## **ESTABLISHING A BUFFER**



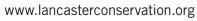
- 1. Plant native trees and shrubs along both sides of a stream.
- 2. The minimum width for a buffer is at least 35 feet wide on both sides of a stream. A wider buffer offers more benefits for water quality and wildlife habitat.
- 3. Maintenance is an important component of a buffer. Mowing and herbicide can help control competition around the trees and shrubs.
- 4. Non-native or invasive plants should be controlled to deter them from taking over a buffer.







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# RIPARIAN BUFFERS: MORE THAN MEETS THE EYE



Promoting the conservation and good stewardship of Lancaster County's natural resources

# **BENEFITS OF RIPARIAN BUFFERS**

Plants stabilize the streambank and help to reduce erosion.

Vegetation along streambanks can help to slow and disperse flood waters.

Trees shade the stream and lower water temperature.

Lower water temperature increase water oxygen levels.



Forested riparian buffers filter sediment and nutrient run off from land areas.

# NATIVE PLANT OPTIONS FOR A RIPARIAN BUFFER

## **PERENNIALS**

## **SWAMP MILKWEED**



Bloom: May to June Conditions: Moist to wet locations. Marshes, meadows, wooded areas. Full sun to partial shade.

Characteristics: Grows 4-6, produces pink to reddish flowers and has an interesting seed pod. It can tolerate drought.

## **JOE PYE WEED**



Bloom: July to October Conditions: Dry to Wet locations. Floodplains, meadows. Full to partial shade.

Characteristics: Grows 1-10? Flowers are pink to purple in color.

Beneficial to song birds, insects, and butterflies.

## **BLUE VERVAIN**



Bloom: June to October
Conditions: Grows moist to wet locations.
Found in meadows, floodplains, swamps
Characteristics: Bright blue to purple
flowers, height of 1-5', bright flowers,
herbal uses. Beneficial to small
mammals, insects, buttferflies, and song
birds. Nut like fruit.

#### **BONESET**



Bloom: July to October
Conditions: Moist to Wet. Found in
floodplains, swamps, streambanks,
meadows. Full sun to shade
Characteristics: Grows 1-5'. Beneficial
to song birds, butterflies, and
insects.

## **COMMON IRONWEED**



Bloom: August to October Conditions: Moist to wet, streambanks, fields, marshes. Full to partial shade.

Characteristics: Grows 3-5', produces purple flowers and valuable to butterflies

### **NEW ENGLAND ASTERS**



Bloom: August to October Conditions: Moist areas, open woods, meadows. Full to partial shade.

Characteristics: Grows 1-6, violet flowers. Tolerates direr soils and some seasonal flooding. Beneficial to butterflies and small mammals.

# **SHRUBS**

## SHADBUSH SERVICEBERRY



Bloom: April to May

Conditions: Prefers moist to wet soils, found in swamps and thickets, full to part shade

Characteristics: White flowers, edible fruit in June, Birds, wildlife, and pollinators use this shrub.

## **COMMON BLACKBERRY**



Bloom: May to July Conditions: Shade tolerant, dry fields, open woods

Characteristics: White flowers, edible black fruit. High pollinator and wildlife value.

## **RED CHOKEBERRY**



Bloom: March to May Conditions: Full to partial shade. Dry to wet areas, forested wetlands, upland forests, fields

Characteristics: Grows 1-13; White purple tinged flowers, red berry in September. Song birds and small mammal use this plant.

## HIGHBUSH BLUEBERRY



Bloom: April to June

Conditions: Full sun to full shade, dry to wet areas, forested wetland, dry to wet woods, streambanks

Characteristics: Grows 6-12', White to pink tinged flowers, black fruit in July, edible berries, high wildlife value.

## **HIGHBUSH CRANBERRY**



Bloom: May to July
Conditions: Full sun, found in
wetlands, wet woods. Does not
tolerate drought.

Characteristics: Up to 16' fall, white flowers, with red berries. Provides winter food for wildlife.

## **SILKY DOGWOOD**



Bloom: May to July Conditions: Full sun to partial shade, moist woods, riparian areas.

Characteristics: White flowers, blue fruit in the fall. Great wildlife habitat, fruit eaten by birds.

photo source www.minnesotawildflowers.info

# **TREES**

## **WILD PLUM**



Bloom: April to May Conditions: Full to partial shade, dry to moist areas, found in woods, pastures, stream sides

Characteristics: White flowers, grows to 20-35', orange, red fruit in August. Edible fruit for

## **RED MAPLE**



Bloom: March to April
Conditions: Dry to wet soils. Shade

Characteristics: Leaves are a variety of colors in the fall.

### SHAGBARK HICKORY



Bloom: May to June Conditions: Full sun, moist soils, lowland valleys, upland slopes.

Characteristics: Yellow green flowers, dark nut in early fall. Important to songbirds, small mammals, and waterfowl

## **BASSWOOD**



Bloom: June to July
Conditions: Partial sun to full shade,
Most areas, woods and slopes.
Characteristics: Yellow flowers,
important pollen source for honey
bees. High wildlife value

photo source www.extension.iastate.edu

## **PERSIMMON**



Bloom: June

Conditions: Full sun to partial shade.

Dry to moist areas, open fields,
deciduous woods.

Characteristics: Greenish yellow to cream. Fruit in fall. High Wildlife value, edible fruits

## **RED BUD**



Bloom: April to May

Conditions: Partial sun to full shade, dry to moist areas. Found in river bottoms and along streambanks.

Characteristics: Grows to a height of 20-35'. Pink to lavender flowers. The fruits are pod shaped. Important to small mammals, song birds, butterflies. .

### PAGODA DOGWOOD

woods



Bloom: May to June Conditions: Shade tolerant, thickets,

Characteristics: White flowers with bluish-black fruit, Provides food and cover for wildlife

photo source University of Kentucky

## **SWAMP WHITE OAK**



Bloom: May Conditions: Wet to moist soils. Sun to partially shaded.

Characteristics: Very important for a variety of wildlife.

photo source www.extension.iastate.edu

## **TULIP POPLAR**



Bloom: June

Conditions: Full to part sun, moist areas, bottomland woods, lower slopes.

Characteristics: Fast growing, important to song birds, small mammals, and hummbingbirds.

## **AMERICAN CRABAPPLE**



Bloom: April to May
Conditions: Full sun, moist areas,
forest edges, streams, fields
Characteristics: Pink to white flowers,
fruit in early fall. Attracts bees,

fruit is sour. High wildlife value.

### **AMERICAN SYCAMORE**



Bloom: May to July
Conditions: Full sun to partial shade,
moist woods, riparian areas.
Characteristics: White flowers, blue
fruit in the fall. Great wildlife

habitat, fruit eaten by birds.

photo source forestryimages.org

## **RIVER BIRCH**



Bloom: May to June Conditions: Wet to moist soils. Shade intolerant

Characteristics: Most common along streams and rivers

photo source https://arbordayblog.org



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