

[View this email in your browser](#)



## Bee Friendly Gardening

A Program of Pollinator Partnership

January 2025



### Do You Have a Bird-Friendly Home?

Over the last half-century North America has lost three billion birds, which equates to 29% of their abundance in 1970, signaling a “pervasive and ongoing avifaunal crisis[1]”. To think about that another way, that’s one of every four birds lost in less than your lifetime. Of the direct anthropogenic (or human-influenced) causes of bird mortality[2], collision with man-made structures is second only to predation by cats (which kill between 105-348 million birds in Canada each year[2]) and 1.3-3.9 billion birds annually in the United States[4]). Building strikes are responsible for a documented 381 million – 1.3 billion bird deaths in North America every single year[5,6]. But those are likely grossly underestimated figures; data from wildlife rehabilitators demonstrate that, of birds that initially survive a collision, ultimately 60% succumb to their injuries – and these weren’t accounted for in those earlier estimates[7]. Forty-four percent of the mortality associated with window strikes is residential, meaning our homes are literal bird death traps; the average building kills between one to 10 birds per year[8]. Birds fly into windows primarily because they can’t see glass as a barrier and often mistake the reflection of the sky or nearby greenery in the window for open space, leading them to fly directly into it. The ruby-throated hummingbird is the predominant pollinating bird of the eastern United States. A 2020 study in Conservation Biology found that they were among the 10 avian species most vulnerable to window strike mortality[9]; similarly, a monitoring program by Birds Georgia found ruby-throated hummingbirds to have died more frequently due to window strikes than any other species[10].



Tim O’Connell – Ruby-throated hummingbird killed from building collision

It is important to note that we can all take steps to improve the situation for hummingbirds and the rest of our feathered friends by alleviating one human-created threat that they face. Here are some tools to empower you to take action:

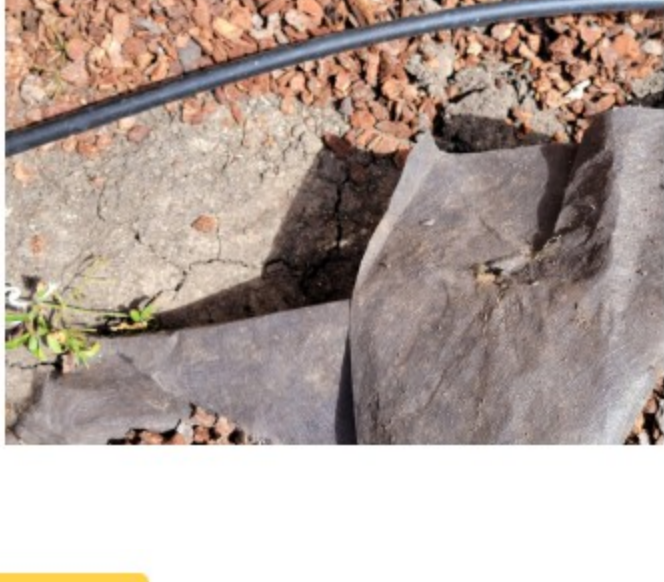
1. If you find a bird that has collided with a window, report it at <https://dbird.org> (please wear gloves if handling the bird).
2. Use [these toolkits](#) to make any space more bird friendly.
3. Modify the windows on your own home to eliminate bird strikes – you are certain to find a method that works for you, no matter your aesthetic and budget, by exploring either [this site](#) or [this comparison chart](#).
4. Finally, read this first-hand account, complete with photos, of someone who used some of these techniques to modify their own windows to great success!

READ ARTICLE

### The Perils of Landscape Fabric

Alison Shadwell-Williams – Garden Designer, Royal Horticultural Society Level 2 and graduate of London College of Garden Design; [Shadwell-Williams Design Studio](#)

Landscape fabric is considered a low-maintenance, long term solution for weed control amongst many home gardeners and garden maintenance companies. It is marketed as a permeable, durable material that prevents weeds from growing throughout the garden. But what is it and is it good for the garden?


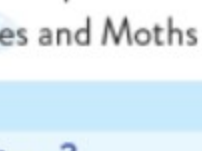



READ ARTICLE

### North American Pollinator Protection Campaign Lepidoptera Task Force

The Lepidoptera Task Force is one of ten task forces associated with the North American Pollinator Protection Campaign (NAPPC). NAPPC’s mission is to encourage the health of resident and migratory pollinating animals in North America, and brings together a growing, collaborative body of more than 170 diverse partners including respected scientists, researchers, conservationists, government officials, and dedicated volunteers. This task force focuses on the role all Lepidoptera (moths and butterflies) serve as both diurnal and nocturnal pollinators. Check out some of the resources they have made!

LEPIDOPTERA ID GUIDE

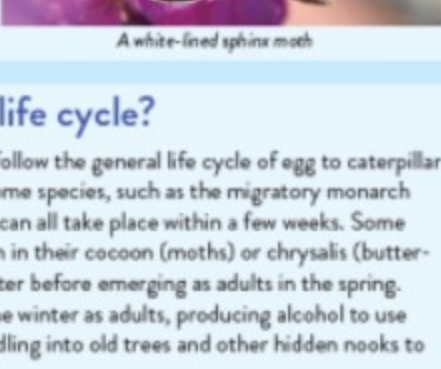


Lovely Lepidoptera

Pollinating Butterflies and Moths

### What are Lepidoptera?

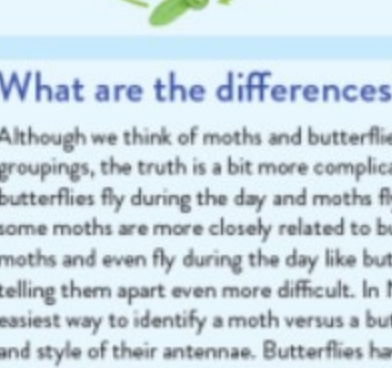
Moths and butterflies belong to the same biological group, Lepidoptera. Globally 180,000 species of Lepidoptera have been described, but considering we discover many new species each year, it's estimated that global species are closer to 300,000 to 500,000. The vast majority of these are moths, as scientists estimate there are ten times more moth species than butterfly species.



*Arctia flava* (glow moth)

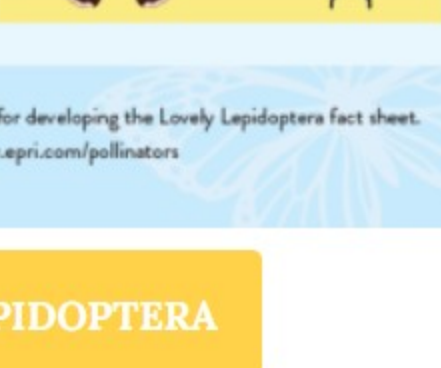
### What is their life cycle?

Moths and butterflies follow the general life cycle of egg to caterpillar to pupa to adult. For some species, such as the migratory monarch butterfly, these stages can all take place within a few weeks. Some species typically spend their entire lives in a physical (diurnal) host for the whole winter before emerging as adults in the spring. Other species spend the winter as adults, hibernating, able to use fat and freeze and huddling into old trees and other hidden nooks to keep warm.



### What are the differences between moths and butterflies?

Although we think of moths and butterflies as distinct animal groupings, the truth is far more complicated. In general, butterflies fly during the day and moths fly at night. However, some moths are more closely related to butterflies than to other moths and even fly during the day like butterflies, which makes telling them apart even more difficult. In North America, the easiest way to identify a moth versus a butterfly is by the shape and style of their antennae. Butterflies have clubbed antennae in North America, and moths have feathery or comb-like antennae.



VS.

EPRI would like to acknowledge the support of Pollinator Partnership for developing the Lovely Lepidoptera fact sheet. Learn more at [www.pollinator.org](http://www.pollinator.org) and [www.epri.com/pollinators](http://www.epri.com/pollinators).

LIGHTS OUT FOR LEPIDOPTERA

# LIGHT POLLUTION

## HURTS POLLINATORS

Nighttime light pollution is an increasing worldwide problem. Countless flowers are co-dependent on nocturnal pollinators. Pollinators are in decline and being harmed by artificial lighting.

### NOCTURNAL POLLINATORS

Moths, including sphinx or hawk moths, are especially common and diverse nocturnal pollinators. There are also many other animals that pollinate flowers at dawn and dusk and into the night, including species of bats, beetles, bees, and other insects.

### FLIGHT-TO-LIGHT BEHAVIOR

Nocturnal pollinators use natural light from the stars and moons in the night sky to navigate. This light-seeking behavior draws them to artificial light where they become confused and trapped.

### HOW IT HARMS POLLINATORS

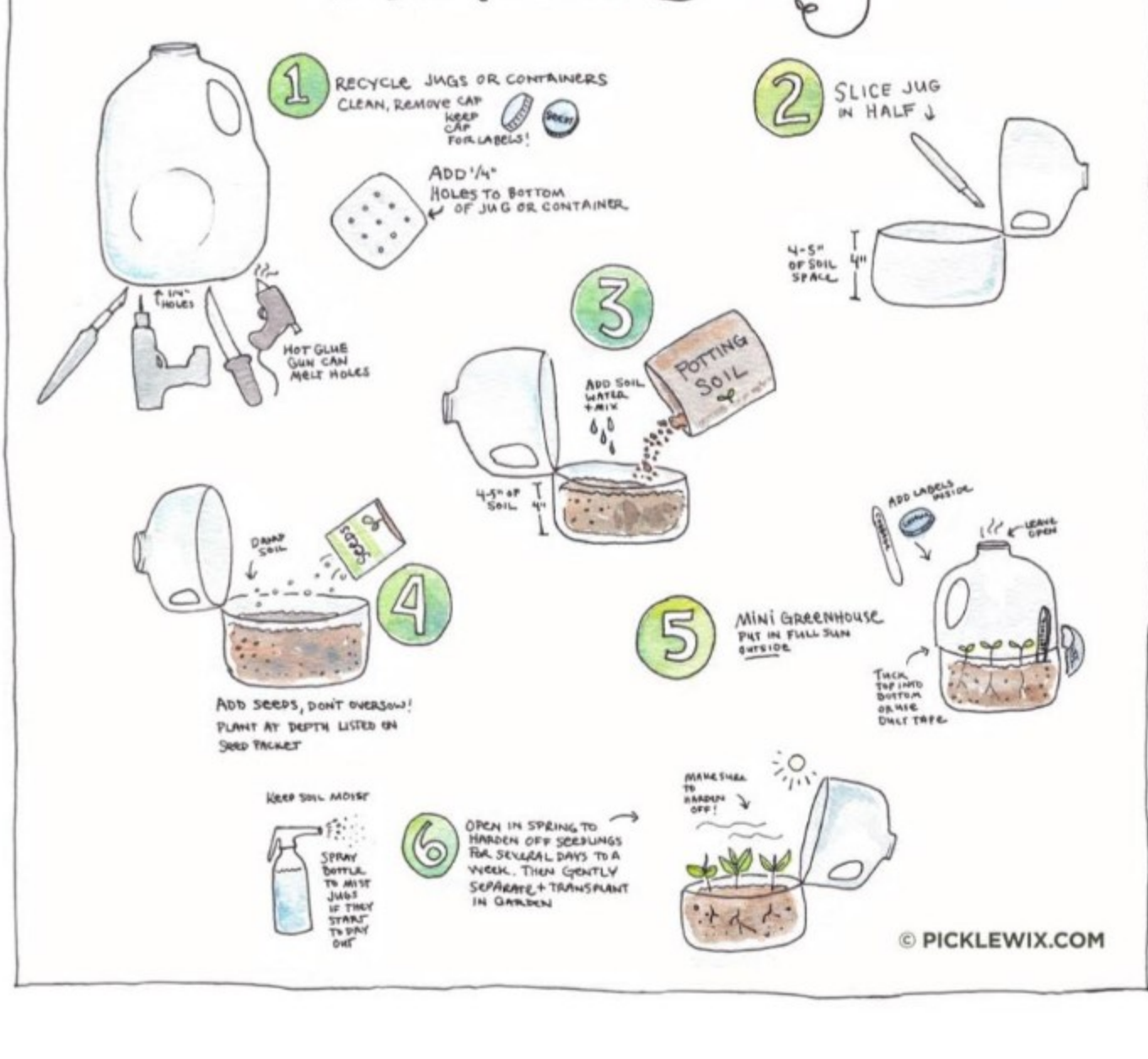
Every light becomes a feeding station for predators of pollinators. Artificial light leaves pollinators exposed, making them easier to spot and reducing their ability to see these predators. This risk factor is a major source of decline in population numbers for nocturnal pollinators. For moths, current estimates range from a 30% to 40% decline globally within the past few decades, with light pollution increasing annually.



FIND OUT MORE

### Grow Your Own Native Plants

When you [create a pollinator garden](#), there are two primary methods for growing plants – you can sow seeds directly in the ground, or you can start with plants. Seeds can offer great coverage of an area for a lower cost than plants. However, they will take a bit more time to establish. Plants are more expensive than seed but can provide a beautiful habitat right away. One cost-effective way to create a pollinator garden is to grow your own seeds into plants. A tried-and-true method for doing this is via the milk jug method. Although different sources might have nuanced differences in the setup, the general idea is the same – create a mini-greenhouse out of a translucent plastic milk jug and allow your seeds to cold stratify through the winter, germinating in spring and providing you with an inexpensive source of plants for your new pollinator garden! This wonderful graphic was shared by BFG member Holli Porter with Seeds to Community Washtenaw. Now is the time to get your seeds going – happy planting!



### Pollinator Steward Certification

Registration Closes 2/1/2025



Fellow BFG member and Certified Pollinator Steward Anya Peters was asked, in an interview with P2's Outreach and Education Specialist Anthony Colangelo, whether she would recommend the PSC Program to others:

"I would, and have, recommended this program to many others. I often find myself reviewing the notes I took in this course to remind myself of information or to find something specific (is that a fly or a bee?). This program is so accessible since the modules do not have to be viewed live as they are recorded, and the deadlines are generous." Anya's incredible work to help pollinators, as well as the actions taken by all of our Certified Pollinator Stewards, is truly inspiring and motivating. This course is ideal for home gardeners, land managers (large and small), farmers, and anyone that wants to do more to support pollinators. Join our growing community of Certified Pollinator Stewards! Register and learn more by visiting our website at <https://www.pollinator.org/psc>.

ANYA'S INTERVIEW

### Project Wingspan Community Connections A Midwest Volunteer Opportunity

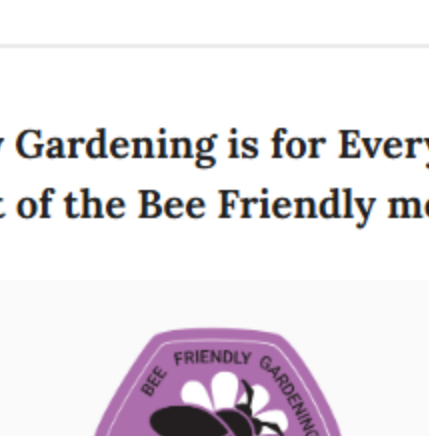
Project Wingspan: Community Connections is a volunteer-led native seed collection project active in Ohio, Illinois, Iowa, and Indiana. Through this effort, Pollinator Partnership oversees the collection of dozens of pounds of local ecotype wildflower seed each year, and distributes cleaned seeds and plugs grown from them to habitat sites throughout the project area at no cost. Project Wingspan is currently seeking volunteer seed collectors, collection locations, and team leads, as well as habitat sites who are interested in filling out our online habitat survey to participate in a habitat acreage count and be eligible for plant material awards. Find out more at the link below.

POLLINATORS AND COMMUNITIES

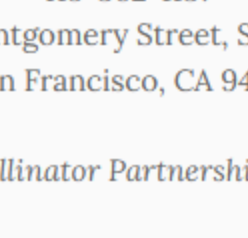
#### Notable Dates:

- January 25 - National Seed Swap Day
- February 24–28 - National Invasive Species Awareness Week
- February 21 - [Pollinator Steward Certification](#) begins (register [here](#)!)
- February 14 - Valentine's Day
- February 5 - Western Monarch Day
- February 3 - Feed the Birds Day
- February 2 - World Wetlands Day
- February - National Bird Feeding Month

Thank you from Sara Wittenberg, your Bee Friendly Gardening Manager



Bee Friendly Gardening is for Every Landscape!  
Be a part of the Bee Friendly movement.



[bfg@pollinator.org](mailto:bfg@pollinator.org)

415-362-1157

600 Montgomery Street, Suite 440

San Francisco, CA 94111

Copyright © 2024 Pollinator Partnership. All rights reserved.