Landscaping that benefits the environment and community

A guide to native landscaping in Tennessee

CEMEX
Building a better future

WILDLIFE HABITAT COUNCIL®

USA
Ready Mix USA

TCA

CEMEX USA has a wide range of conservation projects where industry, nature and education come together.

We are building a better future for thousands of students through STEAM education.

CEMEX | cares

At CEMEX and Ready-Mix USA, a CEMEX company, sustainability is fully embedded in our business. Our employees participate in a wide range of conservation and education projects across the U.S., showcasing the company's continuing commitment to sustainability.

Our voluntary conservation programs seek out conservation and education projects year-round that align with the important needs and priorities in our communities.

Our efforts in nature conservation and environmental education have been recognized by the Wildlife Habitat Council (WHC). CEMEX maintains WHC Conservation Certification at many of our facilities for our conservation education programs and voluntary land stewardship and wildlife enhancement projects.

In addition, CEMEX promotes a culture of appreciation and respect for nature. Since 1993, we have published a new CEMEX Nature book every year, illustrating strategies and diverse approaches to foster the protection of our natural world.

To further support our efforts, and those of our employees, communities and operating facilities, we've partnered with the Wildlife Habitat Council and the Tennessee Concrete Association to produce this guide to native landscaping in Tennessee. Native landscaping — even the smallest backyard patches — can make a big difference for wildlife and people, as well as air and water quality.

Together, we are building a better future – one yard at a time.

Why **native landscaping?**

Landscaping designed to include a variety of native plant species (called native landscaping) can have a wide range of benefits to the environment and the local community.

Native landscaping is good for pollinators

(like butterflies, hummingbirds and bees)

- Produces nectar and pollen food sources
- Provides shelter for bees and butterflies
- Supports a variety of pollinator populations
- Supplies larval host plants for caterpillars

Native landscaping is good for the community

- Enhances appearance
- Provides unique wildlife watching opportunities
- Increases environmental awareness

Native landscaping is good for air and water quality

- Reduces irrigation and fertilizer needs
- Stabilizes soil
- Reduces flooding by absorbing stormwater runoff
- Improves soil drainage for groundwater
- Filters, absorbs and detoxifies pollutants in both air and runoff

It's easy to **get started!**

Here's a step-by-step checklist on how to create a beautiful and beneficial native landscape.

Prepare, Select and Purchase

- Use the map on the next page to determine which ecoregion your home or facility is in.
- Already have plants growing at your home or facility? Use the resources on page 10 to check if they are native species. If the plants are not native species, weed them out.
- Look at the planting lists on pages 6-7 and choose plants for your ecoregion that are best suited to your landscaping needs and conditions.
- Decide how you will install native plants into your landscaping. Will you create a new landscaped area or update an existing one? If the latter, will you use native species to replace plants as they die or replace all of the plants in one go?
- Work with a local plant nursery to choose the native plants. They can also help you find alternative plants if those are not available.
- Get in touch with a landscape architect for help designing the garden layout: ***www.tnasla.org***

Plant and Maintain

- Plant your container plants after the last frost. In general, more northern locations should plant around late March or April, while more southern locations can plant as early as February. (Be sure to ask your nursery for timing recommendations.)
- Weed the landscaped area as needed to prevent undesirable plants from taking over the garden.
- Water the landscaped area as needed. If outdoor watering is prohibited due to drought, it may be better to wait to plant the native plants, which can require more watering than normal in the first growing season while they establish their roots. After the first year, the plants should not require much watering, depending on rainfall.
- Install signs to share your native landscaping story with community members and raise awareness about biodiversity.

Find your **ecoregion**

Your ecoregion will help determine what kinds of plants are best suited for your soil.

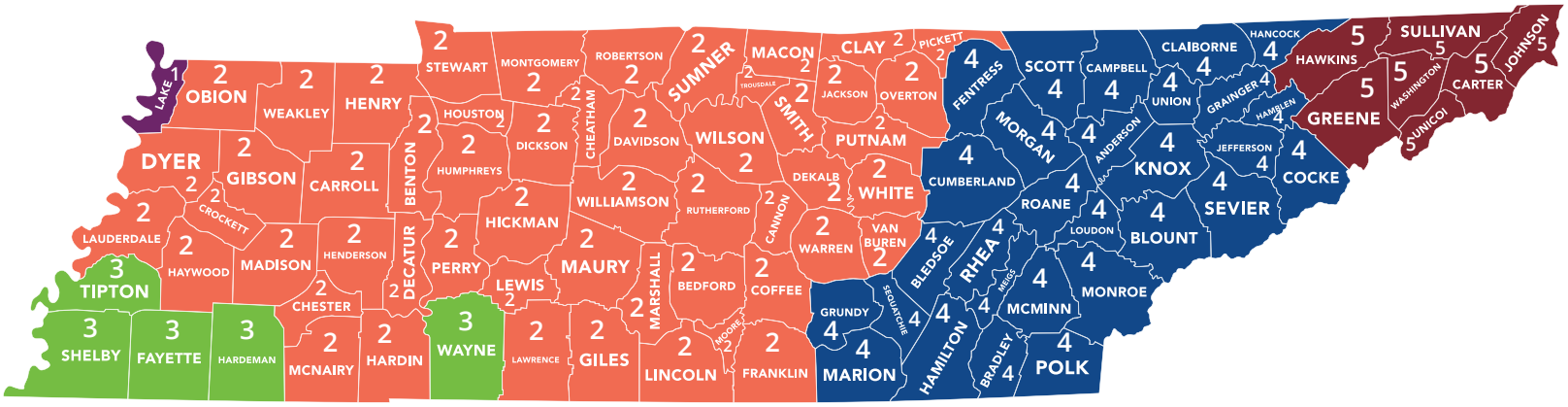
1 Lower Mississippi Riverine Forest Province

2 Eastern Broadleaf Forest (Continental) Province

3 Southeastern Mixed Forest Province

4 Eastern Broadleaf Forest (Oceanic) Province

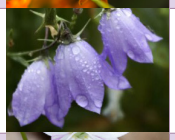
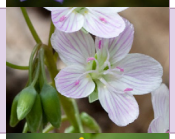
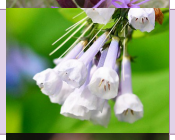
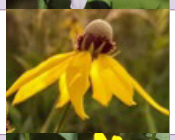
5 Central Appalachian Broadleaf/ Coniferous Forest-Meadow Province



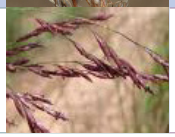
If your home or facility is on a border between ecoregions, double check your location at www.pollinator.org/guides.

Planting **lists**

Select the best plants for your ecoregion.

Type	Common Name/Image	(See key below)	Scientific Name	Bloom Color	Bloom Dates	Plant Height	Drought Tolerance	Eco-regions*
Wildflowers	Eastern red columbine	P	*Aquilegia canadensis*	red, pink, yellow	Feb-Jul	1-2'	High	4, 5
	Swamp milkweed	P	*Asclepias incarnata*	pink, purple	Jun-Oct	2-5'	Low	1, 2, 4, 5
	Butterfly milkweed	P	*Asclepias tuberosa*	orange, yellow	May-Aug	1-2'	High	2, 3, 4, 5
	Harebell 	P	*Campanula rotundifolia*	blue, purple	Jun-Sep	1-3’	High	1, 2, 3, 4, 5
	Virginia springbeauty 	P	*Claytonia virginica*	white, pink	Jan-May	0-1'	Low	1, 2, 3, 4, 5
	Whorled tickseed	P	*Coreopsis verticillata*	yellow	Jun-Jul	1-2'	High	1, 2, 3, 4, 5
	Eastern purple coneflower	P	*Echinacea purpurea*	pink, purple	Jun-Aug	2-4'	Low	2, 3, 4
	Dotted blazing star	P	*Liatris punctata*	pink, purple	Aug-Oct	1-2'	High	1, 2, 3, 4, 5
	Virginia bluebells 	P	*Mertensia virginica*	blue, purple, pink	Mar-Jun	1-2'	Low	2, 3, 4, 5
	Wild bergamot	P	*Monarda fistulosa*	white, pink, purple	May-Sep	2-4'	None	1, 2, 3, 4, 5
	Wild blue phlox	P	*Phlox divaricata*	blue, purple, white	Mar-May	0-1'	Low	1, 2, 3, 4
	Pinnate prairie coneflower 	P	*Ratibida pinnata*	yellow	May-Sep	3-5'	Med	3, 4
	Black-eyed Susan	P	*Rudbeckia hirta*	yellow	May-Aug	1-2'	Med	1, 2, 3, 4, 5

= benefits pollinators | A = Annual | P = Perennial

Type	Common Name/Image	(See key below)	Scientific Name	Bloom Color	Bloom Dates	Plant Height	Drought Tolerance	Eco-regions*
Grasses	Inland sea oats	P	*Chasmanthium latifolium*	green	Jun-Sep	2-4'	Med	2, 3, 4
	Barnyard grass	A	*Echinochloa muricata*	green, purple	Jun-Oct	3-5'	Low	1, 2, 3, 4, 5
	Virginia wild rye	P	*Elymus virginicus*	yellow	Mar-May	2-4'	Med	1, 2, 3, 4, 5
	Switchgrass	P	*Panicum virgatum*	green, brown	Aug-Nov	3-6'	Med	2, 3, 4
	Indiangrass	P	*Sorghastrum nutans*	yellow	Aug-Oct	3-8'	Med	2, 3, 4, 5
	Purpletop 	P	*Tridens flavus*	purple	Aug-Nov	2-7'	High	1, 2, 3, 4, 5

Type	Common Name/Image	(See key below)	Scientific Name	Bloom Color	Bloom Dates	Plant Height	Drought Tolerance	Eco-regions*
Shrubs	Indigo bush	P	*Amorpha fruticosa*	orange, blue, purple	Apr-Jun	6-10'	Med	1, 2, 4, 5
	American beautyberry	P	*Callicarpa americana*	white	Jun-Jul	1-6'	High	1, 2, 3, 4
	New Jersey tea	P	*Ceanothus americanus*	white	Mar-Apr	1-3'	High	2, 3, 4, 5
	Wild azalea	P	*Rhododendron canescens*	white, pink	Mar-May	1-8'	Low	2, 3, 4
	Coralberry	P	*Symphoricarpos orbiculatus*	pink	Jun-Jul	2-4'	Med	2, 3, 4, 5
	Rusty blackhaw	P	*Viburnum rufidulum*	white	May-Jun	1-2'	High	1, 2, 3, 4

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SEEED Knox & CEMEX:

Planting Seeds of Sustainability in Tennessee

In Knoxville, Tennessee, pollinator populations are benefiting from native landscaping at the CEMEX - Knoxville Cement Plant and at the Ready Mix USA - Office and Shop. Both of these facilities maintain conservation programs certified by the Wildlife Habitat Council. In addition to raising awareness among employees, CEMEX and Ready Mix USA are carrying the message of conservation into the community by partnering with organizations like SEEED Knox.

SEEED (Socially Equal Energy Efficient Development) in Knoxville creates pathways out of poverty for young adults through job readiness training, while equipping communities with environmental skills. SEEED is increasing access to sustainable careers, clean energy technologies and a sustainable food supply for low- to moderate-income residents in Knoxville through their Career Readiness Program, Green Community Awareness Program, and Community Garden.

CEMEX / Ready Mix USA's Knoxville Operations collaborated with SEEED, Howell Nurseries, First Impressions, and Native Plant Rescue Squad in the creation of native pollinator habitat to enhance SEEED's Community Garden in the inner city of Knoxville. Creating native pollinator habitat not only benefits the community garden, it will also help with the conservation of monarch butterfly populations.

To learn more, visit **www.seeedknox.com**.

Tennessee Concrete Association

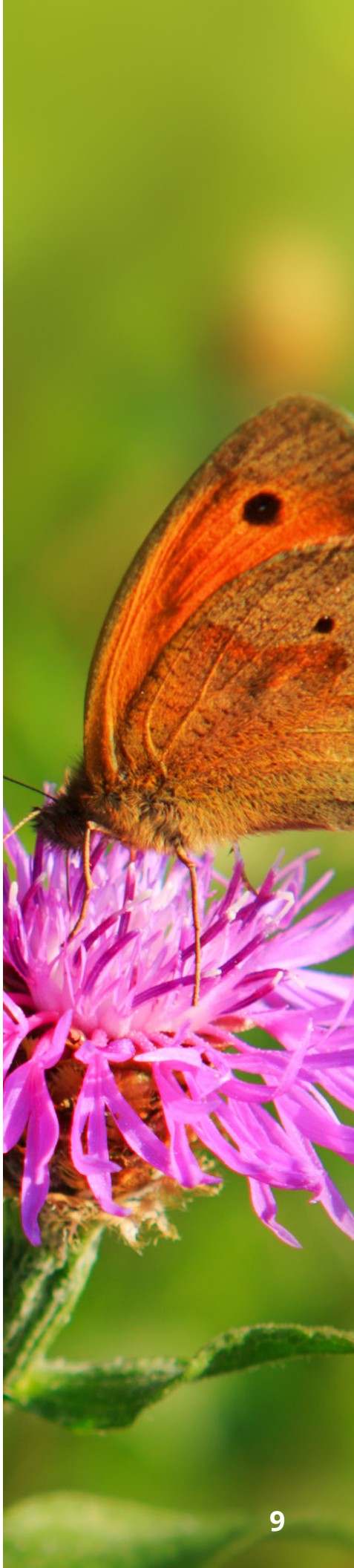
As an organization whose mission it is to LEAD (Learn, Expand, Accelerate and Demonstrate), the Tennessee Concrete Association (TCA) aims to serve as a role model for how concrete can be used proactively to increase the resilience of structures and the built environment as well as to support cutting edge sustainability principles to better steward our natural resources.

Our new campus will showcase concrete's many advantages as the world's best building material. At our old campus, we were proud to create a remarkable environment of concrete applications used in innovative and sustainable ways, such as pervious concrete to direct rainwater into a cistern for use in watering the many trees and shrubs that formed our urban orchard and garden.

TCA will be working to qualify our new campus as a Living Building under the International Living Building Institute's Living Building Challenge. The basic premise of the Living Building Challenge revolves around this question: What if every single act of design and construction made the world a better place? Our goal is to demonstrate that concrete can be used to build at the very highest levels of sustainable construction. A large part of creating regenerative buildings is paying attention to the outdoor area surrounding the building, and using native plants to create beautiful, productive, restorative landscapes.

Creating such landscapes is not restricted to new construction – many existing buildings could utilize the plants identified in this guide to improve their exterior landscape, and in so doing begin the process of regeneration for neighbors and communities by restoring native habitats. Every small area that is restored matters, so launch your own local initiative today!

For more information about TCA, visit **www.tnconcrete.org**.



Resources

Learn about plants that grow wild in Tennessee.
Native Plants for Tennessee
tynnativeplants.wordpress.com

Discover more than 8,000 plants native to North America.
Lady Bird Johnson Wildflower Center
www.wildflower.org/plants

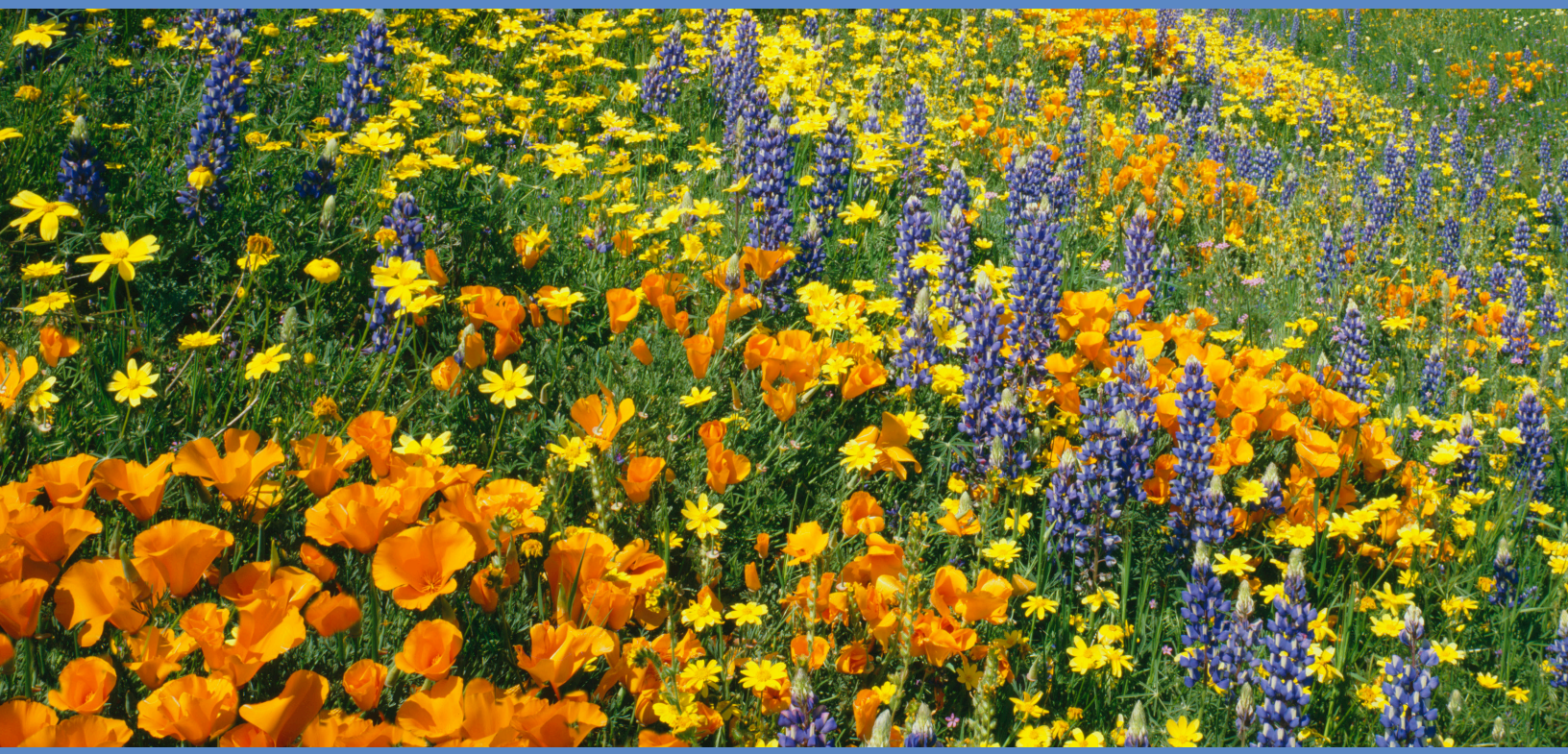
Search for information about vascular plants, mosses, liverworts, hornworts and lichens of the U.S. and its territories.
USDA PLANTS Database | *www.plants.usda.gov*

Use this interactive map to determine which plants are most likely to thrive at a location.
USDA Plant Hardiness Zone map
planthardiness.ars.usda.gov

Find out which ecoregion you are located in and get a free planting guide.
Pollinator Partnership | *www.pollinator.org/guides*

Learn how to plan, start and maintain native plant gardens and landscapes.
University of Tennessee - Tennessee Smart Yards
ag.tennessee.edu/tnyards

Discover how Tennessee Master Gardeners preserve and encourage healthy environments with sustainable gardening, community service and horticulture education.
Tennessee Master Gardener Program
extension.tennessee.edu/MasterGardener



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