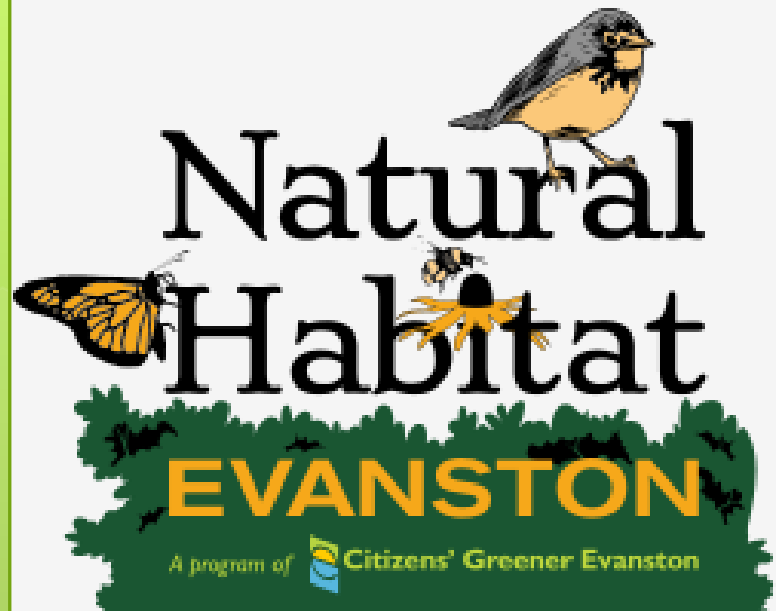


We aim to create a community culture that values, restores and conserves the natural habitat on which we and wildlife depend.



Why Do Less Garden Clean Up?

April 23, 2021 11am

Leslie Shad, Co-Lead
Natural Habitat Evanston



Photo: Mary Jane Klein



Two easy steps advance climate action, community health and biodiversity:

Do Less



- 1. Reduce Lawn (plant natives):**
Turf = More land use than *corn, wheat and fruit trees combined*.
NASA.
- 2. Leave the leaves and plant stalks**

Climate, Health: Lawn Maintenance

- ◉ **Water waste:** 7 billion gals/day. Overwater by @50%. 30-60% municipal fresh water supplies.
- ◉ **Toxins:** chemical fertilizer, pesticides. \geq 10x average farm rate
- ◉ **Lawn Equipment**
 - ◉ **Air pollution:** Carbon and particulates.
 - ◉ Corona virus, Asthma: Evanston 19% vs 12% across IL
 - ◉ **Hearing Damage:** pitch as well as volume.



Biodiversity: Insect and Bird Populations

- **Songbirds.** ↓ 30% (vs. 1970)
- **Monarchs:** ↓ 90% (vs 2000). 900 million bugs.
- **Rusty-patched bumblebee:** ↓ 87% (vs 2000)
Federally endangered. Was in 28 states.
- **Mayflies** ↓ 50% (vs 2012).

Globally

- **75% ↓ insect biomass** in 27 years. In summer, 82% less. German study 2015.
- **Caddisflies:** 63% of species threatened. Lay eggs in water, more vulnerable to pollution and development.
- 50% of surveyed **moth, butterfly and beetle** species in decline; 1/3 threatened with extinction.





*“The most disquieting thing wasn’t the disappearance of certain species of insects; it was **the deeper worry... that a whole insect world might be quietly going missing**, a loss of abundance that could alter the planet in unknowable ways.”*



DO LESS: Mow less

- ❖ Grass Lawns = Ecological Dead Zones. No seeds, nectar, pollen.
- ❖ Turf grass native to Europe and Asia. Concept imported from wealthy European estates.
- ❖ Displaces native plants that insects and birds rely on.

Mow less often. Let clover, dandelion bloom, provide nectar. “No Mow May” UK National Pollinator Strategy.



Photo: **Lovelace Park Meadow.** Singing insects and birds returned even though nothing native planted. **Call or text 311: More No Mow Meadows in Evanston parks!**



DO LESS: Leave Leaves and Plant Stalks

- **Insects Overwinter.** Butterflies, fireflies, bees, native ladybugs under topsoil, in leaves. Beetles, flies, mantis, walking sticks in/on plant stems.
- **Leaf litter = shelter and food for birds.**

Leave @3" space around tree and shrub trunks to let them 'breathe' and to avoid rot.



Photo: Rusty Patched Bumble bee (IL bee federally endangered)



Purplish Copper



Purplish
copper

- ❖ Egg is greenish-white. It is laid singly on the leaves of dock or smartweed
- ❖ Emerge 8-10 days after warm weather, emerge, as larvae.
- ❖ About 3 weeks as caterpillar in leaf litter or debris.
- ❖ ~ JUNE!





Great spangled
fritillary



Overwinter as caterpillar?

Hatch and burrow next to your favorite food source.

- Baltimore Checkerspot: white turtlehead
- Great spangled fritillary: violets

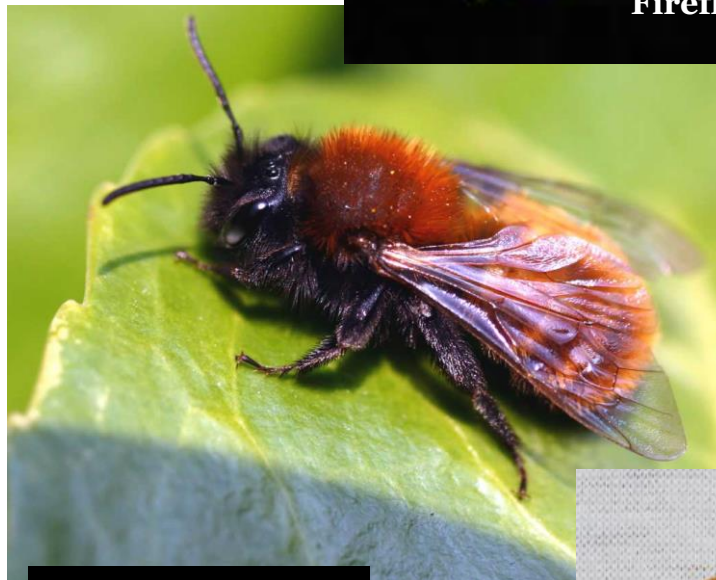


Baltimore
checkerspot





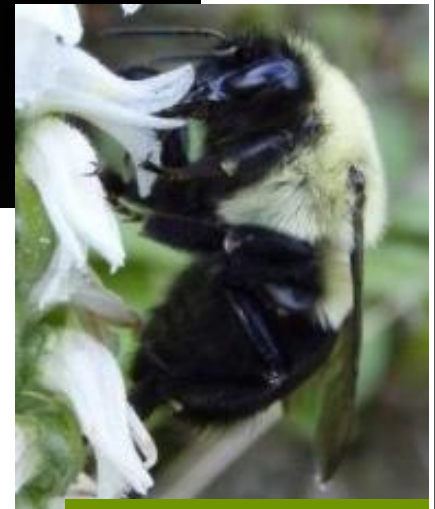
Seven-spot ladybird beetle



Tawny mining bee



Big Dipper Firefly



Queen common eastern bumble bee



Woolly bear-Isabella Tiger Moth



Leave plant stalks and seedheads

Examples of who is affected

Carolina mantis – with ootheca



Goldenrod gall fly



A goldenrod gall in midsummer.

Giant swallowtail



Original Photograph by
ButterfliesAtHome.com

Luna moth



Madison County Conservation Board

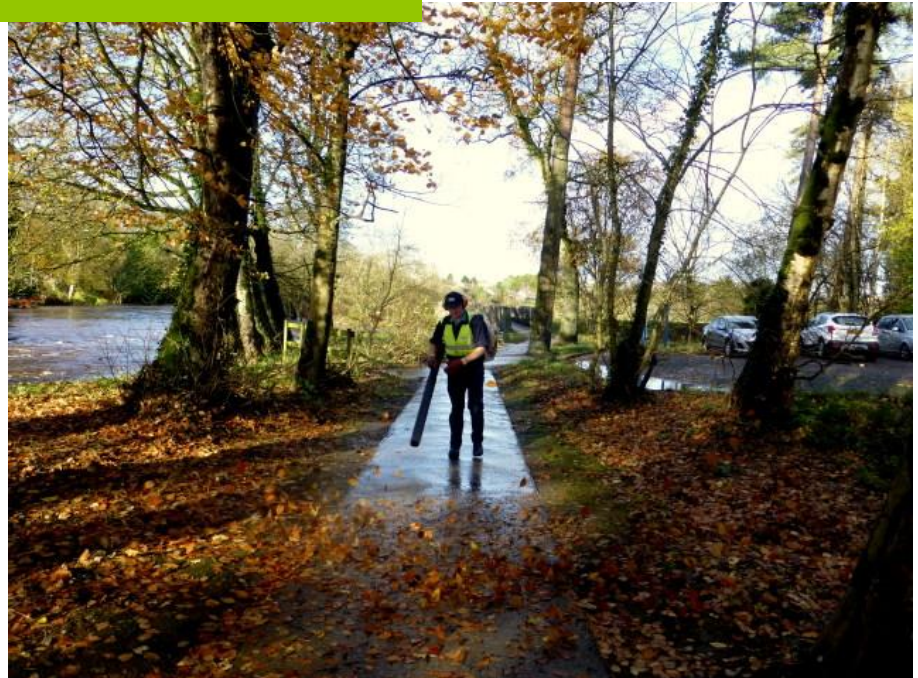


Rakes vs Leafblowers

Blasting Nature: Leaf blowers blast nature at speeds of up to 200 miles per hour.

Human Health

- 5lbs fine dust, animal feces, mold, fungi, pollen, heavy metals and pesticides. Per Hour.
- **Pollution.** 1 hour leafblower = a Toyota Camry driving 1,100 miles at 55 mph. (Calif Air Resources Board)



Noise pollution: real health impact.

Raise stress levels, increase blood pressure, cause headaches, and permanently damage hearing.

Yard crews are most impacted, but so are we all.



Insects Apocalypse

- ◉ <https://www.pnas.org/content/118/2/e2023989118>
- 🔗 <https://www.nytimes.com/2018/11/27/magazine/insect-apocalypse.html>

Field Museum Field Guide: Common Butterflies, Chicago

https://fieldguides.fieldmuseum.org/sites/default/files/rapid-color-guides-pdfs/butterflyguide_new.pdf

Overwintering: Purplish Copper and others

<https://naturemuseum.org/2013/02/where-do-butterflies-go-in-the-winter/>

Lawn/Turf

- 🔗 <https://scienceline.org/2011/07/lawns-vs-crops-in-the-continental-u-s/>
- 🔗 <https://freakonomics.com/podcast/how-stupid-obsession-lawns/>

Leafblowers

- ◉ <https://freakonomics.com/podcast/how-stupid-obsession-lawns/>
- ◉ <https://evanstonroundtable.com/2020/03/23/whats-wrong-with-leaf-blowers/>
- ◉ Calif Air Board:
https://ww3.arb.ca.gov/msprog/offroad/sm_en_fs.pdf?_ga=2.131130185.790829697.1614797622-211081801.1577464984





Questions?

Habitat@NaturalHabitatEvanston.Org

Visit our webpage at
NaturalHabitatEvanston.Org

Why Preserve Native Trees and Shrubs, and Plant More? April 29, 6:30-7:30pm. Register and Get Link

Here <https://docs.google.com/forms/d/e/1FAIpQLSe7gAGOoxeJ1PqtGJtmCoDiBPbtFb8yxkxQdpj5Q28g6Btjvw/viewform>

