For more information about native plants in your area please contact:

Alabama Wildflower Society
Rt. 2 Box 115
Northport, AL 35476

Georgia Native Plant Society
Box 422085
Atlanta, GA 30342

Kentucky Native Plant Society
c/o Department of Biology
Eastern Kentucky University
Richmond, KY 40475

Mississippi Native Plant Society
Mississippi Museum of Natural Science
111 North Jefferson St.
Jackson, MS 39202

North Carolina Wildflower Preservation Society
c/o NC Botanical Garden
Totten Center 457-A
Chapel Hill, NC 27514

South Carolina Native Plant Society
Box 759
Pickens, SC 29671

Southern Appalachian Botanical Society
c/o C. Horn
Newberry College
2100 College St.
Newberry, SC 29108

Tennessee Native Plant Society
Department of Botany
University of Tennessee
Knoxville TN 37996-1100

Virginia Native Plant Society
Box 844
Annadale, VA 22003

For more information about this brochure contact:

Environmental
Research & Services
Tennessee Valley Authority
17 Ridgeway Road
Norris, Tennessee 37828

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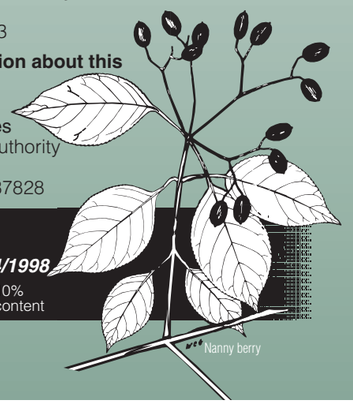


Landscaping with Native Shrubs in Utility Rights-of-Way

A guide to selecting native shrubs for rights-of-way naturalization

The Tennessee Valley

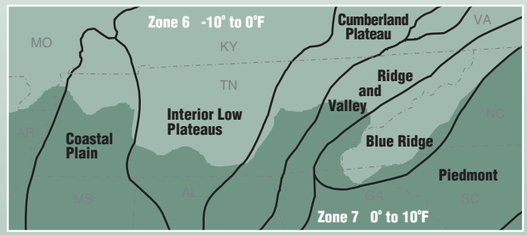
Southern Appalachian Mountains
Ridge and Valley
Cumberland Plateau
Interior Low Plateaus
Coastal Plain

TVA

The Tennessee Valley

Southern Appalachian Mountains, Ridge and Valley, Cumberland Plateau, Interior Low Plateaus, Coastal Plain

The Southern Appalachian Mountains (Blue Ridge), the Ridge and Valley, Cumberland Plateau, the Interior Low Plateaus, and the Coastal Plain all are distinct physiographic regions that make up the Tennessee Valley. Site conditions for each area are determined by topography, soil characteristics, elevation, light availability, and hydrology. These varying site conditions support a mosaic of native plant communities. These regions fall into two different USDA hardiness zones: Zone Six and Zone Seven. These zones are based on the range of average minimum temperatures.



The region addressed in this brochure includes diverse geography, geology, and soils. Soils range from those formed in alluvial sediments along stream courses to soils formed from the residual weathering of rocks like limestone, sandstone, shales, gneiss, schists, and quartzites.

Because there is a range of environmental conditions across the Valley, it is important to realize that native plant species vary as well.

The best way to learn about soils in your area is to contact your local state agricultural extension agent or your county NRCS (Natural Resources Conservation Service) agent.

Special Concerns of Utility Rights-of-Way

Utility Rights-of-Way (ROW) usually involve the clearing of corridors of vegetation because tall trees or shrubs growing under or too close to utility lines often create problems. Branches which break during wind or ice storms can knock down lines, create dangerous situations, and disrupt service.

What is Rights-of-Way Naturalization?

Since exotic, fast growing species often invade these recently cleared corridors, naturalization of ROWs is an attempt to use low growing (< 20 ft. tall), native plants to help establish a healthy ecosystem.

Rights-of-Way Naturalization Considerations

Utility ROW pose an interesting challenge for naturalization. Due to the existence of utility lines, anything planted in or near a ROW must meet certain criteria.

Criteria to be considered for ROW planting are such things as plant height, and water, soil, and light requirements.

Why Naturalize Right-of-Ways?

- A naturalized ROW is more aesthetically pleasing than one that is treated regularly using herbicides and/or tree cutting to keep tall plants from growing in to powerlines.
- The ROW can be naturalized with plants that are suitable for wildlife habitat and forage.
- Naturalizing a ROW benefits the ecosystem and promotes biodiversity.
- A naturalized ROW does not need frequent maintenance and therefore reduces costs and the need for frequent intrusion.

Why Use Native Plants vs. Non-native Plants?

- Species native to the Tennessee Valley have evolved over geologic time and are adapted to the conditions that exist in this area.
- Native plants promote biodiversity and provide food and shelter for native wildlife.
- Non-native plants often escape cultivation and displace native plants, threatening biodiversity.
- Non-native plants can be vectors for disease and exotic pests.

Native Shrub Recommendations

KEY	Height	Soil Moisture	Light	Soil pH	Zone
	S= shrub<15’	W= wet, hydric	F= full sun	B= Basic	6= Areas with min. temp of -10° to 0°F
	S/T= shrub/tree 15-20’	M= moist, mesic	P= part shade	A= Acidic	7= Areas with min. temp of 0° to 10°F
		D= dry, xeric	S= full shade		

Common Name	Scientific Name	Height		Soil Moisture			Light			Soil pH		Zone		Additional Comments
		S	S/T	W	M	D	F	P	S	B	A	6	7	
Red Buckeye	*Aesculus pavia*	*			*		*	*	*		*	*	*	NIce flowers; good food source for wildlife.
Hazel Alder	*Alnus serrulata*	*		*	*		*	*			*	*	*	Good for wet soil sites; tends to form thickets.
False Indigo	*Amorpha fruticosa*	*			*	*	*	*		*		*	*	Prefers stream/river banks, and open woods.
Red Chokeberry	*Aronia arbutifolia*	*		*	*		*	*			*	*	*	Prefers swamps, bogs and moist woods. Not preferred by wildlife.
Black Chokeberry	*Aronia melanocarpa*	*		*	*	*	*	*			*	*	*	Very adaptable. Tends to sucker and form large colonies.
Sweetshrub	*Calycanthus floridus*	*			*		*	*	*	*	*	*	*	Very resistant to diseases and insects. *Seeds of this plant may be poisonous to cattle.*
New Jersey Tea	*Ceanothus americanus*	*			*	*	*	*			*	*	*	May be somewhat difficult to transplant. Fixes atmospheric nitrogen.
Buttonbush	*Cephalanthus occidentalis*	*		*	*		*	*		*		*	*	Prefers wet soils, tolerates wide soil pH range. *Considered poisonous.*
Sweetfern	*Comptonia peregrina*	*			*	*	*	*			*		*	Fixes nitrogen; good deer browse.
Pagoda Dogwood	*Cornus alternifolia*		*		*	*	*	*	*		*	*	*	Does not tolerate hot dry sites; great for wildlife.
Silky Dogwood	*Cornus amomum*		*		*		*	*				*	*	Excellent for streambank stabilization; good growth rate; great for wildlife.
Gray Dogwood	*Cornus racemosa*	*			*	*	*	*	*			*	*	Highly adaptable; great for wildlife.
American Filbert	*Corylus americana*	*			*	*	*	*		*	*	*	*	Good growth rate; tends to sucker.
Cockspur Hawthorn	*Crataegus crusgalli*		*			*	*			*	*	*	*	Needs a well drained soil; drought tolerant.
Oneflower Hawthorn	*Crataegus uniflora*	*				*						*	*	Prefers thickets and woodlands.
Leatherwood	*Dirca palustris*	*		*	*	*	*	*	*	*		*	*	Thrives in moist to wet, shady areas.
Large Fothergilla	*Fothergilla major*	*			*			*			*	*	*	Great autumn coloration; may need shade in hotter areas.
Witch Hazel	*Hamamelis virginiana*		*		*		*	*	*		*	*	*	Requires fertile moist soil.
Smooth Hydrangea	*Hydrangea arborescens*	*			*			*	*	*	*	*	*	Fast growth rate; suckers freely; *twigs may be poisonous to livestock.*
Carolina Holly	*Ilex ambigua*		*			*						*	*	Prefers moist, well drained soils of upland forests.
Deciduous Holly	*Ilex decidua*	*			*		*	*				*	*	Good food source for wildlife.
Inkberry	*Ilex glabra*		*		*							*	*	Evergreen; prefers swamps and streambanks; suckers to form colonies.
Winterberry	*Ilex verticillata*	*			*		*	*	*		*	*	*	Suckers to form colonies. Good for wet swampy areas.
Virginia Willow	*Itea virginica*	*		*	*		*	*	*			*	*	Prefers swamps/streams and wet woodlands.
Mountain Laurel	*Kalmia latifolia*	*				*	*	*			*	*	*	Beautiful flowers in summer. *May be poisonous.*
Drooping Leucothoe	*Leucothe fontanesiana*	*			*			*	*		*	*		Evergreen; will not withstand drought.
Fetterbush	*Leucothe racemosa*	*			*		*	*	*		*	*	*	Prefers banks, backwaters and swamps; tends to sucker producing thickets. *Considered poisonous.*
Spicebush	*Lindera benzoin*		*		*			*	*		*	*	*	Prefers moist woodlands and streambanks.
Ninebark	*Physocarpus opulifolius*	*			*	*	*	*	*			*	*	Good growth rate; very adaptable; excellent for streambank restoration.
American Wild Plum	*Prunus americana*	*				*	*	*				*	*	Requires well drained soil, drought tolerant; good for wildlife.
Chickasaw Plum	*Prunus angustifolia*	*			*							*	*	Usually found in moist soils along roadsides and field borders.
Red Chokecherry	*Prunus virginiana*		*		*	*	*					*	*	Prefers streambanks. *Considered poisonous to livestock.*
Rosebay Rhododendron	*Rhododendron maximum*		*		*			*	*		*	*	*	Moist soils along streams, forms dense thickets. *Most species of Rhododendron are considered poisonous.*
Swamp Azalea	*Rhododendron viscosum*	*			*			*	*			*	*	Grows along ponds and in swamps. Nice flowers. *Most species of Rhododendron are considered poisonous.*
Fragrant Sumac	*Rhus aromatica*	*			*	*	*	*	*	*		*	*	Good for streambanks; suckers producing a dense colony.
Smooth Sumac	*Rhus glabra*	*			*	*	*					*	*	Tolerant of poor dry soils; good for wildlife.
Swamp Rose	*Rosa palustris*	*		*	*		*	*				*	*	Prefers stream and pond banks.
Silky Willow	*Salix sericea*	*		*	*		*	*				*	*	Widely distributed in wet places, swamps, seepage areas and stream banks.
American Elderberry	*Sambucus canadensis*		*		*	*	*	*	*	*		*	*	Fast growth rate; suckers profusely; good for wildlife.
Meadow Sweet	*Spirea alba*	*			*		*					*	*	Prefers bogs and wet meadows.
Steeplebush	*Spirea tomentosa*	*			*		*					*	*	Prefers bogs, wet meadows, and low woodland borders.
American Bladdernut	*Staphylea trifolia*	*			*		*	*	*	*		*	*	Good growth rate; suckers; drought intolerant.
Highbush Blueberry	*Vaccinium corymbosum*		*		*	*	*	*			*	*	*	Can adapt to a wide range of soil conditions, excellent for restoration sites.
Maple Leaf Viburnum	*Viburnum acerifolium*	*			*	*		*	*		*	*	*	Good for shaded sites, forested uplands, needs well drained soils.
Arrowwood Viburnum	*Viburnum dentatum*	*			*	*	*	*				*	*	Adaptable; suckers freely from base.
Possumhaw Viburnum	*Viburnum nudum*		*		*							*	*	Prefers streambanks and swamps, upland slopes.
Yellowroot	*Xanthorhiza simplicissima*	*			*	*	*	*			*	*	*	Good growth rate; suckers freely; prefers moist streambanks.