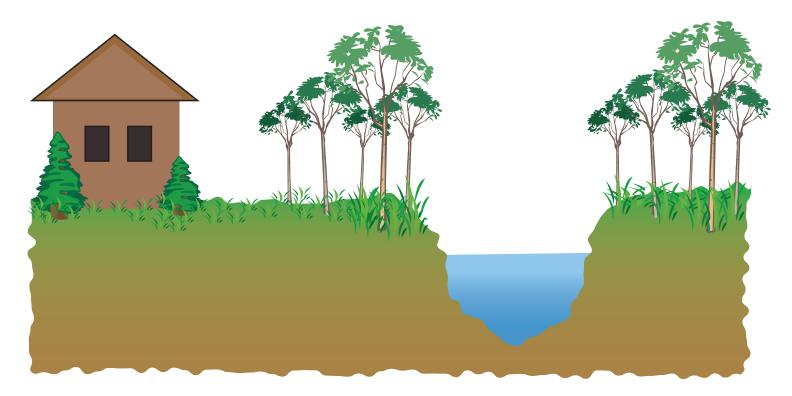
HENV-202



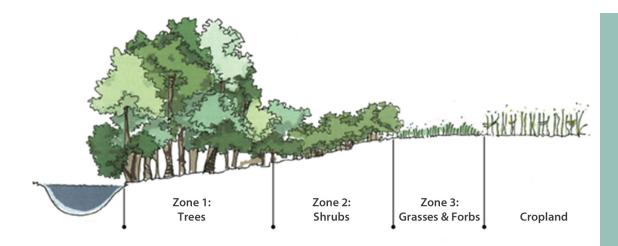
University of Kentucky College of Agriculture, Food and Environment *Cooperative Extension Service*

<section-header><section-header>

Cooperative Extension Service | Agriculture and Natural Resources | Family and Consumer Sciences | 4-H Youth Development | Community and Economic Development



Kentucky has more than 90,000 miles of rivers and streams and thousands of ponds, lakes, reservoirs, and wetlands. You can improve your surroundings and the quality of your stream, pond, or lake by planting an area called a riparian buffer or buffer zone.



Buffer zones are areas along the bank of a water body. When planted with trees, shrubs, and deep-rooted grasses, they protect the water from litter, fertilizers, sediment, and bacteria.

The roots of the plants trap and filter pollutants before they reach the water.

Riparian buffers, or buffer zones, are often called "sponges" because they help soak up pollutants before they enter our streams, ponds, and lakes.

Why should I plant a buffer zone?



- **Improves water quality** by trapping sediment and pollutants that flow off the land
- **Creates habitat** for birds and other wildlife
- **Provides shade** to reduce temperatures in streams and other water bodies
- Assists in soaking up excess run-off from yards after large rains or snowfalls



Ideas for making a buffer zone

- Create a no-mow area around the water's edge.
- Use native plants, trees, and shrubs.
- Plant trees in fall and spring.
- **Plant trees** closest to the water, shrubs next to the trees, and grasses and wildflowers next to the shrubs.
- **Prevent livestock** from grazing in buffer zones.
- **Protect** larger plants and trees with fabric mats or tree cylinders.
- **Contact KY 811** to locate all local utility lines two days **BEFORE** digging or planting.

What plants should I use?

These native Kentucky species are commonly used for buffer zones.

Shrubs and small trees

Arrowwood viburnum (Viburnum dentatum) Buttonbush (Cephalanthus occidentalis) Eastern redbud (Cercis Canadensis) Rough-leaf dogwood (Cornus racemosa) Silky dogwood (Cornus amomum) Spice bush (Lindera benzoin) Big bluestem (Andropogon gerardii) Deer tongue grass (Panicum clandestinum) Eastern gamma grass (Tripsacum dactyloides) River bank wild rye (Elymus riparius) River oats (Uniola latifolia) Switchgrass (Panicum virgatum) Perennial wildflowers Cardinal flower (Lobelia cardinalis) Great blue lobelia (Lobelia siphilitica) Grey goldenrod (Solidago nemoralis) Greyheaded coneflower (Ratibida pinnata) Joe Pye weed (Eupatorium fistulosum) New England aster (Aster novae-angliae) Purple coneflower (Echinacea purpurea) Swamp milkweed (Asclepias incarnate)

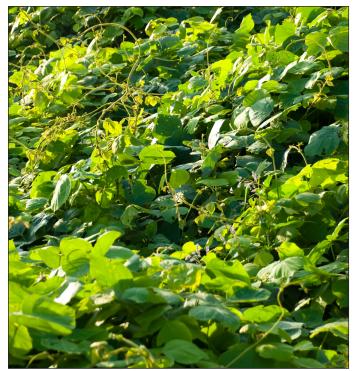
Trees

American sycamore (Plantanus occidentalis)Bald cypresss (Taxodium distichum)Black walnut (Juglans nigra)Black willow (Salix nigra)Bur oak (Quercus macrocarpa)Eastern cottonwood (Populus deltoids)Pin oak (Quercus palustris)Red maple (Acer rubrum)River birch (Betula nigra)Swamp chestnut (Quercus michauxii)Swamp white oak (Quercus bicolor)Tupelo gum (Nyssa sylvatica)White oak (Quercus alba)Yellow Buckeye (Aesculus flava)Yellow-poplar (Liriodendron tulipfera)

What plants should I avoid?

Avoid using invasive plants. These plants do not grow naturally in the area and may keep native plants from thriving.

Common invasive species of Kentuc	ky
Bush honeysuckle (<i>Lonicera maackii</i>)	
Chinese privet (<i>Ligustrum sinense</i>)	
Common reed (Phragmites australis)	
English ivy (<i>Hedera helix</i>)	
Garlic mustard (Alliaria petiolata)	
Japanese honeysuckle (Lonicera japonica)	
Japanese knotweed (Fallopia Japonica)	
Japanese stiltgrass (Microstegium vimineum)	
Kudzu (Pueraria lobata)	
Multiflora rose (Rose multiflora)	
Purple loosestrife (Lythrum salicaria)	
Reed cannarygrass (Phalaris arundinacea)	
Tree-of-heaven (Ailanthus altissima)	
Winter creeper (Euonymus fortunei)	



Kudzu (Pueraria lobata)

Additional information

The following websites provide information about common native Kentucky species and invasive species control.

- Kentucky Division of Forestry (http://forestry.ky.gov)
- Kentucky Department of Fish and Wildlife Resources (http://fw.ky.gov)
- Office of Kentucky Nature Preserves (KNP) (http://naturepreserves.ky.gov)

Adapted from Planting a Riparian Buffer (ID-185).

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate on the basis of race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. Issued in furtherance of Cooperative Extension work, Acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, Nancy M. Cox, Director of Cooperative Extension Programs, University of Kentucky College of Agriculture, Food and Environment, Lexington, and Kentucky State University, Frankfort. Copyright © 2019 for materials developed by University of Kentucky Cooperative Extension. This publication may be reproduced in portions or its entirety for educational or nonprofit purposes only. Permitted users shall give credit to the author(s) and include this copyright notice. Publications are also available on the World Wide Web at www.ca.uky.edu.