## THE OUTSIDER

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# POLLINATORS AND OUR FOOD SYSTEM: A SYMBIOTIC RELATIONSHIP WORTH PRESERVING

June is recognized as Pollinator Month, an acknowledgment of the critical role pollinators play in our ecosystems and food systems, but their contribution is enjoyed year-round. An astonishing 80% of our flowering plants rely on animals for pollination. The diversity of food we enjoy is inseparable from the pollination services provided by animals, primarily bees, butterflies, and moths. These small creatures play an outsized role in supporting the natural world, they are keystone species in our ecosystems.

Pollinators are the foundation of food and ecosystems. They facilitate the reproduction of wildflowers, which then support a myriad of other creatures by providing essential habitat and food sources. Native plants produce extensive root systems that help filter stormwater, build and retain soil, prevent erosion, and stabilize the environment.

#### **ON THE PLATE**

In the context of our food system, it is often stated that pollinators are responsible for every third bite of food we enjoy. While grains like corn, wheat, and rice are wind-pollinated, many fruits, vegetables, and nuts depend on animals for complete or partial pollination. Without pollinators, some plants would fail to produce any fruit, while others would produce smaller and misshapen fruit. This directly affects our food systems and diet. Without pollinators, many of the foods we enjoy would not be available. For those that are still available, the quality would be diminished while prices would be higher.



College of Agricultural, Consumer and Environmental Sciences University of Illinois, U.S. Department of Agriculture, Local Extension Councils Cooperating. University of Illinois Extension provides equal opportunities in programs and employment To illustrate the impact of pollinators, consider the difference in a sample breakfast with and without pollinators. A breakfast of toast with butter, yogurt with honey, eggs, fruit including berries, melon, apples, and peaches, a glass of milk or juice, and a cup of coffee would be reduced to dry toast, eggs, and a glass of water without the ecosystem services of pollinators. The stark contrast between these two meals emphasizes the importance of pollinators in providing diversity and richness of foods we currently enjoy.

#### WITH POLLINATORS

#### WITHOUT POLLINATORS





#### **HOW TO HELP**

In the Midwest, the primary pollinators are bees, butterflies, and moths. Of these three species, bees are the most efficient and effective pollinators. Butterflies contribute to pollination efforts and add an exciting aesthetic to the landscape when spotted fluttering from bloom to bloom. Moths are crucial pollinators that are often overlooked due to their nocturnal activities.

Given the critical role of pollinators, it is imperative that we take action to support and protect them. Here are actions we can take to support pollinators:

• Create Habitat: Incorporating more flowers into the landscape is a simple yet effective way to provide food and shelter for pollinators. Yards including urban decks and patios, gardens, parks, roadsides, and trails can be transformed into pollinator-friendly spaces, creating habitat corridors that facilitate insect movement and foraging.



#### GROWING VOCABULARY

Keystone species: An organism that is the basis on which an entire ecosystem depends. Without them, systems would fail.



- Reduce Pesticide Use: Embrace the presence of insects in your garden, even if it means tolerating some leaf damage. Many insects, including those that feed on plants, play a crucial role in the ecosystem and may help control pest populations. When pest damage exceeds acceptable levels, consider using a pesticide as a last resort. Organic, mechanical, and cultural practices are alternative methods that can help minimize harm to beneficial insects. When pesticides are necessary, apply them in a manner in accordance with the label.
- Visit the Illinois Pollinators website for more information and resources on how to support pollinators. Use the QR code here for fast access.

By creating habitat and reducing pesticide use, we can make significant strides in supporting pollinators. These keystone species help sustain our ecosystems and food systems which contribute to our comfort and pleasure. Awareness and thoughtful land management can help ensure that pollinators will thrive and provide ecosystem services for years to come.





Syrphid Fly on daisy



Katydid wasp on rattlesnake master



Monarch and skipper on tithonia

### **OUTSIDER ACTION**

#### Try these activities to be more of an Outsider

- Visit the Illinois Pollinators website. https://illinoispollinators.org/pollinator-plant-selector
- Visit a garden at night to observe nocturnal pollinators.

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