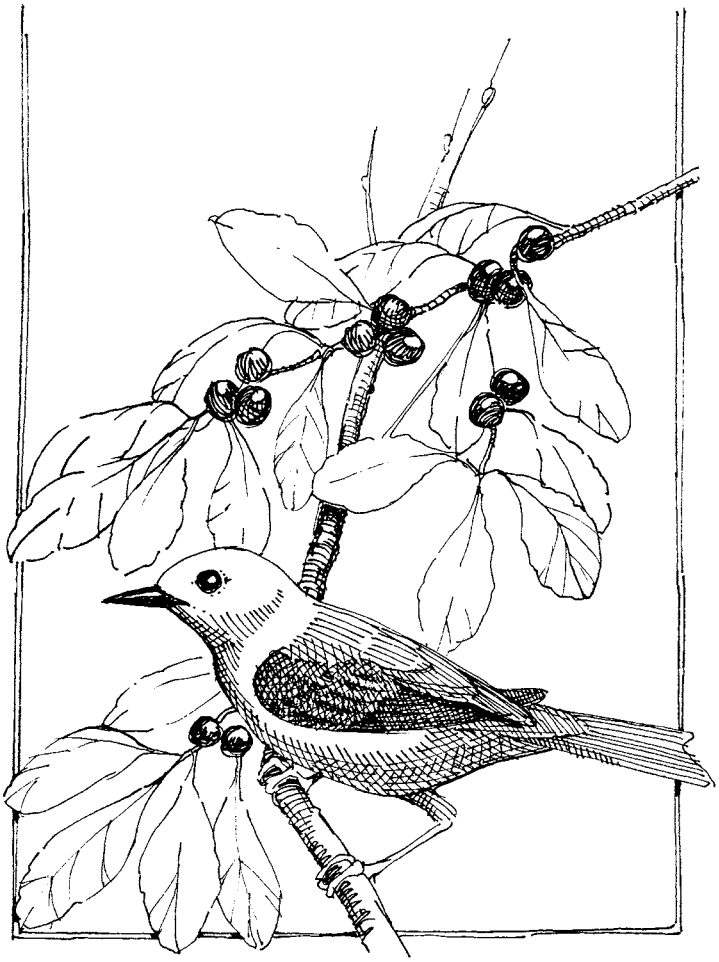
WEST TENNESSEE

Mississippi Alluvial Plain, Coastal Plain, and West Tennessee Uplands



LANDSCAPING WITH NATIVE PLANTS

PROMOTES BIODIVERSITY

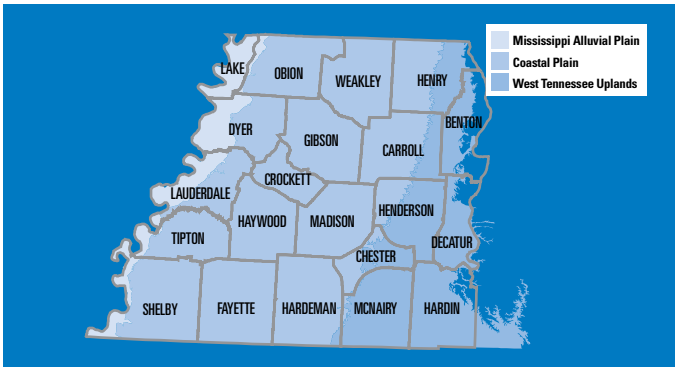
and endorses a land ethic that celebrates our natural heritage

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.

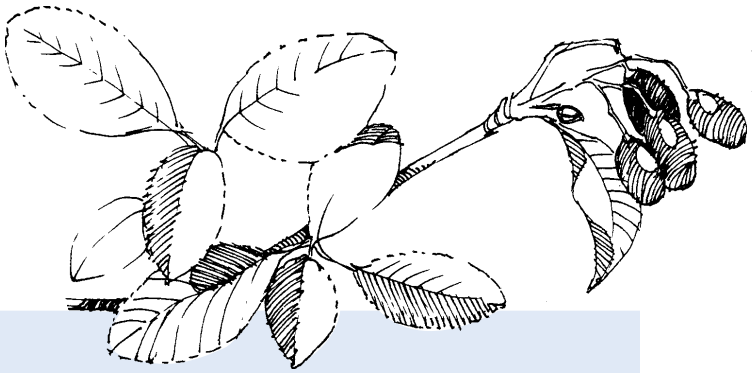
Our natural heritage

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

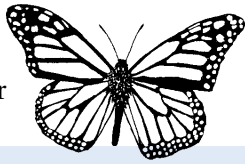
When landscaping with natives match the right plants with the right site conditions. Consider using plants that occur together in their natural habitats. Do your homework before planting; study the plants and the site condition information in this brochure. Visit a natural area and observe how plants 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

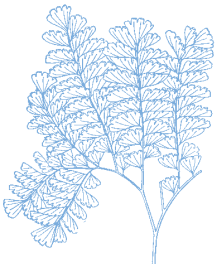
SOIL pH
B = basic; prefers limestone
A = acidic; prefers acidic soils
R = restricted to either B or A

COMMON NAME	SCIENTIFIC NAME	LIGHT			MOISTURE				SOIL pH		
SHRUBS		F	P	S	H	M	S	X	B	A	R
Alder	*Alnus serrulata*	●	●		●	●					
Indigobush	*Amorpha fruticosa*	●	●				●	●	●		
Red chokeberry	*Aronia arbutifolia*	●	●		●	●	●	●		●	
Black chokeberry	*Aronia melanocarpa*	●	●		●	●	●	●		●	
American beautyberry	*Callicarpa americana*	●	●			●	●	●	●		
New Jersey tea	*Ceanothus americanus*		●	●		●	●	●		●	●
Buttonbush	*Cephalanthus occidentalis*	●	●		●						
Silky dogwood	*Cornus amomum*	●	●		●	●					
Hazelnut	*Corylus americana*	●	●	●		●	●				
Hearts-a-bustin'	*Euonymus americanus*		●	●		●	●				
Swamp privet	*Forestiera acuminata*	●	●		●	●					
Oakleaf hydrangea	*Hydrangea quercifolia*	●	●	●		●	●				
Wild hydrangea	*Hydrangea arborescens*		●	●		●	●		●		
Shrubby St. John's Wort	*Hypericum prolificum*	●	●				●	●	●		●
Deciduous holly	*Ilex decidua*	●	●		●	●					
Common winterberry	*Ilex verticillata*	●	●	●	●	●				●	
Virginia willow	*Itea virginica*	●	●	●	●	●					
Spicebush	*Lindera benzoin*		●	●		●					
Mock orange	*Philadelphus inodorus*	●	●			●	●		●		
Wild azalea	*Rhododendron canescens*		●	●		●	●			●	●
Fragrant sumac	*Rhus aromatica*	●	●				●	●	●		●
Winged sumac	*Rhus copallina*	●	●			●	●				
Carolina rose	*Rosa carolina*	●	●			●	●		●		
Swamp rose	*Rosa palustris*	●	●		●	●					
Elderberry	*Sambucus canadensis*	●	●	●		●			●		
Bladdernut	*Staphylea trifolia*		●	●		●	●		●		
American snowbell	*Stryrax americana*	●	●	●	●	●				●	
Bigleaf snowbell	*Styrax grandifolia*	●	●	●		●	●	●		●	
Horse sugar	*Symplocos tinctoria*	●	●			●	●				
Farkleberry	*Vaccinium arboreum*	●	●				●	●		●	●
Deerberry	*Vaccinium stamineum*	●	●				●	●		●	●
Swamp haw	*Viburnum nudum*	●	●	●	●	●					
SMALL TREES											
Dwarf red buckeye	*Aesculus pavia*	●	●	●		●	●				
Serviceberry	*Amelanchier arborea*	●	●	●			●	●		●	
Hercules club	*Aralia spinosa*	●	●				●	●			
Paw paw	*Asimina triloba*		●	●		●			●		
Ironwood, Blue beech	*Carpinus caroliniana*		●	●	●	●					
Northern catalpa	*Catalpa speciosa*	●	●		●	●	●				
Redbud	*Cercis canadensis*	●	●	●		●	●	●	●		
Flowering dogwood	*Cornus florida*		●	●		●	●				
Washington hawthorn	*Crataegus phaenopyrum*	●	●				●	●	●		
Cockspur thorn hawthorn	*Crataegus crus-galli*	●	●				●	●	●		
Wahoo	*Euonymus atropurpureus*	●	●	●		●	●		●		
American holly	*Ilex opaca*	●	●	●		●	●			●	
Cucumbertree	*Magnolia acuminata*		●	●		●					
Sweetbay magnolia	*Magnolia virginiana*	●	●	●	●	●					
Southern crab apple	*Malus angustifolia*	●	●	●		●	●	●			
Hop hornbeam	*Ostrya virginiana*		●	●		●	●		●		
Sourwood	*Oxydendrum arboreum*	●	●	●			●	●		●	●
Water elm	*Planera aquatica*	●	●	●	●	●					
American plum	*Prunus americana*	●	●				●	●	●		
Chickasaw plum	*Prunus angustifolia*	●	●			●	●	●	●		
Carolina buckthorn	*Rhamnus caroliniana*	●	●	●			●	●	●		
Staghorn sumac	*Rhus typhina*	●	●				●	●	●		
Bumelia	*Sideroxylon lycioides*	●	●	●		●	●	●	●		●
Southern rusty blackhaw	*Viburnum rufidulum*	●	●	●		●	●	●	●		

COMMON NAME	SCIENTIFIC NAME	LIGHT			MOISTURE				SOIL pH		
TREES		F	P	S	H	M	S	X	B	A	R
Red maple	*Acer rubrum*	●	●	●	●	●	●	●		●	
Silver maple	*Acer saccharinum*	●	●		●	●					
Sugar maple	*Acer saccharum*	●	●	●		●	●		●		
River birch	*Betula nigra*	●	●	●	●	●				●	
Bitternut hickory	*Carya cordiformis*	●	●	●		●			●		
Pignut hickory	*Carya glabra*	●	●	●			●	●			
Pecan	*Carya illinoensis*	●	●			●	●				
Shagbark hickory	*Carya ovata*	●	●	●		●	●				
Mockernut hickory	*Carya alba*	●	●	●		●	●	●			
Yellowwood	*Cladrastis lutea*	●	●	●		●	●		●		
Persimmon	*Diospyros virginiana*	●	●			●	●				
American beech	*Fagus grandifolia*	●	●	●		●	●				
White ash	*Fraxinus americana*	●	●	●		●	●				
Green ash	*Fraxinus pennsylvanica*	●	●	●	●	●	●	●			
Kentucky coffeetree	*Gymnocladus dioicus*	●	●	●		●	●		●		
Red cedar	*Juniperus virginiana*	●	●				●	●	●		
Sweet gum	*Liquidambar styraciflua*	●	●		●	●	●	●		●	
Red mulberrry	*Morus rubra*	●	●	●		●	●	●			
Tupelogum	*Nyssa aquatica*	●	●	●	●	●					
Blackgum	*Nyssa sylvatica*	●	●	●		●	●	●		●	
Virginia pine	*Pinus virginiania*	●					●	●		●	
Shortleaf pine	*Pinus echinata*	●					●	●		●	
Sycamore	*Platanus occidentalis*	●	●		●	●			●		
Black cherry	*Prunus serotina*	●	●			●	●	●			
Eastern cottonwood	*Populus deltoides*	●	●		●	●					
White oak	*Quercus alba*	●	●			●	●	●			
Scarlet oak	*Quercus coccinea*	●	●			●	●	●		●	●
Southern red oak	*Quercus falcata*	●	●				●	●		●	●
Overcup oak	*Quercus lyrata*	●	●		●	●					
Swamp white oak	*Quercus michauxii*	●	●		●	●					
Chinkapin oak	*Quercus muehlenbergii*	●	●			●	●	●	●		●
Water oak	*Quercus nigra*	●	●		●	●					
Cherrybark oak	*Quercus pagoda*	●	●		●	●					
Willow oak	*Quercus phellos*	●	●		●	●					
Northern red oak	*Quercus rubra*	●	●			●	●		●		
Shumard oak	*Quercus shumardii*	●	●		●	●	●	●	●		●
Post oak	*Quercus stellata*	●	●				●	●			
Shingle oak	*Quercus imbricaria*	●	●		●	●	●		●		
Black willow	*Salix nigra*	●	●		●				●		
Sassafras	*Sassafras albidum*	●	●			●	●				
Bald cypress	*Taxodium distichum*	●	●		●	●					
American basswood	*Tilia americana*	●	●	●		●	●				
Water elm	*Planera aquatica*	●	●		●	●					
VINES											
Peppervine	*Ampelopis arborea*	●	●		●	●	●				
Crossvine	*Bignonia capreolata*		●	●		●	●	●			
Rattan vine	*Berchemia scandens*	●	●	●	●	●	●	●		●	
Trumpet creeper	*Campsis radicans*	●	●				●	●			
Virgin's bower	*Clematis virginiana*	●	●	●		●	●	●			
Coral/trumpet honeysuckle	*Lonicera sempervirens*	●	●	●		●	●	●			
Climbing hydrangea	*Decumaria barbara*	●	●	●	●	●					
Climbing hempweed	*Mikania scandens*	●	●		●	●	●				
Virginia creeper	*Parthenocissus quinquefolia*	●	●	●		●	●	●			
Passion flower	*Passiflora incarnata*	●	●				●	●			
Climbing magnolia	*Schisandra glabra*		●	●		●					
Wisteria	*Wisteria frutescens*	●	●			●	●	●			
Eardrop vine	*Brunnichia ovata*	●	●		●	●	●				

FERNS

Maidenhair fern	*Adiantum pedatum*
Ebony spleenwort	*Asplenium platyneuron*
Lady fern	*Athyrium felix-femina*
Silvery glade fern	*Diplazium pycnocarpon*
Cinnamon fern	*Osmunda cinnamomea*
Royal fern	*Osmunda regalis*
Sensitive fern	*Onoclea sensibilis*
Broad beech fern	*Phegopteris hexagonaptera*
Christmas fern	*Polystichum acrostichoides*



GRASSES

Big bluestem	*Andropogon gerardii*
Giant cane	*Arundinaria gigantea*
River oats, Spangle grass	*Chasmanthium latifolium*
Wild rye	*Elymus virginicus*
Sugarcane plumegrass	*Erianthus giganteus*
Narrow plumegrass	*Erianthus strictus*
Bottle brush	*Hystrix patula*
Switch grass	*Panicum virgatum*
Little bluestem	*Schizachyrium scoparium*
Indian grass	*Sorgustum nutans*
Gamma grass	*Tripsacum dactyloides*

FLOWERS

Doll's eye, White baneberry	*Actea pachypoda*
Giant yellow hyssop	*Agastache nepetoides*
Blue dogbane	*Amsonia tabernaemontana*
Wild columbine	*Aquilegia canadensis*
Green dragon	*Arisaema dracontium*
Goat's beard	*Aruncus dioicus*
Wild ginger	*Asarum canadense*
Pink milkweed	*Asclepias incarnata*
Butterfly weed	*Asclepias tuberosa*
Frostweed aster	*Aster pilosus*
Tickseed sunflower	*Bidens aristosa*
Tall bellflower	*Campanula americana*
Wild senna	*Cassia marilandica*
Fairy wand	*Chamaelirium luteum*
Butterfly pea	*Clitoria mariana*
Coreopsis	*Coreopsis lanceolata*
Cutleaf toothwort	*Dentaria laciniata*
White trout lily	*Erythronium albidum*
Mistflower	*Eupatorium coelestinum*
Boneset	*Eupatorium perfoliatum*
Round leaved thoroughwort	*Eupatorium rotundifolium*
Late thoroughwort	*Eupatorium serotinum*
Flowering spurge	*Euphorbia corollata*
Morning honeysuckle	*Gaura biennis*
Wild geranium	*Geranium maculatum*
Small-headed sunflower	*Helianthus microcephalus*
Goldenseal	*Hydrastis canadensis*
Waterleaf	*Hydrophyllum appendiculatum*
Spider lily	*Hymenocallis occidentalis*
Spotted jewelweed	*Impatiens capensis*
Copper iris	*Iris fulva*
Rough blazing star	*Liatris aspera*
Thick-spike blazing star	*Liatris pycnostachya*
Scaly blazing star	*Liatris squarrosa*
Downy lobelia	*Lobelia puberula*
Great blue lobelia	*Lobelia siphilitica*
Fringed loosestrife	*Lysimachia ciliata*
American agave, False aloe	*Manfreda virginica*
Virginia bluebell	*Mertensia virginica*
Partridgeberry	*Mitchella repens*
Foxglove beard tongue	*Penstemon digitalis*
Sundrops	*Oenothera fruticosa*
Blue phlox	*Phlox divaricata*
Tall garden phlox	*Phlox paniculata*
Obedient plant	*Physostegia virginiana*
Jacob's ladder	*Polemonium reptans*
Solomon's seal	*Polygonatum biflorum*
Yellow leafcup	*Polymnia uvedalia*
Black-eyed susan	*Rudbeckia hirta*
Wild petunia	*Ruellia caroliniensis*
Mad dog skullcap	*Scutellaria lateriflora*
Starry campion	*Silene stellata*
Fire pink	*Silene virginica*
Cup plant	*Silphium perfoliatum*
Blue-eyed grass	*Sisyrinchium angustifolium*
False Solomon's seal	*Smilacina racemosa*
Fragrant goldenrod	*Solidago odora*
Elm leaved goldenrod	*Solidago ulmifolia*
Indian pink	*Spigelia marilandica*
Wingstem	*Verbesina alternifolia*
Bird's-foot violet	*Viola pedata*
Smooth yellow violet	*Viola pubescens*

MOSAIC FOR FULL SUN

Big bluestem	*Andropogon gerardii*
New England aster	*Aster novae–angliae*
White wild indigo	*Baptisia alba*
Partridge pea	*Chamaecrista fasciculata*
Tall coreopsis	*Coreopsis tripteris*
Joe–pye weed	*Eupatorium fistulosum*
Purple bee balm	*Monarda fistulosa*
Gray-headed coneflower	*Ratibida pinnata*
Black-eyed susan	*Rudbeckia hirta*
Sedum, stonecrop	*Sedum ternatum*
Indian grass	*Sorgustum nutans*
Little bluestem	*Schizachyrium scoparium*
Rose vervain	*Verbena canadensis*
Ironweed	*Vernonia gigantia*

MOSAIC FOR SHADE

Jack-in-the-Pulpit	*Arisaema triphyllum*
Thimbleweed	*Anemone virginiana*
Broad beech fern	*Phegopteris hexagonaptera*
Alumroot	*Heuchera americana*
Christmas fern	*Polystichum acrostichoides*
Golden ragwort, butterweed	*Senecio glabellus*
Spiderwort	*Tradescantia subaspera*
Violets	*Violet spp.*
Common cliff fern	*Woodsia obtusa*

EMERGENT AQUATICS

Water plantain	*Alisma subcordatum*
Scouring rush, horsetail	*Equisetum hyemale*
Arrow arum	*Peltandra virginica*
Pickerelweed	*Pontederia cordata*
Cardinal flower	*Lobelia cardinalis*
American lotus	*Nelumbo lutea*
Lizard's tail	*Saururus cernuus*
Arrowhead	*Sagittaria latifolia*
Soft rush	*Scirpus validus*
Ragwort,butterweed	*Senecio glabellus*
Southern wild rice	*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
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