

# Bees can waggle and wave—but they need us to save them

By Steve Blackledge, senior director of our Conservation America campaign

Did you know that honeybees perform a "waggle dance" to communicate about pollen sources, potential threats and even possible new beehives to call home?

And when group action in a honeybee hive is urgent, such as to defend against approaching wasps, these amazing insects can layer themselves to form a "defense wave" with a shimmering, rippling effect that repels would-be attackers.

But to keep these bees safe from the massive die-offs threatening their survival, to keep them dancing and waving and pollinating together, all of us need to stand up for stronger bee protections. And that means stopping the worst uses of bee-killing "neonic" pesticides.

#### Do the "waggle dance"

Say one of your friends discovered a restaurant in your neighborhood with really good food that you hadn't been to before. You'd want them to tell you about it, right?

It's the same with bees and the flowers that provide them with pollen and nectar. But where your friend would probably just tell you where to find that new restaurant, bees communicate a bit differently—they dance!

They transmit the location of a particular flower patch in a series of tightly-coordinated moves that also highlight the odor, quality and distance of food sources. The dancer's bee colleagues



Campaign Associate Ben Grundy (left) with a supporter of our Save the Bees campaign.

decipher this information and incorporate it into their foraging efforts. The dance is also helpful in gathering information about other hives, home locations, predators and more.

Unfortunately, this awesome feat of animal communication is one of several critical bee behaviors that can be severely harmed by pesticides. Bee-killing pesticides called neonicotinoids, or "neonics" for short, can impair bees' nervous systems to the point that they struggle to walk in a straight line. And one study found that baby bumblebee brains are irreparably harmed by neonics. These pesticides are a threat to bees' very survival.

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Thanks for making it all possible

### Tips on how to weatherize your home

If you want to weatherize your home, we have resources to help you on our website—including a recording of a Nov. 17 webinar attended by more than 130 of our supporters.

On the webinar, Zack Surmacz, the weatherization coordinator with Community Energy Project, offered tips such as how to find and deal with drafts, how to heat more efficiently, and how to save money and energy with appliances and lighting.

As the largest intact ecosystem on Earth, the boreal forest provides habitat for a diverse range of wildlife, from caribou and lynx to birds and bears. It's also being logged at the rate of one and a half football fields of forest every minute—much of it to be turned into toilet paper.

"This step forward doesn't mean our work is over," said Ellen Montgomery, director of our national public lands campaign.

"We still need to make sure Procter & Gamble's new bamboo toilet paper isn't just a novelty item but the beginning of a new trend, and we need to encourage other companies to do the same."

## Coalition urges Walmart to go solar

Walmart, one of the most visible retailers in the nation, has the chance to lead the corporate world toward renewable energy.

On Nov. 5, our national network, along with 150 other environmental groups, delivered a letter to Walmart CEO Doug McMillon encouraging the store to install solar panels on the roofs of all viable stores and parking lots by 2035.

If Walmart commits to this goal, it will generate nearly 6,000 megawatts of renewable energy each year, enough to power 660,000 American homes.

"It's encouraging to see such a broad coalition of groups calling for commonsense clean energy solutions," said Johanna Neumann, senior director of our national network's campaign for 100% Renewable Energy.

"Installing solar on superstores like Walmart would be a win for the environment, a win for consumers and a win for businesses."

Environment Virginia hopes Walmart will take the necessary steps to safeguard our environment by installing solar panels at nearly 5,000 U.S. store locations.



Johanna Neumann, senior director of our research partner Environment America Research & Policy Center's campaign for 100% Renewable Energy, made sure her heat pump water heater was set to 120 degrees to help save energy in her home weatherization.

Lisa Frank, the executive director of our national network's Washington legislative office, and Shanika Whitehurst, associate director for product sustainability at Consumer Reports, shared information about how to tap recently passed tax credits and rebates that can help everyone in America reduce energy waste.

"The best and cleanest energy is the energy you never have to use in the first place," said Johanna Neumann, senior director of our research partner Environment America Research & Policy Center's campaign for 100% Renewable Energy, who emceed the event.

To check out the webinar for our tips, visit environmentvirginia.org/cleanenergyhome.

## Procter & Gamble moves in the right direction to protect forests

The campaign to protect our most important forests has taken a promising step forward.

In July, Procter & Gamble (P&G), the company behind Charmin, Puffs and Bounty, announced a new bamboo-based product that would not rely on wood logged from Canada's boreal forest.



Get more updates on our work online at http://environmentvirginia.org.



#### Do the "wave"

Honeybees have a number of individual or small-group tactics they can use to fend off attackers—for instance, they can heat their abdomens to 100 degrees Fahrenheit, which is hot enough to kill a wasp.

But those defenses take a lot of energy. As an alternative, bees can band together on the surface of their hive and synchronize their movements to make it look like the hive is literally shimmering. Think of a crowd doing the "wave" at a football game—except in the bees' case, the wave is meant to confuse an approaching hornet or other predator.

This defense is remarkably effective: Not only does it intimidate the intruder, but it also protects each of the bees individually by making it harder for a predator to single one out to attack. By working together as one, bees protect their hive, conserve their collective energy, and ensure each and every

one of their companions is safe from harm.

But as brilliant as the defense wave is, it can't protect bees from the toxic pesticides that are contributing to alarming declines in bee populations. That's where bee defenders like you come in.

Environment Virginia, our national network of state environmental groups, and our dedicated supporters are coming together to form our own "defense wave" for bees. Our network has helped lead the charge to restrict bee-killing pesticides in seven states—and now, we're working to add more states to the list. We're also raising tens of thousands of voices to call on retail giant Amazon to take neonics off its (virtual) shelves, and for the Biden administration to ban the use of neonics in wildlife refuges nationwide. Together, we can win these and other crucial protections for these precious pollinators.

Upper photo: Exposure to neonicotinoid pesticides can leave bees so impaired they can't walk straight, much less "dance."

Lower photo: Honeybees use a sophisticated set of "dances" to communicate with each other and protect their hives from harm.



#### Featured staff



Elly Boehmer State Director, Environment Virginia

A former canvass director and organizer with Impact, Elly now directs Environment Virginia's efforts to promote clean air, clean water and open spaces in Virginia. Elly lives in Richmond, Virginia, where she enjoys gardening, photography, hiking and rollerblading with her dog.



Environment Virginia and The Public Interest Network are celebrating 50 years of action for a change.

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## **Environment Virginia**

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## Your 2023 Winter Report

#### **Our mission:**

We all want clean air, clean water and open spaces. But it takes independent research and tough-minded advocacy to win concrete results for our environment, especially when powerful interests stand in the way of environmental progress.

That's the idea behind Environment Virginia, Inc., a project of Environment America, Inc. We focus on protecting Virginia's air, water and open spaces. We speak out and take action at the local, state and national levels to improve the quality of our environment and our lives.

# We're calling on General Mills to reduce its single-use plastic packaging

When you think about General Mills, you probably think about your favorite cereal. As a global company with many popular brands, including Cheerios, Nature Valley, Yoplait and Betty Crocker, most people probably encounter a General Mills product on just about every grocery run. But every time we restock our pantries and fridges, we end up with more plastic than we know what to do with.

"A Betty Crocker cake is wonderful and

all, but it's hard to stomach all the plastics that come with these everyday products," said Steve Blackledge, senior director of our research partner Environment America Research & Policy Center's conservation campaigns. "We need companies to choose America's birds, turtles and whales over unneeded waste."

We know stopping plastic at the source is the best way to deal with this waste problem. General Mills has pledged to make all its packaging recyclable or reusable by 2030. And in September, a majority of the company's shareholders voted to pass a resolution to tell the company to reduce plastic use and waste. While both of these steps are a good start, when only 5% of plastics in the U.S. are actually recycled, the company should make more solid commitments to move beyond plastic.

You can add your voice to the call today at environmentvirginia.org/GeneralMills.

General Mills can do more to improve its sustainable packaging efforts and reduce its use of plastic.

