Sun Conditions	
F	Full Sun 6+ hours
P	Partial Sun 2-6 hrs
S	Shade <2 hrs

D/E	Deciduous (D) / Evergreen (E)

Bloom Color	
Blu	Blue
Bur	Burgundy
Crm	Cream
Grn	Green
Org	Orange
Pnk	Pink
Pur	Purple
Red	Red
Wht	White
Yel	Yellow

Wet Code		
OBL	Zone A	Obligate Wetland: Found in wet zones 99% of time. Plant roots tolerate saturation.
FACW	Zone B	Facultative Wetland: Usually occur in 67%-99% of time in wetlands, but occasionally found in non-wetlands (ex. fluctuating river levels).
FAC	Zone B/C	Facultative: Equally likely to occur in wetlands or non-wetlands; estimated probability 34%-66%.
FACU	Zone C	Facultative Upland: Usually occur in non-wetlands 67%-99% of time, but occasionally found in wetlands 1%-33% of time.
UPL	Zone C	Obligate Upland: Occur almost always in non-wetlands 99% of time.

Zone A: Herbaceous plants

A sampling of herbaceous plants that can bend with the river flow at the water's edge (wet code = OBL and FACW).

Type	Common name	Botanical name	Sun	Height x Width	Wet Code	Bloom Time	Bloom	D/E	Features
FERN	Chain Fern	*Woodwardia areolata*	P-S	1'-2'	OBL			D	Amphibian shelter
GRASS	Sweet Flag	*Acorus calamus*	F-P	2'-4'	OBL		Crm, Yel	E	Iris-like leaves, flowers not showy
GRASS	Fringed Sedge	*Carex crinita*	P-S	4'	OBL			E	Drooping seed heads
GRASS	Southern Waxy Sedge	*Carex glaucescens*	F	2'-4'	OBL		Blu	E	Food source for waterfowl
GRASS	Spike Rush	*Eleocharis quadrangulata*	F-P	2'	OBL			E	4-sided rush
GRASS	Soft Rush	*Juncus effusus*	All	3'x1'	FACW			E	Clump-forming
PERENNIAL	Swamp Milkweed	*Asclepias incarnata*	F-P	2'-4'	OBL	Jun-Oct	Pnk	D	Pollinator
PERENNIAL	Hardy Hibiscus	*Hibiscus moscheutos*	F	3'x2'	OBL	Jul-Sept	Red	D	Bird, butterflies, hummingbirds
PERENNIAL	Blue Flag Iris	*Iris virginica*	F-P	2'	OBL	May	Blu, Wht	D	Bird, butterflies, hummingbirds
PERENNIAL	Cardinal Flower	*Lobelia cardinalis*	F-P	3'-5'	FACW	May-Oct	Red	D	Hummingbird, pollinator

Zone B: Livestakes

Livestakes are cuttings from certain native, dormant trees and shrubs. They are inexpensive and hardy. The ones listed below have proven successful (wet code = OBL and FACW).

Common Name	Botanical Name	Sun	Height x Width	Wet Code	Bloom Time	Bloom	D/E	Features
Buttonbush	*Cephalanthus occidentalis*	F-P	10'x5'	OBL	Jun-Aug	Wht	D	Fall reddish flowers, yellow leaves, fragrant
Silky Dogwood	*Cornus amomum*	F-S	6'-10'	FACW	May-Jun	Wht	D	Attracts birds, hummingbirds, pollinators
Red Twig Dogwood	*Cornus sericea (C. stolonifera)*	F-P	15'	FACW	May-Jun	Wht	D	Attracts birds, hummingbirds, pollinators
Ninebark	*Physocarpus opulifolius*	F-S	8'x10'	FACW	Spring	Wht, Pnk	D	Yellow-bronze fall leaves, exfoliating bark
Silky Willow	*Salix sericea*	F-S	12'	OBL	Spring	Grn, Yel	D	Wildlife, fast growing, establishes quickly
Elderberry	*Sambucus canadensis*	F-P	5'-12'	FACW	Jul	Wht	D	Edible

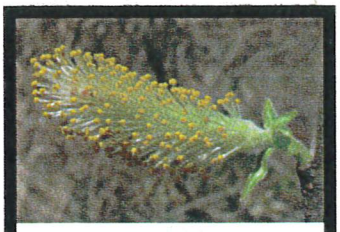
Buttonbush

Red Twig Dogwood

Ninebark
© David Emmitt

Elderberry

Silky Dogwood
© Jon Calabria



Silky Willow
© Alan Cressler

Harvesting Livestakes

Best time to cut and plant livestakes: November-February

1. Cut stakes from long, upright branches (2' long x 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' and make a straight cut above a leaf node.
3. Immediately remove leaves and small branches after cutting stakes. Any extra pieces 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 of harvest. Make sure to keep them upright, if planted upside down they will not grow.

Zone C) **Containers** (wet code = OBL, FACW, FAC, FACU, and UPL)

Type	Common name	Botanical name	Sun	Height x Width	Wet Code	Bloom Time	Bloom	D/E	Features
GROUNDCOVER	Allegheny Spurge	*Pachysandra procumbens*	P-S	6"	UPL	Mar-May	Wht	E	Fragrant
GROUNDCOVER	Green and Gold	*Chrysogonum virginianum*	P-S	1'x1.5'	UPL	May-Oct	Yel	D	Nectar producer
GROUNDCOVER	Dwarf Huckleberry	*Gaylussacia dumosa*	P	3"-15"	FAC	Spring-Summer	Wht	S	Rhizome spreader
PERENNIAL	Black-eyed Susan	*Rudbeckia hirta*	F-P	2'x1'	FACU	Jun-Oct	Yel	D	Birds love the seed in Fall, pollinators
PERENNIAL	Virginia Spiderwort	*Tradescantia virginiana*	P-S	3'x1.5'	FACU	May-Jul	Blu, Pur	D	Pollinators
SHRUB	Beautyberry	*Callicarpa americana*	P	6'x3'	FACU	Jun-Aug	Wht, Pnk	D	Fall clustered berries, bird
SHRUB	Wild Hydrangea, Sevenbark	*Hydrangea arborescens*	P	3'-6'	FACU	Jun-Aug	Grn, Wht	D	Fast growing, short -lived, suckers
SHRUB	Fothergilla	*Fothergilla major*	F-P	10'x9'	FACW	Apr-May	Wht	D	Fall leaves yellow, orange and red-purple
SHRUB	Winterberry	*Ilex verticillata*	All	15'X10'	FACW	Jun-Aug	Wht	D	Birds eat berries after they freeze a few times
SHRUB	Virginia Sweetspire	*Itea virginica*	All	6'X6'	OBL	Jun-Jul	Wht	D	Butterflies, birds, pollinators
SHRUB	Doghobble	*Leucothoe fontanesiana*	P-S	4'x5'	FACW	April-May	Wht, Pnk	E	Fragrant flowers produce good nectar; good amphibian cover
TREE	Downy Serviceberry	*Amelanchier arborea*	F-P	25'x15'	FAC	Mar-May	Wht, Pnk	D	Fall gold to red-orange, birds
TREE	River Birch	*Betula nigra*	F-P	70'x60'	FACW			D	Exfoliating bark; fast-grower, bird
TREE	Fringetree	*Chionanthus virginicus*	All	20'x20'	FAC	May	Wht	D	Fruit attracts birds
TREE	Persimmon	*Diospyros virginiana*	All	30'-60'	FAC	May-Jun		D	Birds, butterfly, pollinators
TREE	Carolina Silverbell	*Halesia carolina or H. tetraptera*	F-P	30'x15'	FAC	Apr-May	Wht	D	Pollinators
TREE	Witch Hazel	*Hamamelis virginiana*	F-P	30'x25'	FACU	Oct-Nov	Yel	D	Birds