

Your yard is Nature's Best Hope

10 ways to bring Nature Home



*Pollinator Friendly
Yards on Facebook*



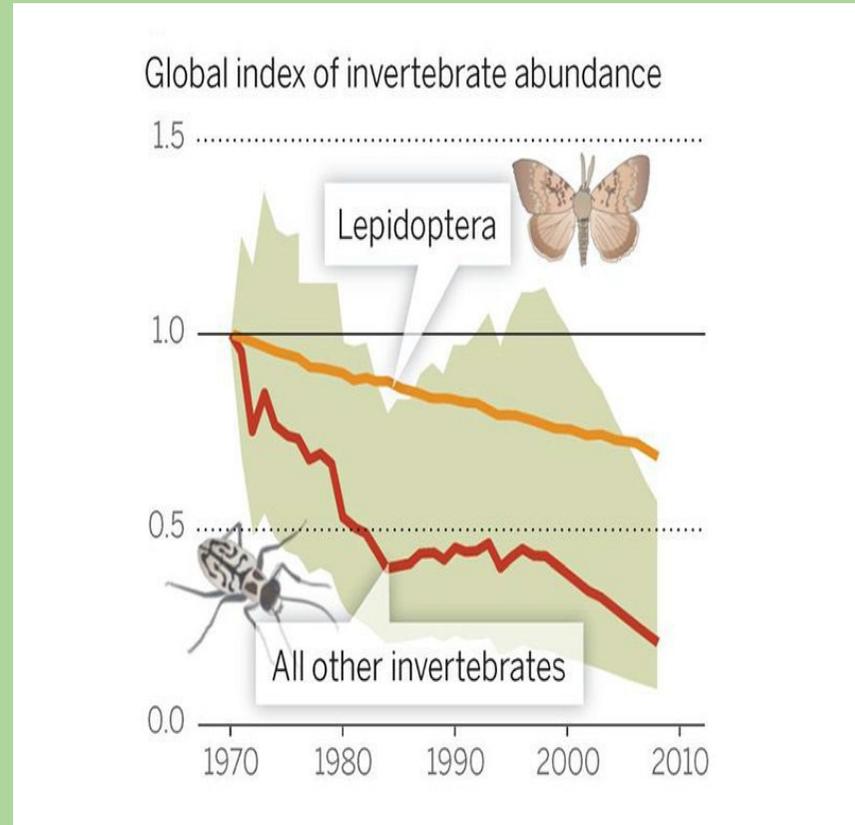
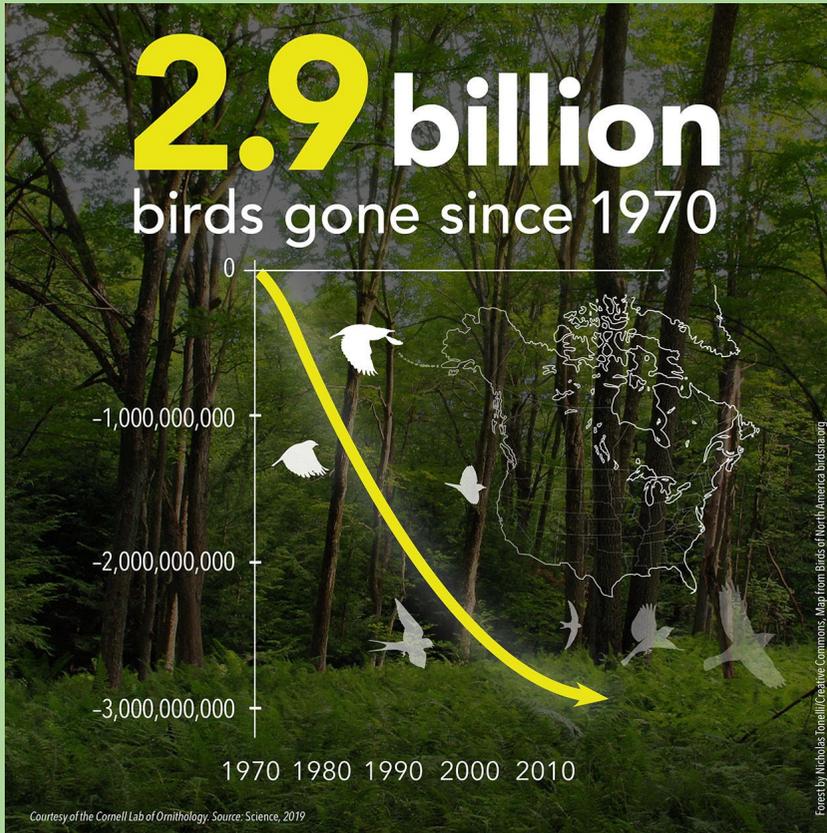
Agenda

- What's happening
- Why it matters
- How you can you help
- How to get started
- Three takeaways
- Additional information
- Resources



What's Happening

Birds and Insects are disappearing at an alarming rate due to habitat loss, pesticides and light pollution.



Why it matters



- Insects aren't just pests. They're crucial pollinators for the planet and our food supply. Three-quarters of the crops we grow need pollinators. **Insects can survive without us, but we can't survive without them.**
- Birds provide insect and rodent control, plant pollination, and seed dispersal which result in tangible benefits to people. Birds depend on insects for their survival. They have ecological value as important elements of natural systems. **Birds don't need us, but we need them.**

10 ways to bring nature home and help birds and pollinators in your yard*

1. Plant Native
2. Leave the Bugs for the Birds
3. Shrink the Lawn
4. Don't use Pesticides and Fertilizers
5. Turn off outdoor lights
6. Learn about native bees
7. Bring back the peaceful, healthy backyard
8. Feed the caterpillars
9. Leave the Leaves
10. Recognize Bugs as an essential part of a functioning ecosystem



*"Your Yard is Nature" by Leslie Nelson Inman

1. Plant Native

**CONVENTIONAL NURSERIES AND
BIG BOX STORES ARE SELLING US
AN ENTIRELY NEW ECOSYSTEM
IMPORTED FROM OTHER CONTINENTS**



**PLANT NORTH AMERICAN NATIVES!
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- What is a native Plant?
 - A plant is considered native if it has occurred naturally in a particular region, ecosystem, or habitat without human introduction.
- Why Plant Native?
 - Native plants have formed symbiotic relationships with native wildlife over thousands of years, and therefore offer the most sustainable habitat.
- Exotic plants (plants from big box stores and conventional nurseries)
 - Evolved in other parts of the world or were cultivated by humans into forms that don't exist in nature and do not support wildlife as well as native plants.

2. Leave the Bugs for the birds



96% of terrestrial birds rely on insects to feed their young. No insects? No birds” –
Dr. Doug Tallamy, author of “Nature’s Best Hope”

3. Shrink the Lawn



The Staggering Wastefulness of **THE AMERICAN LAWN**

45 Million Acres of Lawn

2 Billion Gallons of Gas for Lawn Equipment

41 Billion Pounds of CO₂ Emitted from Leaf Blowers
and Mowers

13 Billion Pounds of Toxic and Carcinogenic Air
Pollutants Emitted From Leaf Blowers and Mowers

100 Million Pounds of Pernicious Lawn Chemicals
and Fertilizers

9 Billion Gallons of Water a Day

..... REPEAT ALL ABOVE ANNUALLY

4. Don't Use Pesticides or Fertilizers

Which kind of childhood...
will they cherish their entire lives?



FIREFLIES?



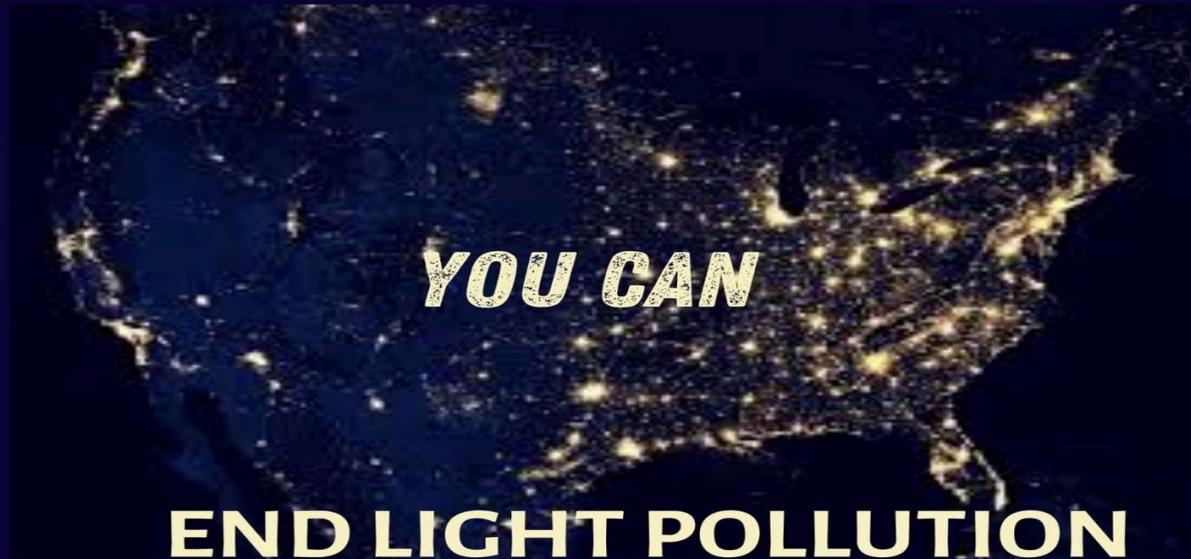
OR POISON?

Fireflies spend their first two years underground
LAWN CHEMICALS KILL FIREFLIES
MOSQUITO SPRAY KILLS FIREFLIES
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- 1.1 Billion Pounds of Pesticides are used every year in the US (Source CDC).
- 2,4-D- the active ingredient in “Weed and Feed” lawn products reduces hatching success and causes birth defects in birds.
- 75 studies have documented the connection between lawn pesticides and lymphoma. Pets and children are the most at risk as they roll around in the grass.
- According to the EPA, 40 - 60% of fertilizer applied to lawns ends up in surface and groundwater, where it kills aquatic organisms and contaminated drinking water.

5. Turn off outdoor lights

WHAT IF YOU COULD
FLIP A SWITCH
AND HELP NATURE?



TURN OFF OUTDOOR LIGHTS

SWITCH TO MOTION DETECTOR LIGHTS

HELP MIGRATING BIRDS, FIREFLIES

AND MANY OTHER BEAUTIFUL CREATURES

POLLINATOR FRIENDLY YARDS ON FACEBOOK

The truth about bees*

- Myth - All bees sting.
- Fact – Most bees do not sting.
 - Only female bees sting, and only in self-defense or in defense of the hive. Of the 4000 species of native bees, a mere 46 species have hives, which are tiny compared to honey bee hives. All other species are solitary and non-aggressive.
 - Most bee stings occur when a honey bee is stepped on or is defending the hive. Bees visiting the flowering plants in your yard are intent on gathering pollen and nectar and have no interest in stinging you.
 - Most stings attributed to bees actually come from yellow jackets, a type of wasp.

- *Dr. Doug Tallamy



7. Bring back the peaceful, healthy yard.

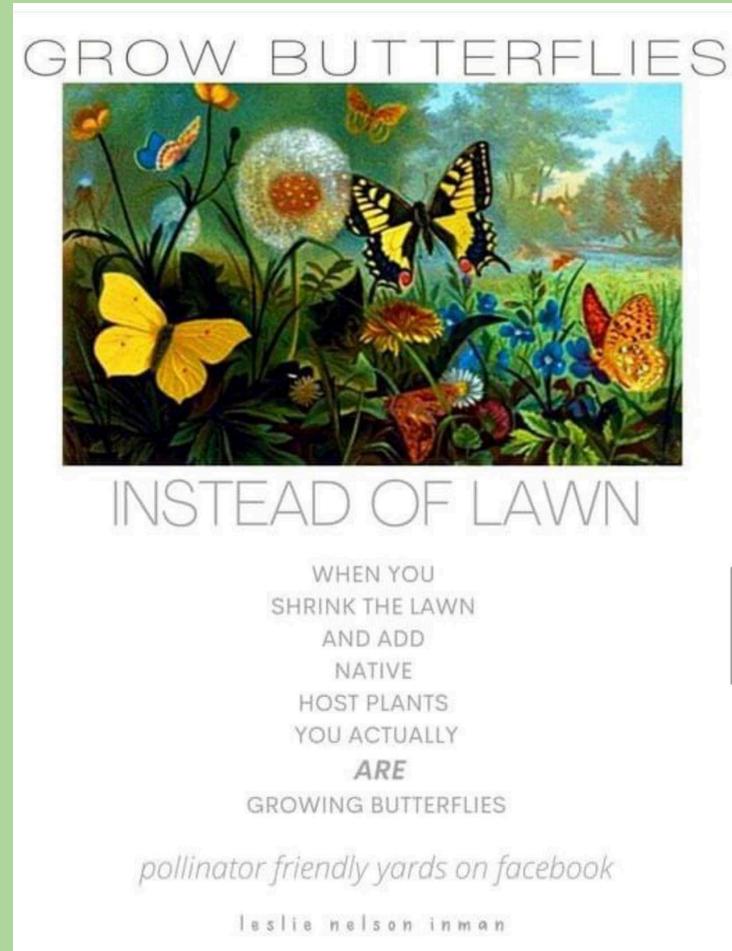
Stop the use of gas leaf blowers.



- Emit unfiltered, toxic exhaust containing known carcinogens.
- They pollute by blasting pesticides, mold and dried animal feces into the air we breathe.
- Generate dangerous levels of noise.
- Destroys soil health and pollinator habitats.

Gas Leaf Blowers have been banned or had their use restricted in over 200 cities and the list is growing. California is banning the sale of new gas lawn mowers and gas leaf blowers in 2024. Washington, DC enacted a ban this year.

8. Feed the caterpillars. They become butterflies.



9. Leave the Leaves

They are food and shelter for butterflies, birds, bees, moths and more!



EXPAND THE 'WILD AREAS'
OF YOUR YARD
MAKE BRUSH PILES
LEAVE THE LEAVES
OR RAKE THEM INTO YOUR 'WILD AREAS'



Leave the leaves in the autumn and you will see more butterflies and fireflies in the spring and summer.

10. Recognize bugs as essential part of a functioning ecosystem.

The fate of humans and insects is intertwined. Insects will thrive without us but we can not survive without them.



How to get started

- You don't need to do it all and you don't need to do it all at once.
- Spend some time assessing your yard. What areas get sun or are in the shade, is the soil dry/moist.....
- Try one or two things and the natural world will reward you with so many more butterflies, bees and bright-winged songbirds that you are likely to decide to do more.
- Decide that any new plants you buy will be native. If one of your ornamental, non native plants dies, make the new plant a native one.
- Consider Pocket Planting - There's room in almost every yard for a small native plant garden. A 10'x10' pocket planting can be enough to start a pollinator habitat.
- Don't cut plants back in Fall. They provide seeds and cover for birds.
- Spread the word! Tell neighbors and show kids - they love nature and bugs
- Buy a book (s) about native plants for your Little Neighborhood Library
- Consider alternatives to gas leaf blowers
 - Switch to electric/ask your landscaper to switch to electric
 - Blow less, ask your landscaper to blow less even when using electric
 - Use rakes and brooms for small areas
 - Leave the leaves or rake them to a garden area in your yard. It's free mulch!
 - Get used to have a less than pristine yard and hardscape areas.



How to get started (continued)

- Other small efforts can help make a difference
 - Plant milkweed in a pot on a your patio, deck to provide food for monarch butterfly's.
 - Join the No Mow May movement.
 - Put out fresh water for birds and other wildlife.
 - Try leave-it-alone gardening. Stop obsessing over perfectly planted flower beds and weed-free lawns.
 - Create a compost pile.
 - Share articles, posts on NextDoor.



3 Take aways

- Let them live
 - Birds and Insects
- Plant Native
- Do less so that you will have more
 - Less lawn, pesticides, leaf blowing, outdoor lights
 - More butterflies, birds, fireflies, frog nest control, rainwater control, health



Additional Information and Resources

Buy Straight Species



- Cultivars and hybrids have been bred to produce more “showy” flowers, but often they’ve been altered just enough that bees fail to recognize the scents, shapes or colors that they’re used to.
- Double blooms – while admittedly stunning – are not bee-friendly because their thick petals make it difficult to access nectar.
- In far too many hybrids, the lovely scents, nectar and pollen may be missing altogether.

Plant Keystone Species

- Keystone plants are natives that are essential to our ecosystems because they support 90% of the caterpillar species that enable our terrestrial birds to reproduce, as well as all of our specialist native bee species.
- Dr. Doug Tallamy, and his team at the University of Delaware have identified 14% of native plants (the keystones) that support 90% of butterfly and moth lepidoptera species.

WANT TO SEE MORE BUTTERFLIES?



| | | |
|--|--|--|
| <i>Prunus</i> | <i>Quercus</i> | <i>Salix</i> |
|  |  |  |
| CHERRY NATIVE TO YOUR AREA | OAK NATIVE TO YOUR AREA | WILLOW NATIVE TO YOUR AREA |
| <i>Aster</i> | <i>Solidago</i> | <i>Helianthus</i> |
|  |  |  |
| ASTER NATIVE TO YOUR AREA | GOLDENROD NATIVE TO YOUR AREA | SUNFLOWER NATIVE TO YOUR AREA |

PLANT THESE KEYSTONE SPECIES TO FEED CATERPILLARS AND SEE MORE BUTTERFLIES!
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Mosquito Control

DISCLAIMER:

We know that mosquitoes are vital food for frogs, birds, dragonflies and many other beautiful creatures, but our neighbors and many towns blanket-spray pesticides, so we have to offer alternatives

MAKE YOUR OWN MOSQUITO TRAP



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- Mosquito Trap. Add cover like chicken wire, screen.
- Eliminate standing water. Stagnant water attracts mosquitos.
- Use fans
- Attract Dragonflies - a single dragonfly can eat 30 to hundreds of mosquitoes per day
 - Joe Pye Weed, Black Eyed Susan, White Yarrow





Gardens that Benefit Wildlife and People

Native plants, eco-friendly gardening practices provide natural sources of the four elements of habitat:

GARDEN
FOR WILDLIFE

Oaks support over 500 species of butterflies and moths and feed and shelter other wildlife.



food



water



cover



raising young

National Wildlife Federation's Certified Wildlife Habitats® include these elements and can support 2X the amount of wildlife.

Songbird babies rely on thousands of caterpillars and other insects supplied by native plants. 

Roughly 30% of native bee species are pollen specialists that restrict their diets to specific native plants. 

Native plants use less water and their roots help with storm-water runoff to maintain healthy watersheds.

Conventional Landscapes

1 million acres of wildlife habitat are lost to suburban development annually.

The monarch butterfly that relies on native milkweed has declined by 90%.

Lawns use 9 billion gallons of water nationwide per day.

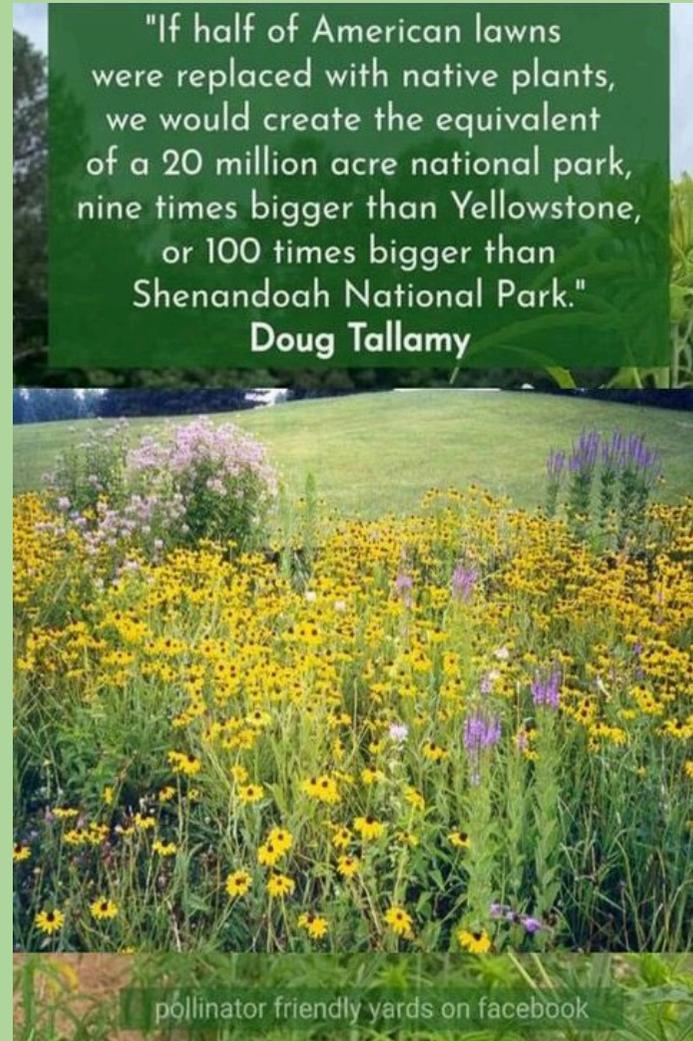
Non-native trees and turf lawns don't support wildlife.



Common garden weedkillers and pesticides harm beneficial insects and soil microorganisms essential to naturally healthy ecosystems.

Homegrown National Park®

- From Doug Tallamy:
 - “Our National Parks, no matter how grand in scale are too small and separated from one another to preserve species to the levels needed.
 - Thus, the concept for Homegrown National Park, a bottom-up call-to-action to restore habitat where we live, work and play extending national parks to our yards and communities.
 - We should not imagine our landscapes as static postcard scenes to mowed, clipped and raked into compliance each week, but rather as integral parts of a dynamic, living planet.”



Homegrown National Park® is a term coined by Doug Tallamy

Georgia Native Plant Organizations

- Georgia Native Plant Society
 - <https://gnps.org/>
- Wild Ones
 - <https://georgiapiedmont.wildones.org/>

Where to buy native plants in the Atlanta area

- Beech Hollow Farms (Scottsdale and Lexington)
 - <https://beechhollowfarms.com/>
- Georgia State University Perimeter College Native Botanical Garden
 - <http://sites.gsu.edu/pcnativegarden/>
- North Georgia Natives
 - <https://www.northgeorgianatives.com/>
- Georgia Native Plant Society - Directory
 - <https://gnps.org/georgias-native-plants/sources-native-plants/>
- Botany Yards – Native Plant Seeds
 - <https://www.botanyyards.com>

Resources

- Leslie Nelson Inman
 - Pollinator Friendly Yards on Facebook
 - <https://www.facebook.com/groups/970225259732416>
 - Your Yard is Nature
 - https://www.etsy.com/listing/859743416/book-your-yard-is-nature?click_key=70b425eacc5d592d52d4357e9ede73c495ef5a83%3A859743416&click_sum=edd7261f&ref=hp_rv-1
- Doug Tallamy –A new approach to conservation that starts in your yard
 - <https://www.amazon.com/Natures-Best-Hope-Approach-Conservation-ebook/dp/B07NMH5GH5>
 - <https://homegrownnationalpark.org/>
- QuietGA – Working to reduce the use of gas-powered leaf blowers in favor of quieter, healthier, greener alternatives
 - <https://quietga.org/>
- Why is Pollination Important
 - <https://www.fs.fed.us/wildflowers/pollinators/importance.shtml>

Resources (cont.)

- Nearly 3 Billion Birds Gone Since 1970
 - <https://www.birds.cornell.edu/home/bring-birds-back/#:~:text=An%20alarming%20new%20study%20reveals,span%20of%20a%20human%20lifetime>
 - <https://www.sciencedaily.com/releases/2022/05/220505114633.htm>
- The loss of insects is an apocalypse worth worrying about
 - <https://www.vox.com/down-to-earth/22958614/insects-bees-butterflies-decline-extinction>
- Eight simple actions that individuals can take to save insects from global declines
 - <https://www.pnas.org/doi/10.1073/pnas.2002547117>
- Light Pollution Impact on Insects
 - <https://www.smithsonianmag.com/smart-news/light-pollution-contributes-insect-apocalypse-180973642/>
- Pesticide Research
 - <https://www.beyondpesticides.org/resources/garden-pesticides>
 - <https://goodneighbor Iowa.org/evidence-of-harm/>

Resources (cont.)

- Why lawns are not sustainable
 - http://www.ecosystemgardening.com/why-lawns-are-not-sustainable-in-conservation-gardening.html?fbclid=IwAR0NvnJiZTKnocE9ol0LHqOsRub0DtPALY2IHzv44_iNiVAfw60j_-l0p3g#:~:text=Lawn%20Care%20Uses%20Huge%20Amounts%20of%20Gasoline&text=Aaron%20Hoover%2C%20of%20the%20University,cars%20driving%2012%2C000%20miles%20each
- How leaf blowers and lawns contribute to climate change
 - <https://news.yahoo.com/leaf-blowers-lawn-mowers-and-fertilizer-how-lawns-contribute-to-climate-change-190726545.html>
- Impacts of Leaf Blowers
 - <https://www.terranovalandscaping.com/impacts-of-leaf-blowers/>
- Are Honey Bees Native to North America
 - <https://www.usgs.gov/faqs/are-honey-bees-native-north-america>
 - <https://www.nwf.org/Home/Magazines/National-Wildlife/2021/June-July/Gardening/Honey-Bees>

Questions?

Thank you!!