About the Birds and the Bees and the Flowers and the Trees: Native Plants to Keep the World Humming

If it seems that that there are a lot fewer butterflies, bees, and birds than some years ago. You are right. Monarch butterflies have declined by at least 90% in the past 25 years. And we've lost approximately 30% of the birds in the U.S. There are several reasons for this, but there is good news! We can help bring some of them back. It's as easy as planting native plants, trees and/or shrubs that serve as food sources, nesting sites and hosts to the pollinators.

Here's more good news. Native plants don't need a lot of pampering like a lot of the non-native plants do. It's all about knowing what to plant to get the best bang for your buck. Native plants are becoming more commercially available too. Some of the information sources in this article provide lists of native plant nurseries. Be aware that some commercial growers may use pesticides which can kill the very insects we want to attract. Organic plant sellers and native plant sellers are usually safe. Burpee and Gurney sell pesticide-free seeds. Some commercial growers like Monrovia, River Bend and Wenke brand plants are pesticide-free. Check plant labels for the grower or ask the seller to be sure what you want to buy is safe.

We hear a lot about pollinators, but who are they? Bees, moths, wasps, butterflies, flies, and beetles act as pollinators. We often think that planting flowers will make the biggest impact, but to help them – especially bees, butterflies, and moths – consider that they need more than just nectar from flowers. They also need nesting sites, such as bare soil and piles of brush or leaves of specific trees. Food for their larvae is needed in the form of host plants. Some native plants do double duty as both hosts and sources of nectar. A few examples are wild geranium and goldenrod, big blue stem grass, arrow wood shrub, native cherry, and native maple trees. The Xerces Society has a great feature – Bring Back the Pollinators - for more help on how to go about helping our tiny friends (<u>http://www.xerces.org/bring-back-the-pollinators</u>).

There are also what are called "keystone plants". According to the National Wildlife Federation,

"Keystone plants are native plants critical to the food web and necessary for many wildlife species to complete their life cycle. Without keystone plants in the landscape, butterflies, native bees, and birds will not thrive. 96% of our terrestrial birds rely on insects supported by keystone plants." (<u>https://www.nwf.org/Garden-for-Wildlife/About/Native-Plants/keystone-plants-by-ecoregion</u>).

Oak trees are the champions of keystone plants supporting 400-500 different pollinators. Coreopsis and black-eyed Susan are also great plants. Check out this video by author Dr. Douglas W. Tallamy at <u>https://www.youtube.com/watch?v=O5cXccWx030</u> to hear more about keystone plants.

There are also plenty of resources to help you find and buy native plants that make great substitutes for non-native plants. Dr. Tallamy has written a number of books. Also, try the U.S. Forest Service for help

(https://www.fs.usda.gov/wildflowers/Native_Plant_Materials/index.shtml). The Tennessee Native Plant Society (https://www.tnps.org/) and other state native plant societies also provide a great deal of information. The National Wildlife Federation lets you enter your zip code to search for native plants for your area (nwf.org). Likewise, the Audubon Society has a very similar search feature (https://www.audubon.org/native-plants). You can also use a search function at the Xerces Society (https://xerces.org/pollinator-resource-center). You do not have to join the groups or pay for searches. These resources are FREE! What about the birds? Birds feed caterpillars and other insects to their young. It takes a lot of caterpillars to feed a brood. If we support the insects, we are also helping feed birds. More food for baby birds, more birds in our future. How great is that?

It's not just about the birds and the bees and the butterflies. It's about us, too. Without pollinators, some of our food crop production would suffer. In fact, the cocoa plant must be pollinated to produce the cocoa bean. No pollinator, no chocolate!

We could go further and create monarch butterfly waystations, or wildlife habitats. But these are stories for another time. Even if we all planted just a few native plants, we could make a difference. The Master Gardeners are in. Join us!

Resources used for this article

Bringing Nature Home, Douglas W. Tallamy

Rosenberg et al., "Decline of the North American avifauna", *Science* 366, 120–124 (2019).

Commercially Available Host Plants for Butterflies and Moths, EASTERN TEMPERATE FORESTS ECOREGION, National Wildlife Federation pamphlet. Available at: https://www.nwf.org/-/media/Documents/PDFs/Garden-for-Wildlife/Eco-Regions/Eastern-Temperate-Forests_Plant-List.ashx?la=en&hash=616D5224A08F6939620441CFECE9BA90B9496712

Pollinator Partnerships, https://pollinator.org/pollinated-food

Pollinators, Chocolate Midge, National Park Service. <u>https://www.nps.gov/articles/chocolate-midge.htm</u>