

Info

Why add edible and floral plants to riparian forest buffers?

Multifunctional riparian forest buffers (MRFBs) offer the opportunity to produce perennial crops of native fruits and nuts, as well as floral trees and shrubs.

These products can be harvested and sold at retail or wholesale markets, and used at home. This information sheet provides examples of how these plants can be added to riparian forest buffers in the Appalachian region.

As their name implies, MRFBs have a wide range of functions. They filter runoff and keep stream banks stable, helping to improve water quality by reducing the amount of nutrients and sediment that flows into waterways. They also shade the water, providing habitat for some cold water-dependent fish species. MRFBs provide habitat for wildlife, including pollinators, and can act as wildlife corridors, providing cover and food sources. Providing habitat for beneficial insects may reduce the need for pesticides, which may have an additional environmental benefit.

Multifunctional buffers also have social benefits. By protecting water quality, MRFBs contribute to safe, clean drinking water for all that live downstream. Increased wildlife habitat means more opportunities for people to enjoy the outdoors through hunting, fishing, bird watching, and water sports.

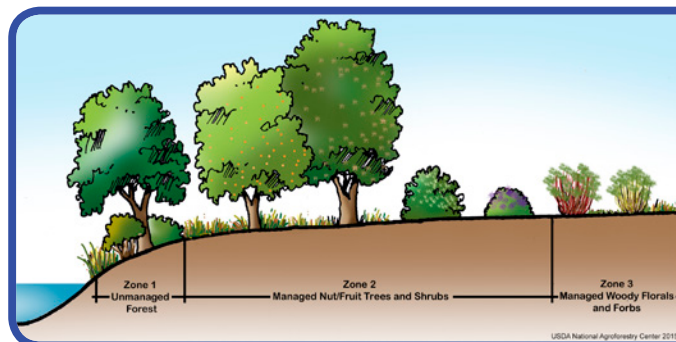
Riparian buffers planted with a rich diversity of native fruits, nuts, and florals offer the grower a special connection with local tradition, culture, and folklore. Pawpaws, for example, are rarely found on supermarket shelves, but have long been a delicacy. Older fans of pawpaws may buy them at farmers markets to savor a taste from their youth, while those new to pawpaws might further their appreciation of the land where they grow wild. American persimmon, when tasted at peak ripeness in the late fall or early winter, has an unparalleled flavor and is a traditional



▲ Elderberries can be a component of multifunctional riparian forest buffers. (Photo credit: Katie Commender/Virginia Tech)

holiday treat. Serviceberry, also known as sarvis, Saskatoon, or Juneberry, has an underappreciated blueberry-like fruit, and everyone loves the clouds of white flowers born in early spring. Native fruits, nuts, and florals are a part of what makes a region unique. Each region has its own set of native fruits, nuts, and florals with potential to be incorporated into MRFBs.

Multi Functional Riparian Forest Buffer Design



Zones 2 and 3 can be planted with different species and at expanded widths to incorporate perennial crops of fruits, nuts, and floral trees and shrubs.

Working Trees

Edibles and florals harvested from multifunctional riparian forest buffers*

Pawpaw



NAC/Joe Banegas

Market Opportunities

With a tropical flavor, custard texture and high nutrient content, America's forgotten fruit can be eaten fresh or made into desserts.

Average Prices

Fresh fruit: \$2/lb wholesale
 \$3+/lb retail
 Frozen pulp \$6/lb retail
 Jam \$6/oz jar retail

Persimmon



ASD/Emily Lachniet

Market Opportunities

The "Fruit of the Gods," sweet persimmon can be sold fresh or made into pudding, jam, dried fruit and even beer.

Average Prices

Fresh fruit: \$2.75/lb retail
 Frozen pulp: \$8+/lb retail
 Dried fruit: \$11+/lb retail

Elderberry



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Market Opportunities

Coined "Nature's Medicine Chest" for its immune boosting properties, elderberries can be made into syrup, cough drops, juice, wine, jam and food coloring.

Average Prices

Juice: \$15-\$17/11oz jar
 Syrup: \$18/4oz jar retail
 Wine: \$10-\$13/bottle retail
 Cough drops: \$2.50/15 retail

Hazelnut



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Market Opportunities

A great source of fiber and 'good' fats, hazelnuts can be sold in shell or shelled and made into flours, candies, butters and oils.

Average Prices

In shell: \$3/lb wholesale
 Shelled: \$6/8oz retail
 Oils: \$8/8oz jar retail

Woody Florals



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Market Opportunities

Woody florals, such as pussy willow and red and yellow twig dogwood, can be coppiced every 2-3 years and sold to the floral industry or used in crafts.

Average Prices

Cuttings: \$0.37-0.45/stem retail
 Wreaths: \$45+ ea retail

Black Walnut



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Market Opportunities

This multi-use tree produces valuable timber and heart-healthy nuts sold in shell or shelled.

Average Prices

In shell: \$9.25/lb retail
 Shelled: \$12/lb retail

*Prices can vary considerably by season and local markets.

APPALACHIAN
 sustainable
 DEVELOPMENT



USDA National Agroforestry Center

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