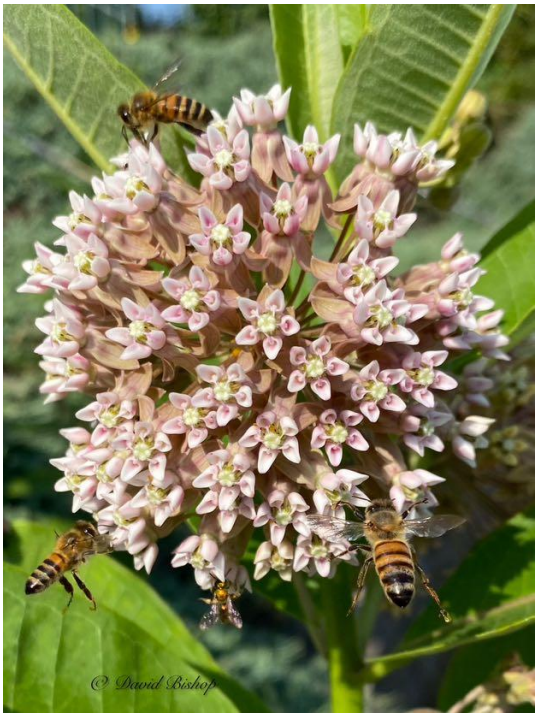
About the Birds and the Bees and the Flowers and the Trees: Native Plants to Keep the World Humming

By Kate O'Lenic. Master Gardener. Originally published in the Johnson City Press and adapted with permission for use by the Appalachian Habitat Alliance

You may have noticed that there are a lot fewer butterflies, bees and birds than some years ago. In fact, 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 here's some 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.



Common Milkweed & Honeybees
photo by David Bishop

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.

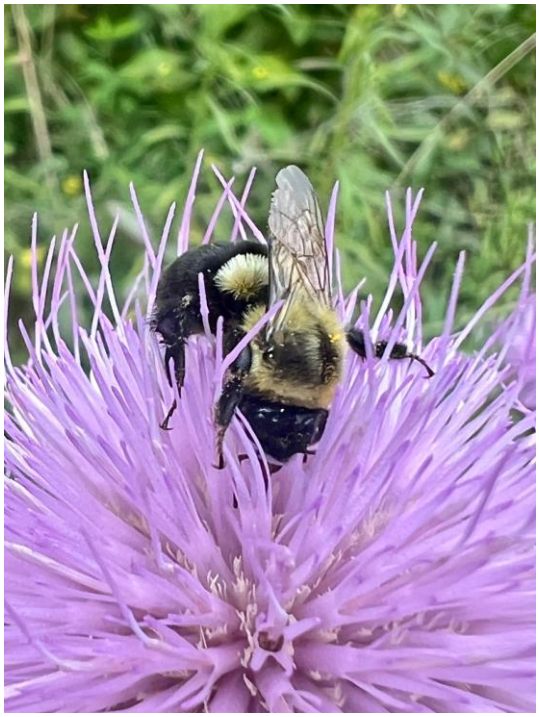
Now about these wonderful pollinators: Who are they? Bees, moths, wasps, butterflies, flies and beetles act as pollinators. To help them, especially bees, butterflies and moths, they need more than just nectar from flowers. They need nesting sites, such as bare soil and piles of brush or leaves or certain 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 (http://www.xerces.org/bring-back-the-pollinators).


Monarch nectaring on Goldenrod
photo by Heather Hendrix

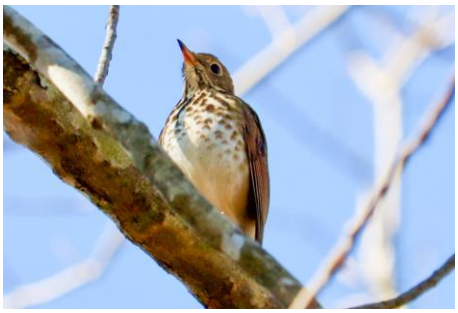
There are also what are called "keystone plants". "*Keystone plants are native plants critical to the food web and necessary for many wildlife species to complete their life cycle. Without keystone plants in the landscape, butterflies, native bees, and birds will not thrive. 96% of our terrestrial birds rely on insects supported by keystone plants*." (from National Wildlife Federation, Keystone Native Plants, Eastern Temperate Forests - Ecoregion 8.)
Oak trees are the champions of keystone plants supporting 400-500 different pollinators. Coreopsis and black-eyed Susan are also great

plants. The National Wildlife Federation is one source for more information (https://www.nwf.org/Garden-for-Wildlife/About/Native-Plants/keystone-plants-by-ecoregion). You can watch a video by Dr. Douglas W. Tallamy, too, at https://www.youtube.com/watch?v=O5cXccWx030.

AND, there are 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.fed.us/wildflowers/Native_Plant_Materials/). 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 don't have to join the groups or pay for searches. They are FREE!



Bumblebee on thistle photo by Heather Hendrix



Hermit Thrush, photo by Heather Hendrix

You may wonder why all this is about bees, butterflies and moths. What about the birds? Well, 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 can help feed the birds. More food for the 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, those are stories for another time. Even if we all planted just a few native plants, we could make a difference. I'm in. Join me!

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. https://www.nps.gov/articles/chocolate-midge.htm