Build A Bee House

Solitary bees, unlike honey bees, do not live in a social structure, or hives. The two primary cavity-nesting, solitary bees in Tennessee are Mason and Leaf-Cutter Bees. You can encourage bees to nest locally by providing a 'Bee Hotel'. They can take many shapes and sizes, and include a variety of materials, but some of the basic things to know are as follows:

- Use UNTREATED wood for the frame
- Locate in a secure, dry place that receives morning sun to awaken and warm your bees
- Position at eye level, about 5-7 'from the ground
- Locate within 100' of a pollen source
- Protect from birds with 3/4"-1" chicken wire and away from a bird feeder
- Use paper tubes or reeds of 1/4" to 5/16" diameter, NOT BAMBOO
- Do not move until November
- To prevent disease, open tubes and harvest healthy cocoons in the fall
- Refrigerate cocoons until spring release
- Never spray insecticides near your bee house



Resources to buy or build your own bee house:

https://crownbees.com/raise-bees/ http://www.foxleas.com/make-a-bee-hotel.asp

Top 5 Trees for TN Pollinators

1-Native Oaks- Quercus spp.
2-Southern Magnolia- Magnolia grandiflora
3-Redbud- Cercis canadensis
4-Blackgum- Nyssa sylvatica
5-Tulip Poplar- Liriodendron tulipifera



Resources:

- TN Dept of Agriculture Bee Information
- TN Wildlife Resources Agency Pollinator Habitat Assistance
- US Dept. of Agriculture Pollinator Assistance Programs
- The Xerces Society
- Pollinator Partnership
- US Fish & Wildlife Service-Pollinators
- <u>USDA Natural Resources Conservation Service Insects</u> <u>& Pollinators</u>
- <u>US Fish & Wildlife Service- Attracting Pollinators to You Garden</u>
- <u>USDA Forest Service- Attracting Pollinators to Your</u>
 Garden Using Native Plants
- USDA Forest Service- Gardening for Pollinators
- <u>USDA Natural Resources Conservation Service-</u>
 Pollinator-Friendly Plants for Northeast United States
- The Xerces Society- Project Milkweed

Be a Friend to TENNESSEE'S POLLINATORS

Learn How You Can Help



POLLINATORS

are a diverse group of species which includes birds, bees, butterflies, bats and beetles. While feeding, they carry pollen from flower to flower which fertilizes plants. They are critically important to life and their numbers are in steady decline as a result of loss of habitat, pests and pathogens, exposure to pesticides and other stressors.

TDOT POLLINATOR HABITAT PROGRAM

is doing its part to help pollinators by building and maintaining pollinator habitat along Tennessee's 13,807 miles of roadways, welcome centers and rest stops.

New England Aster-

Aster novae-angliae

You Can Help Save Pollinators

Use native pollinator-friendly plants in your landscape. Shrubs and trees such as dogwood, blueberry, cherry, plum, willow, and poplar provide pollen or nectar, or both, early in spring when food is scarce.

Choose a mixture of plants for spring, summer, and fall. Different flower colors, shapes, and scents will attract a wide variety of pollinators.

Reduce or eliminate pesticide use in your landscape or incorporate plants that attract beneficial insects for pest control. Don't buy nursery plants that have been impregnated with pesticides.

Plant Milkweed. The Monarch butterfly population has declined by over 90 percent. Milkweed is the host plant on which they lay their eggs. Without milkweed, monarchs can't complete their life cycle.

Provide clean water for pollinators in a shallow basin with half-submerged stones for perches.

Support land conservation in your community by creating community gardens and green spaces to ensure that pollinators have appropriate habitat.

Protect Tennessee's Grasslands which provide native plants that offer nectar and pollen for bees, butterflies, hummingbirds and a wide variety of pollinators. Grasslands have diminished due to development by 90 percent, faster than any other ecosystem in North America.

Give Bees Nesting Places. There are 4,000 bee species native to North America and most of those don't form hives. Solitary female bees lay their eggs in tunnels or in sandy soil. You can offer such nesting spots by leaving tree snags on your property, by leaving bare patches of sandy soil, or by building or buying native bee houses.

Butterfly Milkweed-Asclepias tuberosa

Purple Coneflower-Echinacea purpurea