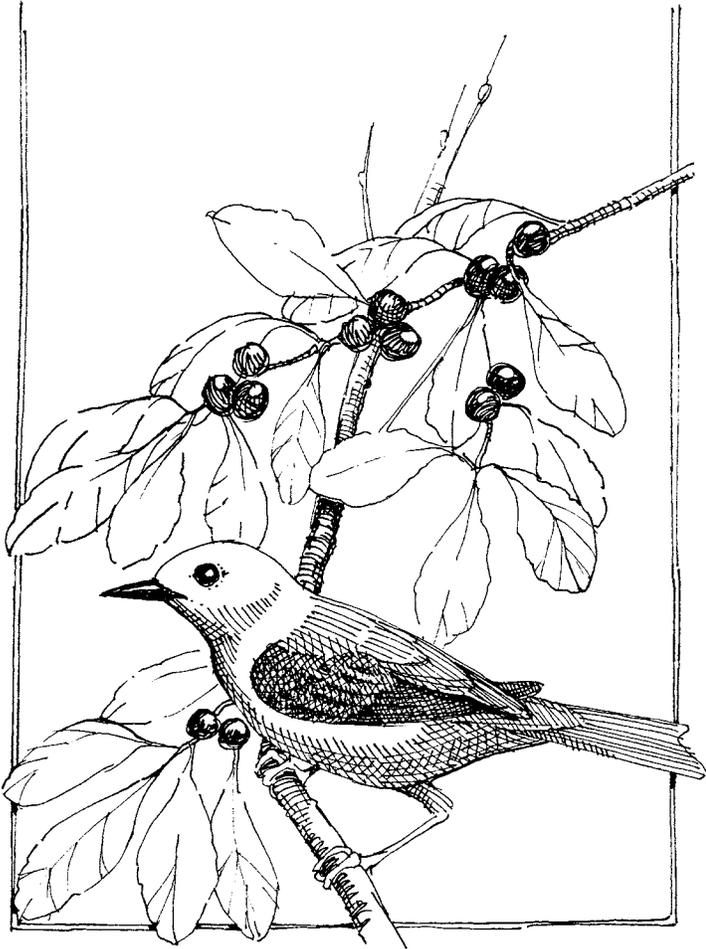


WEST TENNESSEE

Mississippi Alluvial Plain, Coastal Plain,
and West Tennessee Uplands



LANDSCAPING WITH NATIVE PLANTS

PROMOTES BIODIVERSITY

*and endorses a land ethic that
celebrates our natural heritage*

WEST TENNESSEE

Mississippi Alluvial Plain, Coastal Plain,
and West Tennessee Uplands

West Tennessee comprises the Mississippi Alluvial Plain, Coastal Plain, and West Tennessee Uplands. This region is often referred to as the Gulf Coastal Plain because it was submerged between 40-70 million years ago by the Gulf Coastal Embayment. Site conditions within the region are determined by topography, soil pH, soil depth, aspect, availability of light, and hydrology. These site conditions support a mosaic of native plant communities.

- ▶ Inundated tupelo, cypress-tupelo, and scrub-shrub swamps.
- ▶ Oak dominated alluvial bottomland hardwood forests.
- ▶ Mixed mesophytic forests on slopes and ravines characteristic of the Chickasaw Bluffs.
- ▶ Open canopy forests associated with warm season grass barrens.
- ▶ Upland oak-hickory forests ranging from basic soil types to heath-shrub dominated types.



The Mississippi Alluvial Plain is the river floodplain composed of unconsolidated sediment from as far away as the eastern slopes of the Rockies to the western slopes of the Blue Ridge Mountains. Hydric soil occurs in the floodplains along all the major rivers that drain the Gulf Coastal Plain. A fine particled clayey gumbo interspersed with sandy soils occurs along the Mississippi, while a friable silty loam occurs along smaller rivers, streams, and creeks.

The Coastal Plain is a gentle sloping plateau that begins where the Chickasaw Bluffs rise above the Mississippi Alluvial Plain and extends to the West Tennessee Uplands. The Coastal Plain is formed from finely ground wind-blown loess material derived from retreating northern glaciers. The flat to rolling topography is caused by the wind-blown loess that covers the sand, silt, and clay deposited by the Coastal Embayment.

The West Tennessee Uplands is formed from the sand, silt, and clay deposits that underlay the Mississippi Alluvial Plain and the Coastal Plain. Soils vary from clay to sandy. The site conditions of the Western Valley, contiguous to the West Tennessee Uplands, are similar to the Western Highland Rim of Middle Tennessee.

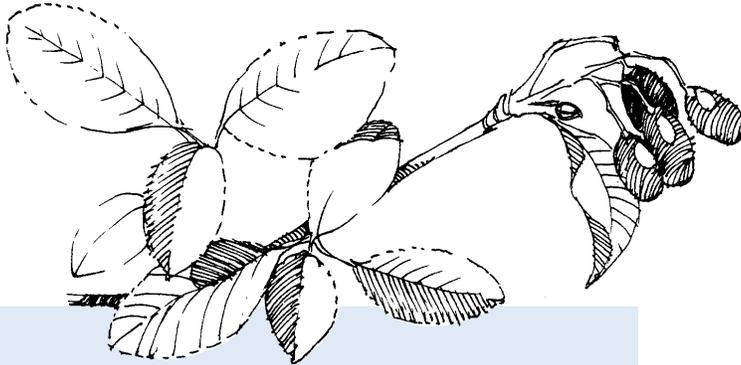
Our natural heritage

The use of native plants in landscaping is a celebration of our natural heritage and an awakening of a land ethic first expressed by Aldo Leopold more than 50 years ago.

The natural processes from which natives evolve represent the cog and wheel of a healthy ecosystem sustained by a complex web of biological diversity.

Native plants have many inherent qualities and adaptive traits that make them aesthetically pleasing, practical, and ecologically valuable for landscaping.

Using native plants contributes to the health and often the restoration of an ecosystem. Landscaping with natives in an urban setting helps restore regional character and places fewer demands on resources.



Native

species naturally occurring in a region (indigenous)

Exotic

species introduced by humans, either deliberately or accidentally (alien, non-native)

What are natives?

Natives are plants that evolved in place over geologic time and are distributed across the landscape largely in response to climatic episodes and adaptation to site conditions related to land formation.

Natives are generally defined as plants that occurred in North America before European settlement. This distinction is made because of the large-scale changes in the flora that have resulted since European settlement and the introduction of “exotic” plants.

Exotics are plants that are directly or indirectly, deliberately or accidentally introduced by human action. To be more precise, natives are natural elements of a regional landscape. While some species are native to North America, they may be exotic to East Tennessee.

Natives vs. exotics

While many exotics are harmless, others pose serious threats to biodiversity. Exotics that escape and naturalize change the floral composition of native plant communities. Exotics that invade native plant communities spread, out-compete, and displace natives. Other exotics are vectors for disease and exotic insects. Future introductions can be prevented by using native species.

Using natives also exhibits regional flora and promotes our natural heritage. Natives have often been overlooked and their aesthetic value ignored. Instead, many regions look the same because overuse of the same exotics has created a monotonous, predictable landscape.

Basics about using natives

When landscaping with natives match the right plants with the right site conditions. Consider using plants that occur together in their natural habitats. Do your homework before planting; study the plants and the site condition information in this brochure. Visit a natural area and observe how plants occur and design your landscape accordingly. Buy nursery propagated plants. Remember, landscaping with natives is art imitating nature.

Benefits of natives

- ▶ Adapted to regional conditions and may require less maintenance and are cost-effective.
- ▶ Hardy, withstand extreme winter cold, do not suffer from die back.
- ▶ Environmentally friendly, require fewer pesticides and fertilizers because of natural adaptations.
- ▶ Promote biodiversity and stewardship.
- ▶ Provide food and shelter for native wildlife.
- ▶ Restore regional landscapes.
- ▶ Prevent future exotic introductions.

Natives for wildlife

Using natives in landscaping helps sustain native butterflies, moths and other beneficial insects; native birds, reptiles, mammals, and other fauna. Fall migrating birds depend on high-energy fruits from flowering dogwood and spicebush. Spring migrants feed on insects that occur on oak trees. Beech and other native trees provide nesting habitat, while Eastern red cedar, short leaf pine, and American holly provide winter cover and food.



- ▶ **Don't dig plants from the wild.**
- ▶ **Buy nursery-propagated plant material.**

Native plant recommendations

KEY

LIGHT

F = full sunlight
P = partial shade
S = shade

SOIL MOISTURE

H = hydric; wet, plants periodically or often inundated by water
M = mesic; moist, adequate soil moisture retention year-round
S = sub-xeric; moist to dry, seasonally moist, periodically dry
X = xeric; dry & drought resistant, little moisture retention, excessively drained

SOIL pH

B = basic; prefers limestone
A = acidic; prefers acidic soils
R = restricted to either B or A

COMMON NAME	SCIENTIFIC NAME	LIGHT			MOISTURE				SOIL pH		
		F	P	S	H	M	S	X	B	A	R
SHRUBS											
Alder	<i>Alnus serrulata</i>	●	●		●	●					
Indigobush	<i>Amorpha fruticosa</i>	●	●				●	●	●		
Red chokeberry	<i>Aronia arbutifolia</i>	●	●		●	●	●	●		●	
Black chokeberry	<i>Aronia melanocarpa</i>	●	●		●	●	●	●		●	
American beautyberry	<i>Callicarpa americana</i>	●	●			●	●	●	●		
New Jersey tea	<i>Ceanothus americanus</i>		●	●		●	●	●		●	●
Buttonbush	<i>Cephalanthus occidentalis</i>	●	●		●						
Silky dogwood	<i>Cornus amomum</i>	●	●			●					
Hazelnut	<i>Corylus americana</i>	●	●	●			●				
Hearts-a-bustin'	<i>Euonymus americanus</i>		●	●		●	●				
Swamp privet	<i>Forestiera acuminata</i>	●	●		●	●					
Oakleaf hydrangea	<i>Hydrangea quercifolia</i>	●	●			●	●				
Wild hydrangea	<i>Hydrangea arborescens</i>	●	●		●	●			●		
Shrubby St. John's Wort	<i>Hypericum prolificum</i>	●	●				●	●	●		●
Deciduous holly	<i>Ilex decidua</i>	●	●		●	●					
Common winterberry	<i>Ilex verticillata</i>	●	●	●	●	●				●	
Virginia willow	<i>Itea virginica</i>	●	●	●	●	●					
Spicebush	<i>Lindera benzoin</i>		●	●		●					
Mock orange	<i>Philadelphus inodorus</i>		●	●		●	●		●		
Wild azalea	<i>Rhododendron canadense</i>		●	●		●	●		●	●	
Fragrant sumac	<i>Rhus aromatica</i>	●	●				●	●	●	●	●
Winged sumac	<i>Rhus copallina</i>	●	●			●	●				
Carolina rose	<i>Rosa carolina</i>	●	●			●	●		●		
Swamp rose	<i>Rosa palustris</i>	●	●		●	●					
Elderberry	<i>Sambucus canadensis</i>	●	●	●		●			●		
Bladdernut	<i>Staphylea trifolia</i>		●	●		●	●		●		
American snowbell	<i>Styrax americana</i>	●	●	●	●	●				●	
Bigleaf snowbell	<i>Styrax grandifolia</i>	●	●	●		●	●		●		
Horse sugar	<i>Symplocos tinctoria</i>	●	●			●	●				
Farkleberry	<i>Vaccinium arboreum</i>	●	●				●	●		●	●
Deerberry	<i>Vaccinium stamineum</i>	●	●				●	●		●	●
Swamp haw	<i>Viburnum nudum</i>	●	●	●	●	●					

SMALL TREES

Dwarf red buckeye	<i>Aesculus pavia</i>	●	●	●		●	●				
Serviceberry	<i>Amelanchier arborea</i>	●	●	●			●	●		●	
Hercules club	<i>Aralia spinosa</i>	●	●			●	●				
Paw paw	<i>Asimina triloba</i>		●	●		●			●		
Ironwood, Blue beech	<i>Carpinus caroliniana</i>		●	●	●	●					
Northern catalpa	<i>Catalpa speciosa</i>	●	●		●	●	●				
Redbud	<i>Cercis canadensis</i>	●	●	●		●	●	●			
Flowering dogwood	<i>Cornus florida</i>		●	●		●					
Washington hawthorn	<i>Crataegus phaenopyrum</i>	●	●			●	●	●			
Cockspur thorn hawthorn	<i>Crataegus crus-galli</i>	●	●				●	●	●		
Wahoo	<i>Euonymus atropurpureus</i>	●	●	●		●	●		●		
American holly	<i>Ilex opaca</i>	●	●	●		●	●		●		
Cucumbertree	<i>Magnolia acuminata</i>		●	●		●					
Sweetbay magnolia	<i>Magnolia virginiana</i>	●	●	●	●	●					
Southern crab apple	<i>Malus angustifolia</i>	●	●			●	●				
Hop hornbeam	<i>Ostrya virginiana</i>		●	●		●	●		●		
Sourwood	<i>Oxydendrum arboreum</i>	●	●	●			●	●		●	
Water elm	<i>Planera aquatica</i>	●	●	●	●	●					
American plum	<i>Prunus americana</i>	●	●				●	●			
Chickasaw plum	<i>Prunus angustifolia</i>	●	●				●	●			
Carolina buckthorn	<i>Rhamnus caroliniana</i>	●	●	●		●	●				
Staghorn sumac	<i>Rhus typhina</i>	●	●			●	●		●		
Bumelia	<i>Sideroxylon lycioides</i>	●	●	●		●	●		●	●	
Southern rusty blackhaw	<i>Viburnum rufidulum</i>	●	●	●		●	●		●		

COMMON NAME	SCIENTIFIC NAME	LIGHT			MOISTURE				SOIL pH		
		F	P	S	H	M	S	X	B	A	R
TREES											
Red maple	<i>Acer rubrum</i>	●	●	●	●	●	●	●			●
Silver maple	<i>Acer saccharinum</i>	●	●	●	●	●					
Sugar maple	<i>Acer saccharum</i>	●	●	●		●	●		●		
River birch	<i>Betula nigra</i>	●	●	●	●	●				●	
Bitternut hickory	<i>Carya cordiformis</i>	●	●	●		●			●		
Pignut hickory	<i>Carya glabra</i>	●	●	●			●	●			
Pecan	<i>Carya illinoensis</i>	●	●	●			●	●			
Shagbark hickory	<i>Carya ovata</i>	●	●	●			●	●			
Mockernut hickory	<i>Carya alba</i>	●	●	●			●	●	●		
Yellowwood	<i>Cladrastis lutea</i>	●	●	●			●	●		●	
Persimmon	<i>Diospyros virginiana</i>	●	●			●	●				
American beech	<i>Fagus grandifolia</i>	●	●	●			●	●			
White ash	<i>Fraxinus americana</i>	●	●	●			●	●			
Green ash	<i>Fraxinus pennsylvanica</i>	●	●	●			●	●	●		
Kentucky coffeetree	<i>Gymnocladus dioica</i>	●	●	●			●	●		●	
Red cedar	<i>Juniperus virginiana</i>	●	●				●	●	●		
Sweet gum	<i>Liquidambar styraciflua</i>	●	●			●	●	●		●	
Red mulberry	<i>Morus rubra</i>	●	●	●			●	●	●		
Tupelogum	<i>Nyssa aquatica</i>	●	●	●			●	●			
Blackgum	<i>Nyssa sylvatica</i>	●	●	●			●	●		●	
Virginia pine	<i>Pinus virginiana</i>	●					●	●		●	
Shortleaf pine	<i>Pinus echinata</i>	●					●	●		●	
Sycamore	<i>Platanus occidentalis</i>	●	●			●	●		●		
Black cherry	<i>Prunus serotina</i>	●	●				●	●	●		
Eastern cottonwood	<i>Populus deltoides</i>	●	●				●	●			
White oak	<i>Quercus alba</i>	●	●				●	●		●	
Scarlet oak	<i>Quercus coccinea</i>	●	●				●	●	●	●	
Southern red oak	<i>Quercus falcata</i>	●	●				●	●		●	●
Overcup oak	<i>Quercus lyrata</i>	●	●				●	●			
Swamp white oak	<i>Quercus michauxii</i>	●	●				●	●			
Chinkapin oak	<i>Quercus muehlenbergii</i>	●	●				●	●		●	●
Water oak	<i>Quercus nigra</i>	●	●				●	●			
Cherrybark oak	<i>Quercus pagoda</i>	●	●				●	●			
Willow oak	<i>Quercus phellos</i>	●	●				●	●			
Northern red oak	<i>Quercus rubra</i>	●	●				●	●		●	
Shumard oak	<i>Quercus shumardii</i>	●	●				●	●	●	●	
Post oak	<i>Quercus stellata</i>	●	●				●	●		●	
Shingle oak	<i>Quercus imbricaria</i>	●	●				●	●		●	
Black willow	<i>Salix nigra</i>	●	●				●	●		●	
Sassafras	<i>Sassafras albidum</i>	●	●				●	●			
Bald cypress	<i>Taxodium distichum</i>	●	●				●	●			
American basswood	<i>Tilia americana</i>	●	●	●			●	●			
Water elm	<i>Planera aquatica</i>	●	●				●	●			

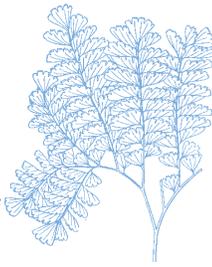
VINES

Peppervine	<i>Ampelopsis arborea</i>	●	●		●	●	●			
Crossvine	<i>Bignonia capreolata</i>		●	●		●	●	●		
Rattan vine	<i>Berchemia scandens</i>	●	●	●	●	●	●		●	
Trumpet creeper	<i>Campsis radicans</i>	●	●			●	●		●	
Virgin's bower	<i>Clematis virginiana</i>	●	●			●	●		●	
Coral/trumpet honeysuckle	<i>Lonicera sempervirens</i>	●	●	●		●	●		●	
Climbing hydrangea	<i>Decumaria barbara</i>	●	●	●		●	●			
Climbing hempweed	<i>Mikania scandens</i>	●	●			●	●			
Virginia creeper	<i>Parthenocissus quinquefolia</i>	●	●	●			●	●		
Passion flower	<i>Passiflora incarnata</i>	●	●				●	●		
Climbing magnolia	<i>Schisandra glabra</i>		●	●			●	●		
Wisteria	<i>Wisteria frutescens</i>	●	●				●	●		
Eardrop vine	<i>Brunnichia ovata</i>	●	●				●	●		

FERNS

Maidenhair fern
 Ebony spleenwort
 Lady fern
 Silvery glade fern
 Cinnamon fern
 Royal fern
 Sensitive fern
 Broad beech fern
 Christmas fern

Adiantum pedatum
Asplenium platyneuron
Athyrium filix-femina
Diplazium pycnocarpon
Osmunda cinnamomea
Osmunda regalis
Onclea sensibilis
Phegopteris hexagonaptera
Polystichum acrostichoides



GRASSES



Big bluestem
 Giant cane
 River oats, Spangle grass
 Wild rye
 Sugarcane plumegrass
 Narrow plumegrass
 Bottle brush
 Switch grass
 Little bluestem
 Indian grass
 Gamma grass

Andropogon gerardii
Arundinaria gigantea
Chasmanthium latifolium
Elymus virginicus
Erianthus giganteus
Erianthus strictus
Hystrix patula
Panicum virgatum
Schizachyrium scoparium
Sorghostum nutans
Tripsacum dactyloides

FLOWERS

Doll's eye, White baneberry
 Giant yellow hyssop
 Blue dogbane
 Wild columbine
 Green dragon
 Goat's beard
 Wild ginger
 Pink milkweed
 Butterfly weed
 Frostweed aster
 Tickseed sunflower
 Tall bellflower
 Wild senna
 Fairy wand
 Butterfly pea
 Coreopsis
 Cutleaf toothwort
 White trout lily
 Mistflower
 Boneset
 Round leaved thoroughwort
 Late thoroughwort
 Flowering spurge
 Morning honeysuckle
 Wild geranium
 Small-headed sunflower
 Goldenseal
 Waterleaf
 Spider lily
 Spotted jewelweed
 Copper iris
 Rough blazing star
 Thick-spike blazing star
 Scaly blazing star
 Downy lobelia
 Great blue lobelia
 Fringed loosestrife
 American agave, False aloe
 Virginia bluebell
 Partridgeberry
 Foxglove beard tongue
 Sundrops
 Blue phlox
 Tall garden phlox
 Obedient plant
 Jacob's ladder
 Solomon's seal
 Yellow leafcup
 Black-eyed susan
 Wild petunia
 Mad dog skullcap
 Starry campion
 Fire pink
 Cup plant
 Blue-eyed grass
 False Solomon's seal
 Fragrant goldenrod
 Elm leaved goldenrod
 Indian pink
 Wingstem
 Bird's-foot violet
 Smooth yellow violet

Actea pachypoda
Agastache nepetoides
Amsonia tabernaemontana
Aquilegia canadensis
Arisaema dracontium
Aruncus dioicus
Asarum canadense
Asclepias incarnata
Asclepias tuberosa
Aster pilosus
Bidens aristosa
Campanula americana
Cassia marilandica
Chamaelirium luteum
Clitoria mariana
Coreopsis lanceolata
Dentaria laciniata
Erythronium albidum
Eupatorium coelestinum
Eupatorium perfoliatum
Eupatorium rotundifolium
Eupatorium serotinum
Euphorbia corollata
Gaura biennis
Geranium maculatum
Helianthus microcephalus
Hydrastis canadensis
Hydrophyllum appendiculatum
Hymenocallis occidentalis
Impatiens capensis
Iris fulva
Liatris aspera
Liatris pycnostachya
Liatris scariosa
Lobelia puberula
Lobelia siphilitica
Lysimachia ciliata
Manfreda virginica
Mertensia virginica
Mitchella repens
Penstemon digitalis
Oenothera fruticosa
Phlox divaricata
Phlox paniculata
Physostegia virginiana
Polemonium reptans
Polygonatum biflorum
Polymnia uvedalia
Rudbeckia hirta
Ruellia caroliniensis
Scutellaria lateriflora
Silene stellata
Silene virginica
Silphium perfoliatum
Sisyrinchium angustifolium
Smilacina racemosa
Solidago odora
Solidago ulmifolia
Spigelia marilandica
Verbesina alternifolia
Viola pedata
Viola pubescens

MOSAIC FOR FULL SUN

Big bluestem
 New England aster
 White wild indigo
 Partridge pea
 Tall coreopsis
 Joe-pye weed
 Purple bee balm
 Gray-headed coneflower
 Black-eyed susan
 Sedum, stonecrop
 Indian grass
 Little bluestem
 Rose vervain
 Ironweed

Andropogon gerardii
Aster novae-angliae
Baptisia alba
Chamaecrista fasciculata
Coreopsis tripteris
Eupatorium fistulosum
Monarda fistulosa
Ratibida pinnata
Rudbeckia hirta
Sedum ternatum
Sorghostum nutans
Schizachyrium scoparium
Verbena canadensis
Vernonia gigantea



MOSAIC FOR SHADE

Jack-in-the-Pulpit
 Thimbleweed
 Broad beech fern
 Alumroot
 Christmas fern
 Golden ragwort, butterweed
 Spiderwort
 Violets
 Common cliff fern

Arisaema triphyllum
Anemone virginiana
Phegopteris hexagonaptera
Heuchera americana
Polystichum acrostichoides
Senecio glabellus
Tradescantia subaspera
Violet spp.
Woodsia obtusa



EMERGENT AQUATICS

Water plantain
 Scouring rush, horsetail
 Arrow arum
 Pickerelweed
 Cardinal flower
 American lotus
 Lizard's tail
 Arrowhead
 Soft rush
 Ragwort, butterweed
 Southern wild rice

Alisma subcordatum
Equisetum hyemale
Peltandra virginica
Pontederia cordata
Lobelia cardinalis
Nelumbo lutea
Saururus cernuus
Sagittaria latifolia
Scirpus validus
Senecio glabellus
Zizaniopsis miliacea

Celebrate our natural heritage and protect native plant communities

1. Learn more about native plants.
2. Buy nursery propagated plant material.
3. Don't dig plants from the wild.
4. Protect native plant and natural area habitat.
5. Promote responsible landscaping practices.
6. Plant native and not exotic plant species.

For more information

Tennessee Dept. of Environment and Conservation (TDEC)
 Division of Natural Heritage
 401 Church St., 8th floor, L&C Tower
 Nashville TN 37243-0447
 615/532-0436

Tennessee Exotic Pest Plant Council (TN-EPPC)
 P.O. Box 936
 Fairview TN 37062
 www.tneppc.org

Tennessee Native Plant Society
 Department of Botany
 University of Tennessee
 Knoxville TN 37996-1100
 423/974-2256



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