

Virtual Firefly Lesson: Creating Firefly Habitat in your Yard

In this lesson, participants will learn about conservation efforts and how to create healthy firefly habitat at home.

Fireflies are magical little creatures. Over the years, the populations of our favorite blinking beetles have dropped significantly, which leads us to this question: Why are fireflies disappearing? We know 2 factors that are contributing to population decline: habitat loss and light pollution. If you want to create a firefly haven in your yard, follow the simple steps below.

Firefly Habitat: Fireflies are nocturnal and utilize different spaces during the day and night. During the day they find shelter in leaf litter and fallen trees. They spend most of their life as larvae, some for even up to 2 years! During this stage of their lives, they rely heavily on leaf litter and other dark, damp spaces to survive. If it is safe to do so at your home, leave dead, fallen, or decaying trees on your property to create habitat for not only fireflies, but for other insects and animals as well.

At night, they make their way up tall, native grasses, flowers, and trees so they have a place to communicate by flashing. This is why fireflies prefer meadows and meadow-like habitats. Next time you are choosing flowers for a garden think about adding some native plants. You can even dedicate a part of your yard to fireflies by letting the grass grow tall and turning it into a meadow. If you have enough space, you can plant shrubs or native trees to create shelter.



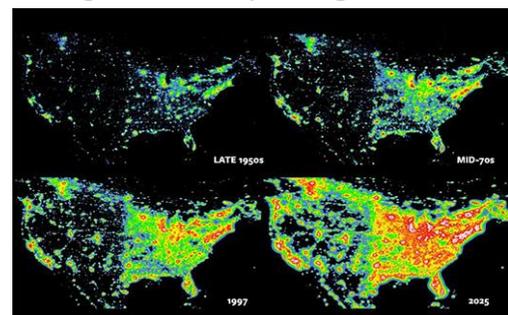
Photo from [Explore](#)

Vernal pools, marshy areas, and shallow, still-standing waters are also important for fireflies. These areas are where they lay their eggs and start the next cycle of fireflies! If you can, consider creating a manmade pond to give fireflies and other animals, including salamanders and frogs, a safe place to lay their eggs. You could also install a rain garden. Check out information on rain gardens [here](#) and [here](#).

Remember: Pesticides kill fireflies! Make sure you are using natural fertilizers and stay away from chemicals including pesticides and herbicides. They are not only dangerous to fireflies, but the *entire* food web. We know that fireflies use leaf litter and plants as their homes, making it our job to keep these spaces safe and healthy.

Light pollution: Fireflies are more active at night because they communicate with each other by flashing. They need dark skies to attract a mate, but because of porch lights and building lights being kept on all night, it makes it difficult for fireflies to communicate. Another way to create healthy firefly habitat at your home is to close your blinds and turn

Light Pollution Maps Throughout Time



Maps from [Firefly Conservation and Research](#)



your porch lights off at night. A lot of people also choose to install motion sensor lights outside for safety, rather than keeping a light on all night.

Ways you can create healthy firefly habitat:

1. **Refuse** the use of pesticides and other poisonous chemicals on your lawn.
2. Create space for native plants in your yard. Be sure to find species that bloom throughout different parts of the year and have different colors and shapes. Also consider planting some shrubs and trees.
3. Let sections of your lawn grow tall.
4. Leave leaf litter and decaying plant matter alone.
5. Create water features in your yard, like a rain garden, pond, or stream.
6. Be sure to close your blinds at night to block out any light that would shine outside. Also, turn off outside lights or replace them with motion sensor lights.
7. Educate your family, friends, and neighbors about how to help fireflies!

Additional Resources:

- [Xerces Society Plant List](#)
- [Native Plant Society of NJ](#)
 - [Native Species Lists](#)
 - [Where to Buy Native Plants](#)
 - [Rain Gardens](#)
- All About Fireflies:
 - [Firefly.org](#)
 - [Xerces Society](#)
- [How to be Dark Sky Friendly](#)