

Buying Livestakes in NC

- ◆ **Carolina Wetland Services, Inc.;** Charlotte, NC
(866) 527-1177 www.cws-inc.net
- ◆ **Coastal Plain Conservation Nursery;** Edenton, NC
(252) 482-5707 www.coastalplainnursery.com
- ◆ **Deerwood Nursery;** Zirconia, NC
(828) 606-3625 www.deerwoodnursery.com
- ◆ **Foggy Mountain Nursery;** Creston, NC
(336) 384-LEAF www.foggymntn.com
- ◆ **Lumber River Native Plants;** Gibson, NC
(336) 601-8787 www.ncnativeplants.com
- ◆ **Mellow Marsh Farm;** Siler City, NC
(919) 742-1200 www.mellowmarshfarm.com
- ◆ **Native Roots Nursery;** Clinton, NC
(910) 385-8385 www.nativerootsnursery.com



Getting Technical Advice

- ◆ **Army Corps of Engineers**
www.saw.usace.army.mil/Missions/RegulatoryPermitProgram.aspx
- ◆ **North Carolina Cooperative Extension** (find your county)
www.ces.ncsu.edu
- ◆ **NC Division of Soil and Water Conservation**
(find your district)
www.ncagr.gov/SWC/
- ◆ **NC Division of Water Quality**
portal.ncdenr.org/web/wq/

Benefits of Vegetated Buffers

- ◆ Intercepts pollution - acts like a sponge to absorb extra fertilizer, pesticides, heavy metals, etc.
- ◆ Stabilizes streambanks - deep root systems of trees and shrubs hold the soil in place.
- ◆ Stores floodwater in soils and slows flow.
- ◆ Provides habitat and food for wildlife.
- ◆ Moderates water temperatures for aquatic species.
- ◆ Creates a sense of place and reduces noise.
- ◆ Saves money by reducing property damage, less maintenance and requires little to no chemical treatment.

Livestakes Species include:

Livestakes are cuttings from dormant woody trees or shrubs found along streambanks.

Buttonbush, *Cephalanthus occidentalis* -part shade to full sun
Silky Dogwood, *Cornus amomum* -full sun to part sun, some shade
Ninebark, *Physocarpus opulifolius* -sun to shade
Silky Willow, *Salix sericea* -full sun to shade
Elderberry, *Sambucus nigra* -sun to part shade



Silky Willow © Alan Cressler



Buttonbush



Silky Dogwood © Jon Calabria



Ninebark © David Emmitt



Elderberry © Alan Cressler

Harvest Your Own Livestakes

Best time to cut and plant livestakes: November-February

1. Cut stakes from long, upright branches (2 ft long by thumb-width in diameter). Remove no more than 5% of the parent plant.
2. Make an angled cut on the branch just below a leaf node. Measure about 2 ft and make a straight cut above a leaf node.
3. Immediately remove leaves and small branches after cutting stakes. These branches or “whips” can be pushed into the streambank as well.
4. Keep livestakes wet in a bucket until ready to plant. Never leave stored livestakes in the sun or let them dry out. For best results, plant livestakes within 24 hours.

Planting Livestakes

Helpful Materials:

Gloves
Hammer (dead blow, mallet, etc.)
Rebar or pilot hole starter
Ruler
Hand pruners or loppers
Livestakes in bucket of water (harvested or ordered)



Step 1: Measure 6 in - 12 in from the water surface and angle the rebar perpendicular to the streambank. Hammer a pilot hole with rebar and pull out after starter hole is made.



Step 2: Using hand pruners, scar the pointed end of the livestake (pointed end goes into the ground).



Step 3: Orient livestake with leaf buds facing upward. Hand push or gently hammer livestake $\frac{3}{4}$ of the length into the streambank. Make sure to leave 3-4 inches above soil line.



Step 4: Plant every 2 ft - 3 ft in a triangular pattern (spacing about the length of the livestake) and begin again.

