, 27] putting food production and the environment in jeopardy.[28, 29, 30, 31]The International Union for Conservation of Nature (IUCN) Task Force on Systemic Pesticides reviewed over 1,121 peer-reviewed papers published in the last five years, including industry-sponsored studies, and confirmed neonicotinoids are a key factor in bee declines and are harming beneficial organisms essential to functional ecosystems and food production. The IUCN Task Force found neonics are 5,000-10,000 times more acutely toxic to bees than DDT and concluded there is an urgent need to reduce the use of these chemicals and switch to sustainable methods of food production and pest control.[32]

Neonics are the fastest-growing class of synthetic pesticides, and Bayer Crop Science's neonic imidacloprid, introduced in 1994, is among the most widely used insecticides in the world. This class of pesticides is persistent, lasting for months to years in the soil, permeates the entire plant, and is later released in pollen, nectar and dew. Because they can't be washed off food, it is likely we are eating them daily.

Bees are key indicator species, and with roughly 80 percent of all flowering plants on Earth reliant on pollinators to reproduce, if we lose bees we will also likely lose a host of other important species.[33] Bees are "canaries in the coalmine," and their rapid decline signals that our current industrial agriculture system, based on monocultures requiring increasingly heavy use of ever more toxic pesticides, is having disastrous consequences.

The bee-killer hiding in our gardens

Neonics aren't just used in commercial agriculture. Many of the plants and seeds sold in nurseries and garden stores across the United States have been pre-treated with the pesticides at doses up to 120 times higher than are used on farms and continue "expressing" these pesticides in home gardens where they can continue to contaminate soil and be taken up by plants for months to years. These nursery plants carry neither a list of pesticides used, nor do they carry a warning that these plants could harm pollinators. As our study, *Gardeners Beware 2014: Bee-Toxic Pesticides Found in "Bee-Friendly" Plants Sold at Garden Centers across the U.S. and Canada* shows, many people may purchase plants with the intent of providing a habitat for bees, but unknowingly end up poisoning them.[34] This report shows that 51 percent of "bee-friendly" garden plants purchased at Home Depot, Lowe's and Walmart in 18 cities across the United States and Canada contain neonicotinoid pesticides at levels that have the potential to harm or even kill bees.

Imidacloprid has been shown to be expressed in nectar and pollen in soil treated plants like garden flowers at a much higher rate than it does for seed treated plants like corn. Imidacloprid in nectar from seed-treated plants is typically expressed at less than 1 part per billion, while soil-treated plants have been shown to express the pesticide in nectar at levels as high as 40 parts per billion.[35] Troublingly, a food dose of just 20 parts per billion has been shown to destroy honeybee colonies.[36] While the large scale use of neonics in agricultural settings makes it the most common way bees are exposed to these pesticides, their use in gardens, lawns and landscapes may be an important contributing factor in declining bee and wild pollinator health.

Good News from the European Union

The evidence that neonicotinoids are a key factor in pollinator decline is compelling, which is why these insecticides have been restricted in several European countries starting as early as 1999, including France, Germany and Italy. Since these restrictions went into effect, overwinter colony losses have dropped from approximately 30 percent to 13.6 and 14.1 percent in France and Germany, and reached a low of 5.3 percent for Italy during the 2012–2013 winter season.[37]

Based on recommendations by the European Food Safety Administration (EFSA), the European Union (EU) voted for a continent-wide suspension of several widely used neonics in order to protect bees, which went into place on December 1, 2013. Two weeks later the European Food Safety Authority cited evidence that neonicotinoids acetamiprid and imidacloprid "may adversely affect the development of neurons and brain structures associated with learning and memory" and they recommended that the European Commission further restrict their use.[38]

The United States continues to stall

In the U.S., EPA did not fully approve the use of some of the most widely used neonics, allowing them into the market under a "conditional approval,"[39] based on the company's own studies, despite the objections of some of EPA's own scientists.[40] Despite mounting evidence linking these pesticides to bee declines, and more than a million public comments urging swift action on neonics to protect bees, the EPA has delayed action until its review of these pesticides is complete in 2016-2019. In April 2015, the EPA placed a moratorium on new or expanded uses of neonicotinoids while it evaluates the risks posed to pollinators. This action does not address the more than 500 neonicotinoid products on the market for more than 100 uses. As a result, these chemicals remain on the market in the U.S.

In June 2014, President Obama announced a federal strategy to protect pollinators and called on EPA to assess the effect of pesticides, including neonicotinoids, on bees and other pollinators within 180 days but it remains to be seen what concrete actions will be taken. The U.S. Fish and Wildlife Service announced it will phrase out use of neonicotinoids on all National Wildlife Refuges by 2016.

Marketplace shift

In response to mounting scientific evidence and public concern, many of the UK's largest home improvement retailers, including Homebase, B&Q and Wickes, made public commitments to no longer sell products containing pesticides linked to declining bee populations. In the U.S. over twenty nurseries, landscaping companies and retailers have taken steps to address the problem,including the two largest home improvement retailers in the world—Lowe's and Home Depot.

BJ's Wholesale Club, a retailer with more than 200 locations in 15 states, required its vendors to remove neonicotinoids from plants by the end of 2014 and/ or include a warning label for neonicotinoid-treated plants.[41] Home Depot, the world's largest home improvement store, now requires labeling of plants treated with neonicotinoids and is working with its suppliers to "find alternative insecticides for protecting live goods and bees."[42] Lowe's, the second largest home improvement store in the world, committed to phasing out consumer-use products and nursery plants that contain neonicotinoids as suitable alternatives become available, redouble existing integrated pest management practices for suppliers and provide additional materials educating customers about pollinator health.[43] In October 2014, Whole Foods Market issued a new product rating system called Responsibly Grown for conventional produce and flowers as "good, better or best" based upon an established criteria, including pollinator protection. The system restricts neonicotinoids to receive a "best" rating.[44]

Bee the Change: Take Action

The science is clear: pesticides found in commercial agriculture, local garden stores and our urban parks and landscapes are a key contributor to bee declines. Chemical companies like Bayer and Syngenta, the makers of neonicotinoid pesticides, have been lobbying non-stop to remove restrictions on neonics in the European Union and prevent similar action in the U.S.

But the bees can't wait — and neither can we. Even though EPA is dragging its feet, we can protect bees in

our own backyards right now by rejecting neonics and demanding that top retailers stop selling these bee-killing pesticides. We need your help to demand that Home Depot, Lowe's and other major garden retailers commit not to sell neonicotinoid pesticides, as well as plants and seeds pretreated with these pesticides. We also need your help to ensure EPA and Congress enacts meaningful and rapid protections for bees, including suspending the use of bee harming pesticides. Visit **www.BeeAction.org** to learn more and take action.

Endnotes

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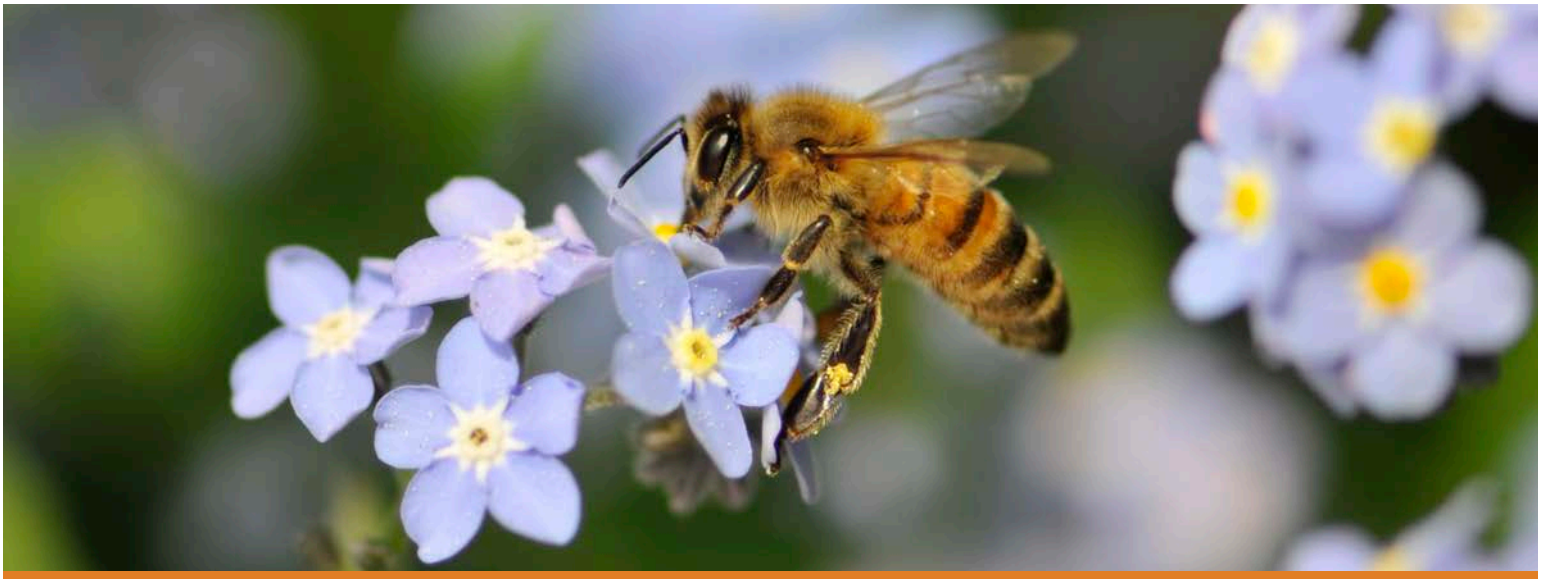

THE PROBLEM:

Bees and other pollinators are essential for the two-thirds of the food crops humans eat every day – but they are in great peril, and populations are dwindling worldwide. Over the last eight years, on average, beekeepers have lost almost 30 percent of their hives. Some are experiencing full losses, putting their livelihood in jeopardy. A growing body of science has implicated the world's most widely-used pesticides, neonicotinoids (neonics), made by giant chemical companies Bayer and Syngenta, as a key factor in recent global bee die-offs. That's why Europe is banning neonics. Recent tests have found these bee-killing pesticides in "bee-friendly" home garden plants sold at stores like Home Depot and Lowe's — with no warning to consumers. Despite more than four million comments urging swift protection for bees, the EPA has delayed action until as late as 2019.

THE SOLUTION:

With delayed action by the EPA and Congress in the U.S., it's up to us to take a stand and protect bees. People across the country are organizing in their communities to move businesses, schools, cities and states to commit to stopping their sale of neonicotinoid pesticides and plants pre-treated with these plants – and are putting pressure on Congress and the President to protect these essential pollinators. You can also save bees in our own backyard by not using neonicotinoid insecticides on your property and only planting neonicotinoid-free plants. Ask landscaping companies that service your lawn and trees to not use neonicotinoids or pretreated plants and ask garden retailers to stop selling neonicotinoid products and garden plants pre-treated with the pesticides.

TAKE ACTION:

1. Call President Obama and urge him to direct his administration to protect bees from toxic pesticides: 202-456-1111

   Sample script: "Hi, my name is _____ and I'm calling to urge President Obama to protect bees from toxic pesticides immediately to protect our food supply and the environment."

2. Contact your member of Congress and encourage them to support Saving America's Pollinators Act: 202-224-3121

   Sample script: "Hi, my name is _____ and I'm calling to urge xxxx to support the Saving America's Pollinators Act to protect bees from toxic pesticides immediately to protect our food supply and the environment."

GET INVOLVED:

To learn more about how you can protect bees, contact Friends of the Earth at 202-222-0715 or e-mail **beeaction@foe.org**. We can provide you with a detailed Action Kit to protect bees.

BeeAction.org

TIPS FOR GARDENERS

Bee Safe Gardening Tips

Grow Bee-Safe

Plant bee-friendly plants using only organic starts or untreated seeds in organic potting soil for your home vegetable and flower gardens to help provide safe food and habitat for bees. See other side of this tip sheet for a list of bee friendly native plants.

Practice Bee-Safe Pest Control

Avoid the use of systemic bee-toxic pesticides in your garden and use alternative approaches such as providing habitat to attract beneficial insects that prey on pest insects in your garden. If pest pressure is too high, use insecticidal soaps or oils and other eco-friendly pest control products.

Do not buy products that contain neonicotinoids

Read the label and avoid using off-the-shelf neonicotinoid insecticides in your garden. These products contain acetamiprid, clothianidin, imidacloprid, and thiamethoxam as active ingredients. See the list below for a list of common off-the-shelf neonicotinoid plant treatments and the neonicotinoids they contain.

Do a clean sweep

See if you have these products at home, dispose of them properly or take them back to the store where you bought them.

Take action

Learn more and take action to save bees at www.BeeAction.org.

Look Out for these Brand Name Products Containing Neonicotinoids on the Label!

Acetamiprid

Ortho® Flower, Fruit & Vegetable Insect Killer; Ortho® Rose & Flower Insect Killer

Clothianidin

12 Month Tree & Shrub Protect & Feed II (Granules); 12 Month Tree & Shrub Protect & Feed II (Granules); All-In-One Rose & Flower Care Granules; ALOFT® Gc Sc Insecticide; ALOFT® Lc G Insecticide; ALOFT® Lc Sc Insecticide; ARENA® .25 G Insecticide; ARENA® 50 WDG Insecticide; Green Light® Grub Control with Arena® Insecticide

Dinotefuran

Green Light® Tree & Shrub Insect Control with Safari® 2 G Insecticide; Safari 2 G Insecticide; Safari 20 SG Insecticide; Transtect™ 70WSP Insecticide; Zylam® 20 SG Systemic Turf Insecticide

Imidacloprid

12 Month Tree & Shrub Insect Control Landscape Formula; 12 Month Tree & Shrub Protect & Feed (Concentrate); 12 Month Tree & Shrub Protect & Feed (Granules); 12 Month Tree & Shrub Protect & Feed II (Granules); 12 Month Tree & Shrub Protect & Feed II (Granules); 2-In-1 Insect Control Plus Fertilizer Plant Spikes; 2-In-1 Systemic Rose & Flower Care; 3-In-1 Insect, Disease & Mite Control (Ready-to-Spray); 3-In-1 Insect, Disease & Mite Control (Ready-to-Use and Concentrate); All-In-One Rose & Flower Care; All-In-One Rose & Flower Care Granules; Complete Brand Insect Killer For Soil & Turf (Granules); Complete Brand Insect Killer For Soil & Turf (Ready-to-Spray and Concentrate); Criterion™ 0.5 G; Criterion™ 2F Insecticide; Criterion™ 75 WSP Systemic Insecticide; DIY Tree Care Products Multi-Insect Killer; Dual Action Rose & Flower Insect Killer; Ferti-lome® 2-N-1 Systemic; Fruit, Citrus & Vegetable Insect Control; Hi-Yield® Systemic Insect Spray; Hunter .5 G Insecticide; Hunter 75 WSP Insecticide; Knockout Ready-to-Use Grub Killer Granules; Lesco Bandit 2F Insecticide; Lesco Bandit Insecticide 0.5 G; Lesco Bandit Insecticide 75 WSP; Mallet® 0.5 G Insecticide; Mallet® 2 F T&O Insecticide; Mallet® 75 WSP Insecticide; Marathon® 1% Granular; Marathon® 60 WP; Marathon® II; Merit® 0.5 G; Merit® 2 F; Merit® 75 WP Insecticide; Merit® 75 WSP Insecticide; Merit® Tree Injection; Monterey Once A Year Insect Control; Monterey Once A Year Insect Control II; Ortho® Bug B Gon® Year-Long Tree & Shrub Insect Control; Ortho® MAX® Tree & Shrub Insect Control Ready-to-Spray; Season Long Grub Control Plus Turf Revitalizer; Season-Long Grub Control; Surrender® GrubZ Out; Termite Killer Granules; Xytect™ 2F Insecticide; Xytect™ 75WSP Insecticide; Xytect™ Infusible

Thiamethoxam

Flagship™ 0.22 G; Flagship™ 25 WG; Maxide® Dual Action Insect Killer Concentrate; Maxide® Dual Action Insect Killer Granules; Meridian® 0.33 G; Meridian® 25 WG

Bee Friendly Flowers


Aster


Black-Eyed Susan


Blazing Star


Calstrop


Creosote Bush


Currant


Elder Flower


Goldenrod


Huckleberry


Joe Pye Weed


Lupine


Oregon Grape


Penstemon


Purple Coneflower


Rabbitbush


Rhododendron


Scorpion Weed


Snowberry


Stonecrop


Sunflower


Wild Buckwheat


Wild Lilac


Willow


Woodland Sage

Some common off-the-shelf neonicotinoid plant treatments

We call on retailers to commit to not sell neonicotinoid pesticides, as well as plants and seeds pretreated with these pesticides. A growing body of science shows that these pesticides are a key factor in the global bee die-offs. Retailers should stop the sale of neonicotinoid pesticides to protect honey bees and other pollinators essential to our food supply and the environment.

The EU has banned neonics and a majority of the UK's largest home improvement retailers, including Homebase, B&Q and Wickes, have made public commitments to no longer sell products containing pesticides linked to declining bee populations. In the U.S., over twenty garden centers, nurseries and landscaping companies, including Lowe's and Home Depot, the two largest home improvement retailers in the world, are taking steps to eliminate neonics from their stores. We call on your company to join these leaders in sustainability and pollinator health by making this same commitment to remove neonicotinoids from your shelves.

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Please send completed petitions to:
Friends of the Earth, 1100 15th St. NW, 11th Floor Washington, DC 20005; Fax: 202-783-0444

EXECUTIVE SUMMARY FROM GARDENERS BEWARE 2014 REPORT

In 2013, Friends of the Earth U.S. and the Pesticide Research Institute released *Gardeners Beware: Bee-Toxic Pesticides Found In Bee-Friendly Garden Plants Sold Nationwide*, a report documenting a first-of-its-kind pilot study on the prevalence of neonicotinoid pesticides in bee-attractive plants commonly purchased by home gardeners. For the spring 2014 planting season, we expanded the scope of the study to include 18 locations in the U.S. and Canada and analyzed neonicotinoid concentrations in flowers separately from the greenery (stems and leaves). The results of our new study show that the use of neonicotinoid insecticides in nursery plants is still widespread, and these plants remain a source of exposure for bees and other pollinators.

Two-thirds of the food crops humans eat every day require bees and other pollinators to successfully produce a crop. However, the health and productivity of honey bees, bumble bees, and other pollinators are in great peril, and populations are dwindling worldwide. Concerned citizens have responded by planting "bee-friendly" gardens to provide urban foraging grounds. Unfortunately, as our new study shows, many of the nurseries that provide bee-attractive plants sold at top retailers in the U.S. and Canada continue to use persistent, systemic neonicotinoid insecticides that have been shown to impair the health and survival of bees and other vulnerable pollinators.

Although managed honey bee losses have been linked to multiple factors—including *Varroa* mite infestations, pathogens, malnutrition and habitat degradation—a strong and growing body of scientific evidence suggests that neonicotinoid pesticides are a major contributing factor. Neonicotinoids, manufactured primarily by Bayer CropScience, Syngenta, and Dow AgroSciences, are used extensively in agricultural and urban/suburban areas. The neonicotinoid imidacloprid—introduced in 1994—is among the most widely used insecticides in the world. Neonicotinoids are used as seed treatments on more than 140 crops, with virtually all corn, and a large percentage of soy, wheat, and canola seeds planted in the U.S. being pretreated with neonicotinoids.

Neonicotinoids are systemic pesticides that are taken up through roots and leaves and distributed throughout the entire plant, including pollen and nectar. These pesticides can poison bees directly, but even low-level exposure can lead to sublethal effects such as altered learning, impaired foraging and immune suppression, which exacerbates the lethality of pathogen infections and mite infestations. Unfortunately, home gardeners have no idea they may actually be poisoning pollinators through their efforts to plant bee-friendly gardens.

The plants included in this new study were purchased from major nursery outlets and garden centers, including Home Depot, Lowe's and Walmart in 18 cities throughout all four official geographic regions of the U.S., as well as three provinces of Canada. The collected plant samples were submitted to an independent accredited analytical laboratory to identify specific neonicotinoids and quantify their concentrations in the flowers alone versus the stems and leaves.

Findings include:

- Neonicotinoid residues were detected in 36 out of 71 (51 percent) of commercial nursery plant samples. In the samples with detections, the combined concentrations of bee-toxic neonicotinoids ranged from 2 to 748 micrograms per kilogram (μg/kg) in flowers and 2 to 1,945 μg/kg in stems and leaves.
- In approximately half of samples with detections, the neonicotinoid residues were distributed evenly between flowers and stems/leaves or were localized primarily in the flowers. This result suggests that bees are being exposed to neonicotinoids through contact with contaminated flowers and ingestion of pollen and nectar within the flower.

EXECUTIVE SUMMARY FROM GARDENERS BEWARE 2014 REPORT (continued)

- Since 51 percent of the plants that were tested contained neonicotinoid residues, the chance of purchasing a plant contaminated with neonicotinoids is high. Therefore, many home gardens have likely become a source of exposure for bees.
- For the samples with positive detections, adverse effects on bees and other pollinators consuming nectar and pollen from these plants are possible, ranging from sublethal effects on navigation, fertility, and immune function to pollinator death.

The bulk of available scientific literature suggests that neonicotinoids are a key contributing factor to the decline of pollinator populations. As a result of this growing body of evidence, the European Commission suspended the use of three neonicotinoids (clothianidin, imidacloprid, and thiamethoxam) on flowering plants attractive to bees in European Union countries, effective December 1, 2013. Unfortunately, U.S. EPA has been slow to adequately address the threats to pollinators posed by neonicotinoids, delaying any substantive action until 2016–2019 when the Registration Review process for these chemicals is completed.

At the local and state levels in the U.S. and in the marketplace, there are signs of progress. The "Saving America's Pollinators Act" H.R. 2692 would suspend seed treatment, soil application, or foliar uses of certain neonicotinoid insecticides on bee-attractive plants until U.S. EPA reviews all of the scientific evidence, and field studies can be done to evaluate both short- and long-term effects of these pesticides on pollinators. The bill is bipartisan and currently has sixty-eight co-sponsors.

In addition to federal legislation, state and local governments have been active in working to address neonicotinoids. In February 2014, Oregon passed the "Save Oregon's Pollinators Act" HB4139-A. The city of Eugene, OR became the first city in the country to ban the use of neonicotinoids on city property. In May, the Minnesota legislature passed two bills: one prohibiting retailers from labeling plants treated with pollinator-lethal insecticides (e.g., neonicotinoids) as bee-friendly and another to compensate beekeepers for bee losses. Additional measures to protect bees from exposure to bee-toxic pesticides have been introduced in Minnesota and the following states: California, Maine, Maryland, New Jersey, New York, Alaska and Vermont.

In Canada, the Province of Ontario introduced a Beekeepers Financial Assistance Program to compensate for losses of more than 40 percent of registered active hives. Prince Edward County in Ontario temporarily suspended the use of neonicotinoids on municipal lands, effective immediately.

Retailers, from small local nurseries to national chains like BJ's Wholesale Clubs, Inc., are also making progress on this issue by committing to phase out their use of neonicotinoids in garden plants and removing neonicotinoid pesticide products from their shelves.

Although U.S. EPA and Health Canada's Pesticide Management Regulatory Agency (PMRA) have not yet taken action, there is still much that can be done to protect bees. Friends of the Earth U.S. and allies are asking consumers, retailers, suppliers, institutional purchasers and local, county, state and federal regulators and policymakers to take action to avoid neonicotinoid pesticides to help protect bees and other pollinators.

Since 51 percent of the plants that were tested contained neonicotinoid residues, the chance of purchasing a plant contaminated with neonicotinoids is high. Many home gardens have likely become a source of exposure for bees

Recommendations for Garden Retailers:

- Do not sell off-the-shelf neonicotinoid insecticides for home garden use.
- Require neonicotinoid-free vegetable and bedding plants from suppliers and do not sell plants or plant starter mixes pre-treated with these insecticides.
- Offer third-party certified organic starts and plants.
- Educate your customers on why your company has made the decision to protect bees and other pollinators.

EXECUTIVE SUMMARY FROM GARDENERS BEWARE 2014 REPORT (continued)

Recommendations for Wholesale Nursery Operations Supplying Retailers:

- Use only untreated seeds for plants grown from seed.
- Do not use neonicotinoid insecticides as soil drenches, granules, or foliar treatments when growing vegetable and bedding plants.
- Offer neonicotinoid-free and organic vegetable and bedding plants to your customers and label them as such.
- Educate your customers about why your nursery operation made the choice to limit the use of neonicotinoid pesticides.
- If quarantine regulations require use of systemic insecticides on certain plants that are hosts for invasive pests, treat only those plants, minimize the number of treatments and label treated plants accordingly. Do not use neonicotinoids if less toxic systemic pesticides are approved for use on the target pest. Use pest exclusion systems wherever possible to avoid having to treat plants with pesticides.

Recommendations for Home Gardeners and Institutional Purchasers (such as schools, universities, private companies, hospitals, and others):

- Stop using all neonicotinoid insecticides on your property and facilities (e.g. landscaping around parking lots, grounds and gardens) and only plant neonicotinoid-free plants.
- Specify in contracts with landscaping companies that service your grounds and trees not to use neonicotinoid insecticides and not to install plants pretreated with neonicotinoids.
- Provide critical habitat for pollinators by planting pollinator friendly trees and flowers.

Recommendations for Cities, Counties and U.S. States:

- Suspend the use of neonicotinoids and other insecticides for cosmetic purposes on ornamental and landscape plants, like the ban now in force in Ontario, Canada.
- Pass resolutions to ensure that neonicotinoids are not used on city- and county-owned property, including schools, parks and gardens.
- Require that bee-toxic insecticides be prominently labeled as such in displays of these chemicals at garden centers, hardware stores and nurseries.
- Provide critical habitat for pollinators by planting pollinator-friendly trees and flowers.

Recommendations for the U.S. EPA:

- Suspend the registrations of neonicotinoids for agricultural as well as cosmetic and other unnecessary uses pending the results of pesticide re-evaluation.
- Require a bee hazard statement on the label of all products containing systemic insecticides toxic to pollinators, including soil drenches and foliar use products.
- Prioritize the systemic insecticides for Registration Review starting in 2014, and ensure inclusion of independent, peer-reviewed research on the acute and chronic effects of systemic insecticides on bees.
- Expedite the development and implementation of valid test guidelines for sublethal effects of pesticides on pollinators and require data from these studies for all currently registered and any new pesticides.

Recommendations for the U.S. Congress:

- Support and pass H.R. 2692, the Saving America's Pollinators Act, introduced by Representatives John Conyers (D, Mich.) and Earl Blumenauer (D, Ore.). This legislation will suspend seed treatment, soil application, or foliar uses of certain neonicotinoid pesticides on bee-attractive plants until:
  - all of the scientific evidence is reviewed by the U.S. EPA, and
  - field studies can be done to evaluate both short- and long-term effects of these pesticides on pollinators.

Recommendations for Health Canada's Pesticide Management Regulatory Agency (PMRA):

- Suspend the registrations and temporary registrations of neonicotinoid pesticides in both agriculture and minor use pending the results of the PMRA re-evaluation.

Recommendations for Canadian Provinces:

- Enact an immediate moratorium on the sale of neonicotinoid-treated seeds on field crops as well as for minor use in horticulture in each respective province, pending the results of the PMRA re-evaluation of neonicotinoids.

Recommendations for Consumers:

- **Take Action U.S.:** Join the Friends of the Earth U.S. Bee Action campaign at **www.BeeAction.org** and sign our petition to garden retailers asking that they stop selling neonicotinoid treated plants and products that contain neonicotinoids. You can also contact your member of Congress and encourage them to support the Saving America's Pollinators Act. You can find action, and bee-friendly gardening tips at **www.BeeAction.org.**
- **Take Action Canada:** Join the Friends of the Earth Canada campaign – take part in The Bee Cause work (**www.BeeCauseCanada.org**) and sign the petition to influence garden centres in Canada to stop selling neonicotinoid treated plants.
- **Raise Your Voice Locally:** Let your local nursery manager know that you will only purchase plants free of neonicotinoids and ask the manager to communicate your request to their corporate headquarters and suppliers who grow the plants they sell. Find a sample letter for U.S. companies and more ideas for action at **www.BeeAction.org.** For a sample letter for Canadian companies, visit the FOE Canada website at http://foecanada.org/en/files/2014/03/Model_Letter_on_Neonics_to_Garden_Centres.pdf.
- **Grow Bee-Safe:** Avoid buying neonicotinoid-treated seeds and seedlings. Purchase organic plant starts or grow your plants from untreated seeds in organic potting soil for your home vegetable and flower gardens.
- **Practice Bee-Safe Pest Control:** Avoid the use of systemic bee-toxic pesticides in your garden (see Appendix A) and use alternative approaches such as providing habitat to attract beneficial insects that prey on pest insects in your garden. If pest pressure is too high, use insecticidal soaps or oils and other eco-friendly pest control products. For more tips and links to more resources for pollinator and eco-friendly gardening, visit **www.BeeAction.org** and www.garden4bees.com.
- **Do not buy products that contain neonicotinoids:** Read the label and avoid using off-the-shelf neonicotinoid insecticides in your garden. These products may contain acetamiprid, clothianidin, imidacloprid, thiamethoxam and dinotefuran as active ingredients. See Appendix A at the end of this report for a list of common consumer products containing neonicotinoids.
- **Do a clean sweep:** See if you have these products at home, dispose of them as municipal hazardous waste or take them back to the store where you bought them.

LETTER TO GARDEN RETAIL STORE

Send a letter to your local garden center or giant retailer in your community and ask them to stop sell bee-killing pesticides. Edit this sample letter to include the current date, address of the store, CEO of the store and name of the retailer. Don't forget to sign it! [***Highlight the text in the letter below, copy it then paste it to create your letter(s)***]

Dear Manager,

I am a customer at your store and I am writing to respectfully ask your company to help protect bees and other pollinators essential to our food supply and the environment by committing to not sell products containing pesticides linked to the global decline in bee populations. This includes pesticide products containing systemic neonicotinoid pesticides, as well as nursery bedding and vegetable plants treated with these chemicals.

One out of every three bites of food we eat, from almonds to strawberries and soybeans are pollinated by bees. Unfortunately bees and other essential pollinators around the globe have been dying at alarming rates. In the past eight years, beekeepers have lost an average of 30 percent of their hives with some losing 100 percent of their operations.

A growing body of science points to neonicotinoid insecticides (neonics) as a key factor in bee die offs. Exposure to neonics can directly kill bees, and can also weaken their immune systems and increase their vulnerability to disease and pests.

The widespread agricultural use of neonics is a common exposure pathway for bees; however, cosmetic use of these pesticides in gardens, lawns, and landscapes may be an important contributing factor in declining bee and wild pollinator health. A recent study by Friends of the Earth, Gardeners Beware 2014: Bee-Toxic Pesticides Found in "Bee-Friendly" Plants Sold at Garden Centers across the U.S. and Canada, found that many of the "bee friendly" garden plants sold to unsuspecting consumers in nurseries and garden stores across the U.S. have been pretreated with neonics at levels that have the potential to harm or even kill bees.

These nursery plants carry neither a list of pesticides used, nor do they carry a warning that these plants could harm pollinators. Customers who intend to plant "bee-friendly" gardens may unknowingly be buying off-the-shelf products and plants that harm or kill bees.

As a customer concerned about bee health, I am worried that some of the plants sold at your store may be pre-treated with neonics. I am writing to ask you to take action to help protect bees and other pollinators by committing to the following:

- **Do not sell off the shelf neonicotinoid insecticides for home garden use.**
- **Demand neonicotinoid-free vegetable and bedding plants from nursery suppliers and do not sell plants pre-treated with these pesticides.**
- **Offer third party certified organic starts and plants.**
- **Educate your customers on why your company has made the decision to protect bees and other pollinators.**

Please contact Friends of the Earth by emailing **beeaction@foe.org** to discuss your store's current policies and how your store can show its leadership in sustainability by committing to not sell products that harm or kill bees. Friends of the Earth would also be happy to answer any questions you might have or provide further information on this topic.

Thank you for your attention to this important matter. I hope to be able to count your store among the places where I can feel confident that I am purchasing plants and products that will help, not harm the small creatures that are so essential to our food supply and healthy ecosystems.

Sincerely,

Resources: Visit **www.BeeAction.org** to learn more, read a letter from Friends of the Earth and allies to retailers, and read the report *Gardeners Beware 2014: Bee Toxic Pesticides Found in "Bee-Friendly" Plants Sold at Garden Centers Across the U.S. and Canada.*

RESOURCES:

How do I find bee-friendly nurseries?

Many "bee-friendly" plants are pre-treated with bee-harming chemicals making it difficult for gardeners to know if they are creating truly safe havens for bees. In the long term, retailer and institutional purchasing campaigns work to create market demand for truly bee-friendly plants free of bee-harming pesticides. At this point, the best way to know that plants are bee-friendly is to purchase certified organic starts and plants.

What Does Organic Mean?

This label represents the national standards set in place by the U.S. Department of Agriculture. Plants and food with this label, whether grown in the U.S. or imported from another country, must meet the following standards:

- No harmful toxins
- No synthetic or artificial ingredients
- No genetically modified organisms

Some websites that will help you find bee-friendly retailers and products for your lawn, garden and plants:

List of neonicotinoid free garden centers.
www.beeaction.org

Database of organic crop and garden vegetable seed providers.
attra.ncat.org/attra-pub/organic_seed/

Beyond Pesticides directory of organic seeds and nurseries.
www.beyondpesticides.org/pollinators/seed.php

Database of organic, untreated, heirloom seed suppliers.
www.greenpeople.org/seeds.htm

Database of certified organic products or companies.
www.greentrade.net/directory/search/

International directory with one of the largest international databases concerning organic wholesale and supply companies.
www.organic-bio.com/en/directory/

List of organic products and businesses.
organicconsumers.org/btc/BuyingGuide.cfm

A Sampling of Online Resources:

Bee Protective: Recommendations for managing landscapes for pollinators.
bit.ly/ManagingLandscapes

Bee Protective Habitat Guide: Information on flowering plants for pollinators.
bit.ly/BEEHabitatGuide

Crop Conversion Calculator: Side by side comparison of organic and conventional management of crops and plants.
bit.ly/CropConversionCalculator

Garden Insects Guide App: Learn how to organically prevent damage from pest insects and attract and use beneficial insects.
bit.ly/GardenInsectsGuide

Pesticide Research Institute. Resources on bees and pesticides, beekeeping contacts and recommended research links.
www.pesticideresearch.com

Pollinator Conservation Resource Center: View regional information for habitat conservation and plant guides.
bit.ly/PollinatorConservation

Pollinator Planting Guides: Guide to planting tailored to regions of the U.S.
www.pollinator.org/guides.htm

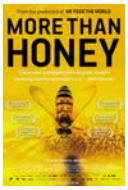
Organic Weed Control Toolbox: Tools and methods for organic weed control.
www.extension.org/pages/18532/an-organic-weed-control-toolbox#.U9KejPldX34

Organic Weed Management: Articles, resources and videos for organic weed management, preventative measures, practices and case studies.
www.extension.org/pages/61887/weed-management-topics#.U9KKX_ldX34

Wild Bee Gardens: Guides to creating pollinator habitat and learn about North America's native bees and flowers.
https://itunes.apple.com/us/app/wild-bee-gardens/id687148177?mt=8

FILMS:

Queen of the Sun. Taggart Siegal. 82 min, 2011. Queen of the Sun is a profound, alternative look at the global bee crisis. Taking us on a journey through the catastrophic disappearance of bees and the mysterious world of the beehive, this engaging and ultimately uplifting film weaves an unusual and dramatic story of the heartfelt struggles of beekeepers, scientists and philosophers from around the world including Michael Pollan, Gunther Hauk and Vandana Shiva. Together they reveal both the problems and the solutions in renewing a culture in balance with nature.
www.queenofthesun.com/



More Than Honey. Markus Imhoof. 95 min, 2012. More Than Honey tackles the vexing issue of why bees, worldwide, are facing extinction. With the tenacity of a man out to solve a world-class mystery, Markus Imhoof investigates this global phenomenon, from California to Switzerland, China and Australia.
www.morethanhoneyfilm.com/

Nicotine Bees. Kevin Hansen. (54 min, 2010). Nicotine Bees is a documentary about why the honey bees of the world are in trouble and why our food supply is in trouble as a result, highlighting how Colony Collapse Disorder is linked to a systemic class of pesticides, based on nicotine, called neonicotinoids.
pierreterre.com/

Vanishing of the Bees. George Langworthy and Maryam Heinem. 60 min, 2009. Vanishing of the Bees follows commercial beekeepers David Hackenberg and Dave Mendes as they strive to keep their bees healthy and fulfill pollination contracts across the U.S. The film explores the struggles they face as the two friends plead their case on Capitol Hill and travel across the Pacific Ocean in the quest to protect their honeybees. Filming across the US, in Europe, Australia and Asia, this documentary examines the alarming disappearance of honeybees and the greater meaning it holds about the relationship between mankind and mother earth.
www.vanishingbees.com

The Last Beekeeper. Jeremy Simmons. 66 min, 2009. An intimate look at the struggles of three American beekeepers becomes a painful meditation on the devastating effects of economic and ecological change when a mysterious illness among the bees threatens both insects and businesses.

BOOKS:

A Sting in the Tale: My Adventures with Bumblebees Dave Goulson. 2014. Picador.

Attracting Native Pollinators: Protecting North America's Bees and Butterflies. The Xerces Society. 2011. Storey Publishing.
www.xerces.org

Farming for Bees: Guidelines for Providing Native Bee Habitats on Farms. Mace Vaughan, Matthew Shepherd, Claire Kremen and Scott Hoffman Black. 2011.
www.xerces.org

Hives in the City: Keeping Honey Bees Alive in an Urban World. Alison Gillespie. 2014. Croydon Hill.
www.alisongillespie.com

Managing Alternative Pollinators: A Handbook for Beekeepers, Growers, and Conservationists. Eric Mader, Marla Spivak, and Elaine Evans. 2010. SARE.
www.xerces.org

Poison Spring: The Secret History of Pollution and the EPA. E.G. Vallianatos and Mr. McKay B. Jenkins. 2014. Bloomsbury Press.

Poisoned for Profit: How Toxins Are Making Our Children Chronically Ill. Alice Shabecoffe. 2010. Chelsea Green Publishing.

Pollinators of Native Plants: Attract, Observe and Identify Pollinators and Beneficial Insects with Native Plants. Heather N. Holm. 2014. Pollination Press.

Seeds of Destruction. William F. Engdahl. 2007. Global Research.

Silent Spring. Rachel Carson. 2002.Houghton Mifflin Harcourt

The Barefoot Beekeeper. P.J. Chandler. 2009. P J Chandler.

The Systemic Insecticides: A Disaster in the Making. Dr. Henk Tennekes. 2010. ETS Nederland BV.

LOCAL BEEKEEPING ORGANIZATIONS:

Visit this website to find a club near you:
www.easternapiculture.org

Learn the basics of beekeeping by visiting:
www.abfnet.org

ORGANIZING GUIDES:

Colours of Resistance. Resources and organizing tools to develop anti-oppression framework and analysis into organizing work.
www.coloursofresistance.org/

Midwest Academy. Trainings and resources on organizing philosophy, methods and skills.
www.midwestacademy.com/