

## How a Riparian Buffer Works

A riparian buffer is an area adjacent to a body of water that contains a mixture of shrubs, trees, grasses, and other plants.



### Zone 1

Primarily large trees that provide shade and fortify the bank from erosion and flooding

### Zone 2

Small trees and shrubs that filter runoff and provide uptake of nutrients and pollutants

### Zone 3

Tall, native grasses and herbaceous cover that help spread and filter runoff

## Providing For Wildlife

Choosing the species to use in your riparian buffer restoration project can be overwhelming.

If you are looking to maximize the shelter provided to terrestrial wildlife, consider these species:

### American Plum

(*Prunus americana*)

American plum trees form a dense, thorny thicket that is used by many species. It is valuable for bird nesting, loafing, roosting, and small mammal bedding.

- **Size:** Large shrub or small tree up to 15 ft
- **Establishment:** Transplanted or direct seeded



### American Sycamore

(*Platanus occidentalis*)

The large, dense canopy of sycamore trees makes them excellent providers of shade for wildlife. Additionally, sycamores house wood-boring insects and leafhoppers.

- **Size:** Large tree up to 100 ft
- **Establishment:** Direct seeded



### Black Locust

(*Robina pseudoacacia*)

The wood of black locust trees provides the ideal shelter for bird cavities. In particular, it is favored by woodpeckers and flickers.

- **Size:** Large tree up to 85 ft
- **Establishment:** Transplanted seedlings



### Button Bush

(*Cephalanthus occidentalis*)

Button bush forms a foliage structure that is commonly used for bird nests. This plant is a favorite of waterfowl, particularly wood ducks.

- **Size:** Medium shrub up to 12 ft
- **Establishment:** Rooted from cuttings or transplanted seedlings

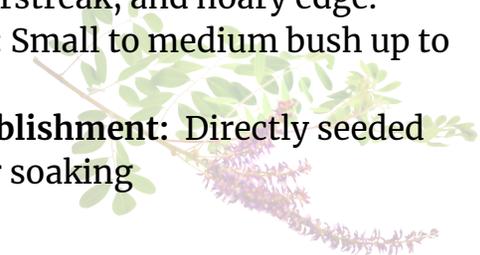


### Indigo Bush

(*Amorpha fruticosa*)

Indigo bush is an important host plant for many moth and butterfly larvae, including the silver-spotted skipper, gray hairstreak, and hoary edge.

- **Size:** Small to medium bush up to 10 ft
- **Establishment:** Directly seeded after soaking



## Pawpaw

(*Asimina triloba*)

Pawpaw trees provide the sole shelter for the larvae of the zebra swallowtail butterfly. Herbivores find the leaves unpalatable, leaving ample foliage for shade.

- **Size:** Small to medium tree up to 40 ft
- **Establishment:** Directly seeded



## Possumhaw Viburnum

(*Viburnum nudum*)

Possumhaw viburnum is a potential host for the spring azure butterfly. It is also known to house humming bird clearwing moths.

- **Size:** Large shrub up to 12 ft
- **Establishment:** Direct seeded or rooted cutting



## Shagbark Hickory

(*Carya ovata*)

Shagbark hickory trees have unique, flaking bark. This bark provides shelter for many insects and small mammals, such as bats and flying squirrels.

- **Size:** Large tree averaging 80 ft
- **Establishment:** Transplanted seedlings



## White Oak

(*Quercus alba*)

Due to their size and density, the foliage of white oaks provides Ideal nesting habitat for birds. It also provides abundant shade.

- **Size:** Large tree up to 100 ft
- **Establishment:** Direct seeded



## Yellow Birch

(*Betula alleghaniensis*)

Yellow birch trees are common shelter for squirrels, saw-whet owls, and flying squirrels.

- **Size:** Large tree up to 80 ft
- **Establishment:** Direct seeded



## Resources to Get Started

For more information, please visit [pecva.org/buffers](http://pecva.org/buffers) or refer to one of the following organizations:



**Questions?** Contact PEC staff at [trees@pecva.org](mailto:trees@pecva.org) or 540-347-2334 to learn more.



# Riparian Buffers

A guide for landowners in the Virginia Piedmont

Learn more at [pecva.org/buffers](http://pecva.org/buffers)

