

Henderson County Center  
740 Glover Street  
Hendersonville, NC 28792  
Phone: 828 697 4891  
Fax: 828 697 4581  
E-mail: [diane\\_silver@ncsu.edu](mailto:diane_silver@ncsu.edu)  
<http://henderson.ces.ncsu.edu/mudcreek>

Prepared by

Diane Silver, Extension Agent, Natural Resources  
Cliff Ruth, Area Specialized Agent, Commercial Horticulture

### Other Resources

For a wealth of stream restoration information and resources, visit the website of the Stream Restoration Institute at NC State University: [www.ncsu.edu/sri](http://www.ncsu.edu/sri).

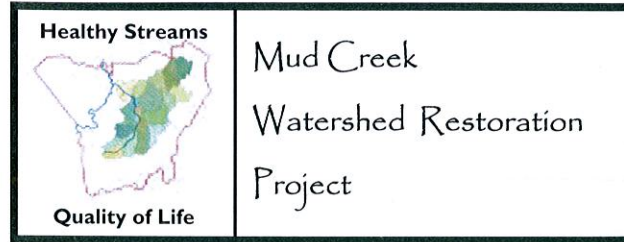
For information on reducing stream volumes through stormwater management, visit the Stormwater Resources site at <http://www.bae.ncsu.edu/stormwater/>.

Distributed in furtherance of the Acts of Congress of May 8 and June 30, 1914. North Carolina State University and North Carolina A&T University commit themselves to positive action to secure equal opportunity regardless of race, color, creed, national origin, religion, sex, age, or disability. In addition, the two Universities welcome all persons without regard to sexual orientation. North Carolina State University, North Carolina A&T University, U.S. Department of Agriculture, and local governments cooperating.

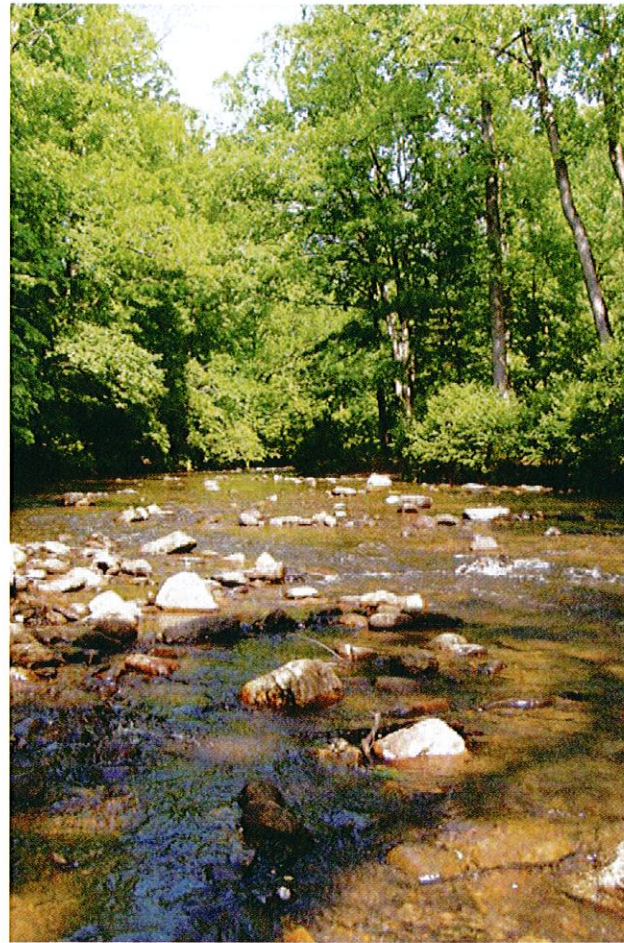
2000 copies of this document were printed at a cost of \$700.00, or \$0.35 per copy.

Funding for the Mud Creek Watershed Restoration Project is provided by the NC Division of Water Quality through a Federal 319 grant.

Printed on recycled paper.



## Riparian Plants for Streambank Stabilization



NC Cooperative Extension Service  
Henderson County Center

## Pick the right plants



Riparian plants are those that are naturally adapted to grow near streams. They are the plants to choose for streambank stabilization. Use this brochure

as a guide to native riparian plants in Western North Carolina.

Tall trees are the best option for streambank stabilization, but keep in mind that tall trees will shade out a garden. You'll need to choose trees, shrubs, or herbaceous species based on your overall landscaping needs.

On the inland-most side of the buffer, try Clethera, Fothergilla, or Sweetspire. Closer to the stream, continue with these, or consider shifting into Sweet Shrub or Button Bush, if you think there's a little more moisture as you get closer to the stream.

On the bank itself, consider live-stakings of Silky Dogwood, or Ninebark if it's sunny. Harvest cuttings for live-stakings during the dormant season (winter).

It's good to use a nice mixture of species to obtain good biodiversity -- monoculture is more vulnerable to disease. A basic estimate for shrubs is to plant one unit per 6-foot x 6-foot space. Live-stakings should be planted at 3 x 3 foot intervals.

If you go to a nursery, emphasize that you are doing landscaping for conservation purposes, and you want strictly local, native plants. Some exotic species may have characteristics similar to natives, and may serve the same function, but for the integrity of our local ecosystems, we strongly encourage the use of only native species.

## Photo Gallery of Riparian Plants



Sweetbay Magnolia ←



↓ Ninebark

Yellowroot





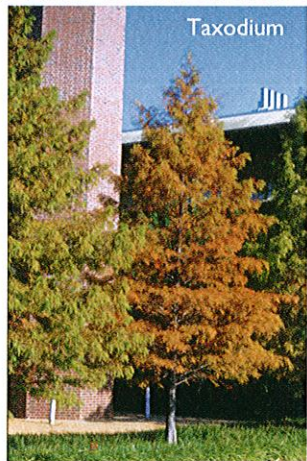
Blackwillow



Elderberry



Taxodium

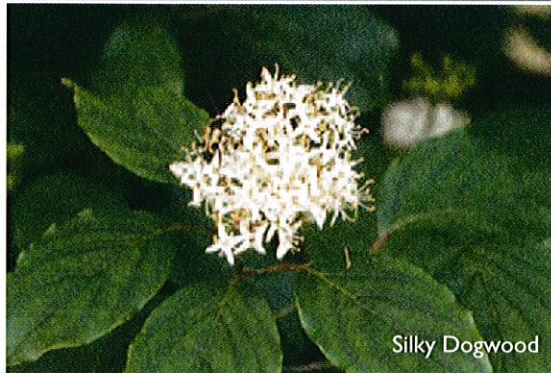


Trees

<i>Aesculus octandra</i>	Yellow Buckeye
<i>Betula lenta</i>	Cherry Birch
<i>Betula nigra</i>	River Birch
<i>Carpinus caroliniana</i>	Ironwood
<i>Carya cordiformis</i>	Bitternut Hickory
<i>Carya ovata</i>	Shagbark Hickory
<i>Diospyros virginiana</i>	Persimmon
<i>Fraxinus pennsylvanica</i>	Green Ash
<i>Halesia caroliniana</i>	Silverbell
<i>Nyssa sylvatica</i>	Blackgum
<i>Platanus occidentalis</i>	Sycamore
<i>Prunus serotina</i>	Black Cherry
<i>Tilia heterophylla</i>	White Basswood

Live-Stakings

<i>Cornus amomum</i>	Silky Dogwood	good in sun or shade; fast stabilizer.
<i>Physocarpus opulifolius</i>	Nine Bark	good in sun; fast-growing; attractive
<i>Salix nigra</i>	Black Willow	



Silky Dogwood

Sweetspire



Small Trees

<i>Acer negundo</i>	Box Elder	fast-growing; less attractive
<i>Alnus serrulata</i>	Tag Alder	quick stabilizer
<i>Amelanchier arborea</i>	Serviceberry	quick stabilizer
<i>Asimina triloba</i>	Common pawpaw	quick stabilizer
<i>Cornus alternifolia</i>	Alternate Leaf Dogwood	
<i>Crataegus crusgali</i>	Cockspur Hawthorn	quick stabilizer
<i>Hamamelis virginiana</i>	Witch-Hazel	
<i>Lindera benzoin</i>	Spicebush	quick stabilizer
<i>Magnolia tripetala</i>	Umbrella Tree	
<i>Salix sericea</i>	Silky Willow	

Shrubs

<i>Aronia arbutifolia</i>	Red Chokeberry	
<i>Calycanthus floridus</i>	Sweet Shrub	like it a little wet; better closer to the stream
<i>Cephalanthus occidentalis</i>	Button Bush	like it a little wet; better closer to the stream
<i>Clethra acuminata 'Hummingbird'</i>	Clethera	attractive; fall foliage & blooms
<i>Corylus americana</i>	Hazel-Nut	
<i>Fothergilla major</i>	Fothergilla	attractive; fall foliage & blooms
<i>Ilex verticillata</i>	Winter Berry	
<i>Itea virginica</i>	Sweetspire	attractive; fall foliage & blooms
<i>Leucothoe axillaris</i>	Doghobble	
<i>Lyonia ligustrina</i>	Male-Berry	
<i>Rhododendron periclymenoides</i>	Wild Azalea	
<i>Rhododendron viscosum</i>	Swamp Azalea	
<i>Rosa palustris</i>	Swamp Rose	
<i>Spirea latifolia</i>	Meadowsweet	
<i>Spirea tomentosa</i>	Steeple Bush	
<i>Symplocos tinctoria</i>	Sweet Leaf	
<i>Viburnum cassinoides</i>	Witherod	
<i>Viburnum dentatum</i>	Arrowwood	quick stabilizer

Herbaceous

<i>Arisaema triphyllum</i>	Jack-in-the-Pulpit
<i>Asclepias incarnata</i>	Swamp Milkweed
<i>Carex crinata</i>	Fringed Sedge
<i>Carex intumescens</i>	Bladder Sedge
<i>Carex lupulina</i>	Hop Sedge
<i>Carex lurida</i>	Lurid Sedge
<i>Carex scoparia</i>	Broom Sedge
<i>Carex stricta</i>	tussock Sedge
<i>Carex vulpinoidea</i>	Fox Sedge
<i>Chelone glabra</i>	Turtlehead
<i>Cyperus strigosus</i>	Umbrella Sedge
<i>Elymus hystrix</i>	Bottlebrush Grass
<i>Eupatorium fistulosum</i>	Joe-Pye-Weed
<i>Eupatorium perfoliatum</i>	Boneset
<i>Impatiens capensis</i>	Jewel-weed
<i>Juncus effusus</i>	Soft Rush
<i>Leersia oryzoides</i>	Rice Cutgrass
<i>Lobelia cardinalis</i>	Cardinal Flower
<i>Lobelia siphilitica</i>	Great Blue Lobelia
<i>Ludwigia alternifolia</i>	Bushy Seedbox
<i>Panicum virgatum</i>	Switchgrass
<i>Polygonum sagittatum</i>	Tearthumb
<i>Scirpus atrovirens</i>	Green Bulrush
<i>Scirpus validus</i>	Soft Stem Bulrush
<i>Sparganium americanum</i>	Bur-Reed
<i>Thelypteris palustris</i>	Marsh Fern
<i>Uniola latifolia</i>	River Oats
<i>Veronica noveboracensis</i>	Ironweed
<i>Xanthorhiza simplicissima</i>	Yellow-Root



Juncus