

Ways to improve our yards so they will support pollinators-birds, bees, and butterflies.

We can help pollinators. Their numbers are declining; but numerous federal, state, and local organizations are stressing that the help of homeowners and local groups can make a positive impact on the health of pollinator populations.

The United States Department of Agriculture says, “Without pollinators we don’t eat.”

Your garden choices can make a difference. Populations of insect pollinators and Monarch butterflies are in spiraling declines. The USDA is spending millions of dollars to help bees, and Monarch Watch is educating the public about the plight of the butterflies. Research can help you make educated decisions about pesticide use and neonicotinoids (their use is questionable). Err on the side of nature.

Bees There are 4000 native bee species in the U.S. They differ from wasps by having branched or plume-like bristled combs on their forelimbs for cleaning their antennae. Honeybees are not native to the United States, but many bees are. We have many native bees in Arkansas. One large family, Solitary bees, do not sting, are excellent pollinators, and are easy to attract to suburban yards. Improving a yard to attract bees does not encourage increased populations of Yellow Jackets, wasps, and hornets because they are not bees and are not drawn to bee friendly plants.

Butterflies are effective but overlooked pollinators. One butterfly, the Monarch, is of special concern. A good place to get general information and to monitor the Monarch’s migration is Monarchwatch.org

Butterfly basic information: Life span-winged 1-2 weeks-whole life span 6-8 weeks with some exceptions like Monarchs. Monarch’s 1st generation-March/April, 2nd generation-May/June, 3rd generation-July/August, 4th generation -Sept/October, if East of Rocky Mountains go to Mexico (a few go to Florida) if West of Rocky Mountains go to California to hibernate. They hibernate and the 4th generation wakes up and starts North -Feb/March where they mate and lay eggs on the way. The life cycle starts over.

Monarch butterflies are vulnerable to harsh weather and lack of food as they migrate. **Quote from Monarch Watch, “Every backyard can be an oasis.”** Monarchs can travel 3000 miles to their hibernation destination. They can fly 50 to 100 miles a day, they can take 2 months to complete the migration journey, they weigh a ½ gram (about the same as a small paperclip), they can’t fly in rain, they can flap their wings 300 to 720 times a minute, and they can fly as high as 11,000 feet on thermals.

Steps to make your yard more pollinator friendly.

3 Star* Basics: Food, Shelter, and Water - arrangement is important**

Plant in **tiers** using both **evergreen and deciduous** plants. Plant in **drifts** and vary colors and flower shapes.

For Bees -yellow, blue and purple with various flower shapes - clover, sage, salvia, oregano, lavender, ironweed, yarrow, yellow hyssop, alfalfa, Echinacea, bee balm, buttercup, goldenrod, English thyme, and flowering trees such as tulip poplar, tupelos, oranges and sourwoods.

For Butterflies-white, purple, pink, red, yellow, orange with **flat flowers** such as daises for landing to feed –use Lori Spencer’s book, Arkansas Butterflies and Moths, for all kinds of information including **host plants**, the caterpillar food. Plant milkweed, the only host plant for Monarchs-do not use pesticides for Milkweed Bugs. Butterflies appreciate **flat rocks and shelter from wind**.

for Hummingbirds- red or orange tubular flowers for sipping–Natives: cross vine, trumpet vine, cardinal flower, columbine, blazing star, red buckeye, beautyberry, tulip poplar, trumpet honeysuckle (not Japanese), iris fulva, Indian pink, beebalm, phlox, yucca and non–natives: begonia, canna, four-o-clock, impatiens, zinnia, lantana, butterfly bush and cleome.

Birds will come to eat the bees, butterflies, and other insects that visit your yard.

4 Star**Research and Supplemental Food, Shelter and Water**

Supplemental Food: For Birds-Black oil sunflower seed- #1 seed choice for birds from studies from Cornell University- Striped sunflower seed, milo, corn, and common “bird seed” mix attract blackbirds and pigeons.

For Hummingbirds-Insects (more protein than beef) are 60% of their diet-flowers vary in nectar from 10 to 80 calories/oz. Hummers prefer 32% nectar (sucrose, glucose, and fructose).

Do not use artificial sweetener or honey- New Jersey Tea plant (*Ceanothus americanus*) is appreciated by hummers.

Place feeders close to windows so hummingbirds do not hit the windows with force if scared.

1 part sugar/4 parts water-fill only the amount eaten in a couple of days (store remaining in refrigerator)

Most importantly, **keep feeders clean** using a 20% bleach solution to wash then rinse.

For Butterflies- same as for hummingbirds plus overly ripe fruit

Supplemental Shelter: Build butterfly, bird and bee houses with untreated wood according to plans from reliable sources. Use .org, .gov, .edu for information.

Supplemental water: you can use birdbaths and ponds with shallow areas. Birds, bees, and butterflies prefer running water so use drip systems, fountains, or misters.

5 Star***No pesticides and Go Native** (plants that were in area before Columbus). Use natives to tweak your landscape design when you replace existing plants. The plants at Witt Stephens and Audubon Arkansas have been evaluated for their suitability in a traditional urban landscape.

Natives provide better bird nesting as shown in a study using Chickadees. Chickadees weigh 1/3 of an oz. and average 6-8 babies that consume 78 caterpillars per baby for 16-18 days from 6am to 8pm. That is about 10,000 caterpillars per nest. Caterpillars are the energy efficient food of choice for most nesting birds. Oak trees are the most beneficial. **For Birds-Dust Bath:** Choose a good sunny location of about 4 feet in diameter away from bushes or other features that might allow predators to hide. Lift out any sod /weeds in the area and break up the soil beneath to a depth of 6 inches. To prevent weeds or grass from encroaching from the sides, line the perimeter with stone or some other edging. Fill the dust bath back up to ground level with fine

sand mixed with the soil. Remove any debris and add more sand as needed. **For Butterflies-Puddling:** Locate near existing butterfly plants that can be easily observed. Choose a shallow container such as a terra cotta saucer or a birdbath to contain your puddling. Fill the container with sand or soil avoiding potting soil with additives because butterflies can be quite sensitive to chemicals. Placing flat rocks in the puddling will provide landing spots. Keep the area moist by adding water each day until the surface is wet. Be patient and butterflies will eventually find your oasis.

NO Cats outside!

Little Rock is Zone 8a for plant selection.

Arkansas Butterflies and Moths by Lori A Spencer a must have

Trees, Shrubs, and Vines of Arkansas and Wildflowers of Arkansas both by Carl Hunter old but good

Arkansas Wildflowers by Don Kurz has excellent pictures

Bringing Nature Home by Douglas W. Tallamy as a gardener you need to know this info

Pine Ridge Gardens, 832 Sycamore Road, London, AR 72847 479-293-4359 source of native plants www.pineridgegardens.com

www.uaex.edu gives accurate info for AR

www.monarchwatch.org factual info, migration maps

www.arbirds.org Arkansas Audubon Society has a wonderful program-Bird Friendly Yards, that offers personal help and evaluation

www.si.edu Smithsonian has lots of info about all kinds of insects

www.wildflower.org Lady Bird Johnson Wildflower Center

www.plants.usda.gov plants database/USDA plants

www.missouribotanicalgarden.org Missouri Botanical Gardens good all around source

www.birds.cornell.edu, www.allaboutbirds.org Fabulous site Cornell University

fws.gov/pollinators/ US Fish and Wildlife site for pollinators

Pollinator Partnership pollinator.org/pollinators go to drop down box- select Planning Guide

Pollinator Partnership also has a free app BeeSmart-Pollinator Gardener

