



# Residential Pollinator Habitat Checklist

Pollinators need habitat in abundance and every new patch of ground planted with native flowering forbs, herbs, vines or fruits and vegetables can contribute to their health, our health, and the health of our gardens, crops and environment. The checklist below provides some helpful tips on planning, designing, installing and maintaining your own backyard Pollinator Habitat.

Plan Your Habitat	
	<p>Select a Site for a Pollinator Habitat</p> <ul style="list-style-type: none"> <li>• Review your yard and identify a location for your Pollinator Habitat. Measure the general dimensions of the area.</li> <li>• Ideal pollinator habitat receives full sun, 20% shade or less per day.</li> <li>• Sites in part shade to heavy shade should be designed with native pollinator plants adapted to such shade conditions.</li> </ul>
	<p><b>Create a Plant Palette</b></p> <ul style="list-style-type: none"> <li>• Take time to thoroughly research the best native pollinator plants for your area of Tennessee and for your specific site conditions.</li> <li>• Be sure to use the TN-ERA Tool to help select a diversity of plants, including both native forbs and grasses/sedges.</li> <li>• Provide a continuous period of bloom by selecting a diversity of forbs blooming at different times throughout the year.</li> <li>• A good rule of thumb is to plant at least 3 spring, 3 summer, and 3 fall blooming species.</li> <li>• Long-flowering herbs and garden staples (e.g. squashes, melons, tomatoes, strawberries, raspberries, and blackberries) can also be incorporated into your pollinator plant palette.</li> </ul>
	<p><b>Create a Planting Plan</b></p> <ul style="list-style-type: none"> <li>• A plan is critical to determining plant/seed quantities as well as the desired aesthetic of your pollinator habitat.</li> <li>• For most residential sites, a planting plan can be created with plant plugs in mind.</li> <li>• Designing with plugs is desirable because it allows the designer to position plants in a manner that takes mature plant height and spread into account.</li> <li>• Often in a residential setting, a planting looks best when shorter species are planted in front along a path and taller species are planted in back along a fence.</li> </ul>
Site Preparation	
	<p><b>Eliminate Undesirable, Invasive Non-native Plants</b></p> <ul style="list-style-type: none"> <li>• If possible, eliminate undesirable, invasive non-native plants within a 50 foot proximity of the desired pollinator site.</li> </ul>
	<p><i>Option A</i></p> <ul style="list-style-type: none"> <li>• If renovating a former garden or planting bed, eliminate undesirable species by hand, pulling out the entire plant, including roots.</li> <li>• Compost plants in your yard or dispose of plants off-site.</li> </ul>
	<p><i>Option B</i></p> <ul style="list-style-type: none"> <li>• If weeds are prolific and hand pulling is not practical, apply a non-selective glyphosate herbicide on vegetation.</li> <li>• Note, three or more herbicide sprayings over a three month period may be necessary to fully kill undesirable plants.</li> </ul>
	<p><i>Option C</i></p> <ul style="list-style-type: none"> <li>• Remove lawn area by cutting and removing or scalping and spraying.</li> <li>• Rent a sod cutter to cut and remove sod and roots</li> <li>• Use the cut sod to cover poor performing lawn areas or place into a compost pile for later garden use.</li> <li>• Scalp-mow lawn area to ground with low mowing blades and/or string trimmer to expose soil.</li> <li>• Spray area with glyphosate herbicide, wait two weeks and add a follow up spray as needed. Time planting per herbicide manufacturer directions. If weeds are still prolific after planting, mulch open ground with two layers of newspaper prior to shredded hardwood bark or pine straw mulch to suppress.</li> </ul>
Planting & Maintaining	
	<p><b>Planting with Seed</b></p> <ul style="list-style-type: none"> <li>• If planting with seed, generously broadcast the seed by hand over the site.</li> <li>• Once the seed has been broadcast, tamp it down by foot or other means to ensure it is in firm contact with the soil.</li> <li>• Seeding may take place at various times of the year, however it is often best done in winter and early spring.</li> <li>• Note, many seeds require a prolonged period of cold/moist exposure in order to germinate.</li> </ul>
	<p><b>Planting with Plugs</b></p> <ul style="list-style-type: none"> <li>• If planting with plugs, consult your planting plan and position species accordingly.</li> <li>• Position plugs at a typical spacing appropriate to the mature growth of plants.</li> <li>• For most pollinator plants, a spacing of 18-24" is ideal.</li> <li>• Dig a hole slightly deeper and wider than the plug itself.</li> <li>• Plant the plug in the hole, holding up to match surrounding grade and fill any voids or exposed pockets with extra soil.</li> <li>• Plugs are best planted in late spring to early summer when temperatures are warm but not hot.</li> </ul>

# Residential Pollinator Habitat Checklist *Continued*

	<b>Watering</b> <ul style="list-style-type: none"> <li>Pollinator habitat established with plugs will require weekly watering throughout the first growing season.</li> <li>Water the soil directly beneath plants during morning hours when temperatures are cool.</li> <li>During drought conditions more frequent watering may be necessary.</li> </ul>
	<b>Mulching</b> <ul style="list-style-type: none"> <li>A 2-inch layer of shredded hardwood bark, aged leaf or pine straw mulch can be added to pollinator habitat during its first year of establishment.</li> <li>Mulch aids in retaining soil moisture and suppressing weed growth.</li> </ul>
	<b>Weeding</b> <ul style="list-style-type: none"> <li>With the establishment of any pollinator habitat, the emergence of weeds is to be expected.</li> <li>During the first year it is critical that weeds be monitored and removed.</li> <li>In most cases, weeds can be kept in check through hand pulling, however if weeds are prolific, an herbicide spraying may be necessary.</li> </ul>
<b>Additional Habitat Components</b>	
	<b>Snags</b> <ul style="list-style-type: none"> <li>Dead trees, stumps, logs, and other forms of woody vegetation provide for excellent pollinator nesting habitat.</li> </ul>
	<b>Exposed Soil</b> <ul style="list-style-type: none"> <li>Native bees will often nest underground in areas where the soil is left slightly exposed.</li> </ul>
	<b>Landscape Rocks</b> <ul style="list-style-type: none"> <li>Protection, nesting and minerals are resources afforded pollinators through the addition of boulders, rocks and gravel.</li> </ul>
	<b>Water</b> <ul style="list-style-type: none"> <li>As with most forms of life, pollinators require abundant water resources.</li> <li>Water can be incorporated with the addition of a bird bath, pond and even shallow depression where rainwater pools for extended periods.</li> </ul>
	<b>Bee Boxes</b> <ul style="list-style-type: none"> <li>Native Mason bees make their nests in small cavities, often those found in wood.</li> <li>To create a bee box, drill multiple holes of varying diameters and depths an inch or more apart within a wood log or untreated wood block.</li> <li>Place the bee box at a height of approximately 6 feet and in an area that is somewhat protected from the elements.</li> <li>Ideally, your bee box will be situated in area that receives morning sun.</li> </ul>
<b>Preparing for Next Year</b>	
	<ul style="list-style-type: none"> <li>Let your neighbors know that you have a Pollinator Habitat started and keep them updated on what is flowering and the pollinators that are visiting.</li> <li>Help them see the habitat possibilities in their yard. Show them the great resources that you have found and help them plan and design their own Pollinator Habitat.</li> <li>Back in your yard, monitor each month and take a photo of what was flowering and the types of pollinators that visited. See if your habitat had 3 or more species flower each month from March through November.</li> <li>Early spring and late fall flowering plants are important food sources for pollinators as they go into and come out of winter. Research other plant species to see if you can supplement your habitat with more early and late flowering selections.</li> <li>Research your pollinator visitors to see if you can add anything to your habitat to draw them and meet their needs.</li> <li>At year end, leave the dried flowers with seeds, stems and grasses for pollinator nesting and for food over the winter.</li> <li>Leave your pollinator habitat all natural as the new growth emerges; and let it just be habitat.</li> <li>Or, cut everything down to a height of 12 inches in mid- to late February to protect ground and grass clump nesting pollinators and make way for the new growth.</li> <li>If cutting and clearing in February, look for thick stems that might have been hollowed out and filled with pollinator eggs. If space allows, keep the larger stems in a sunny brush pile to let the young pollinators hatch in spring.</li> <li>Plan your Pollinator Habitat expansion. Maybe a raingarden, shade garden or trellis for flowering vines. So many options.</li> </ul>

## Notes:

For more information regarding the establishment and maintenance of pollinator habitat in the State of Tennessee, please refer to the TDOT Eco-Region Revegetation Application. Equipment used for establishing pollinator habitat, such as a sod cutter, roto-tiller or string trimmer can be rented at your local hardware store.

