

CLEAR CHOICES CLEAN WATER

POLLINATORS

- What are pollinators? A pollinator is any insect or animal that moves pollen from one plant to the reproductive parts of another plant. Pollen is deposited on a pollinator while it is feeding on a flower or plant and transferred to a new plant as the pollinator feeds on it. The flower then uses the pollen to produce a fruit or seed.

As you will see, many insects, birds, and mammals act as pollinators. And while honeybees might be the best-known pollinator, it is actually our native bees that are the most efficient and prolific at the job.”

Video: <https://youtu.be/h1oOZzbxJgs>



- Did you know that about 75% of all flowering plants and about 35% of crops worldwide depend on pollinators? Watch this video to learn more about the threats to pollinators and why it's important to protect them!"

Video: <https://youtu.be/EeoRIMkW22Y>



- These are some of the most common threats to pollinators. Check out these links to learn more about protecting pollinators in Agronomic Production!
<https://indiana.clearchoicescleanwater.org/pledges/native-plants-and-pollinators/pollinators/#void>
<https://indiana.clearchoicescleanwater.org/wp-content/uploads/sites/3/2020/10/POL-4.pdf>
<https://indiana.clearchoicescleanwater.org/wp-content/uploads/sites/3/2020/10/PPP-113-POL-3.pdf>

COMMON THREATS TOWARDS

Pollinators



1

PESTICIDES



2

HABITAT LOSS



3

PESTS & DISEASE



Learn more at

<https://indiana.clearchoicescleanwater.org>

- You might not immediately see the connection between birds and bugs and clean water, but it's a connection that is growing every year—literally! Pollinators are key to the reproduction and spread of many native plants, and native plants provide food and habitat for pollinators. These native plants also capture, clean, and store rainwater in their leaves, stems, and roots. Less runoff polluting our water, more beneficial pollinators doing their important work. Maybe the next time you take a drink of water you should thank a bee, a hoverfly, a beetle, or a hummingbird for a job well done!

Pledge to protect our water with pollinators at

<https://indiana.clearchoicescleanwater.org/pledges/native-plants-and-pollinators/>

#cleanwater #pollinators

INSECTS MADE MY SUNDAE

WHIPPED CREAM
is made from the cream part of cow's milk. Cows eat hay and grains that are pollinator dependent.

CHOCOLATE
comes from the cacao tree which is only pollinated by two types of midge.

VANILLA
flavoring is derived from vanilla orchids that are pollinated by one species of bee and hummingbirds.

CHERRIES
along with most other fruit toppings, require pollinators in order to produce fruit.

NUTS
are grown from trees and plants, most of which require pollination.

SUGAR
comes from either the sugar beet or sugar cane, both of which require pollinators.

ICE CREAM
is made from milk that comes from cows. A cow's diet is made up of hay (alfalfa, timothy, clover) and grain which are dependent on pollinators.

Pollinators create more than **\$250 BILLION** in output annually **ACROSS THE GLOBE.**

About **90% OF ALL FLOWERING PLANTS** and **75% OF CROPS** worldwide depend on pollinators.

- Pollinators are critical to today's agricultural success, affecting about 320,000 different crops. In fact, [more than a third of crops](#) worldwide rely on pollination as well as products like beeswax candles and lip balm. They are also responsible for the reproduction of most of the plants in the natural world."

The 1-2-3 Punch

Knocking Out Our Pollinators

Indiscriminate Use of Pesticides
Using best management practices for pesticide application can help protect pollinators

Manicured Turf Lawns
Replacing parts of your lawn with native plants and trees help replace lost habitat.

Sterile City Landscapes
Careful use of chemicals and more native plants and trees help pollinators.

1 PESTICIDES

In 2000 **LESS THAN 5% OF SOYBEAN ACRES** and **LESS THAN 30% OF CORN ACRES** were treated with a PESTICIDE

TODAY 80% of Soybean and **40% of Corn ARE TREATED**

Even Sub-lethal doses of PESTICIDES can affect foraging and nesting behaviors, often preventing pollination

2 HABITAT LOSS

50% Loss of FORESTS

85% Loss of WETLAND

99.9% Loss of PRAIRIE

Pre-development Indiana: **36,291** square-mile area contained about 20 million acres of forestland and 2 million acres of prairie

5.6 million acres of wetlands

WHAT'S THE IMPACT?
It takes about **1,875** FLOWER VISITS to raise one mason bee.

HERBICIDES also kill plants that pollinators use for forage

3 PESTS & DISEASE

The **VARROA MITE** which was introduced from **RUSSIA** has been **DEVASTATING AMERICAN HONEY BEE HIVES** since the 1980s

Varroa mites weaken bees by **SUCKING THEIR BLOOD** and **PASSING DISEASES**

Varroa mites **CRIPPLE ADULTS** and **KILL LARVAE**, causing the colony or population **TO COLLAPSE.**

FORESTS **FARMS** **HOME** **ROADS** **CITY**