

**Rebecca Konopka**  
Carter County Extension Office

## Streamside Buffers: A Simple Solution for Cleaner Water and Healthier Livestock

In Kentucky, it's common for livestock to drink directly from streams, which can lead to water contamination and damaged ecosystems. Implementing streamside buffers—vegetated areas next to streams that protect water quality and improve livestock management—should be considered to lessen negative environmental effects. August is the perfect time of the year to begin planning for site preparation.

### What is a streamside buffer?

A streamside buffer, also called a riparian buffer, is a strip of land with plants like trees, shrubs and grasses located along streams or rivers. These buffers act as a protective barrier between water bodies and the land used for agriculture or other activities. They help filter out pollutants, stabilize stream banks and provide habitat for wildlife.

### Benefits of streamside buffers

1. **Water quality:** Buffers trap sediment and filter out pollutants from runoff, keeping streams cleaner.
2. **Erosion control:** Plant roots hold soil in place, preventing erosion of stream banks.
3. **Flood control:** Buffers slow down and absorb floodwaters, reducing flood damage.
4. **Wildlife habitat:** The mix of trees, shrubs and grasses supports a variety of wildlife.

The width of a streamside buffer can vary, but even a narrow buffer of 15 feet on each side of a stream can protect stream banks. Wider buffers (over 100 feet) are more effective in filtering out pollutants like nitrogen. The USDA recommends three zones for an effective buffer:

- **Zone 1:** Closest to the stream, consisting of undisturbed forest.
- **Zone 2:** Managed forest area extending further from the stream.
- **Zone 3:** A grassy area that helps control runoff and sediment.

### Benefits to farmers

For farmers, streamside buffers offer numerous advantages. They reduce land loss from erosion, protect water resources and increase land value. Buffers also create habitats for wildlife, which can boost opportunities for hunting and fishing. Additionally, there are government programs that provide financial support for establishing streamside buffers.

Cattle prefer streamside areas due to water availability and lush vegetation. However, their presence can lead to soil compaction, vegetation damage, and stream contamination. Excluding cattle from these areas improves water quality and pasture utilization. Implementing practices like fencing and providing alternative water sources and artificial shade can help manage cattle more effectively.

### Implementing streamside buffers

1. **Identify the area:** Look for flood-prone areas near streams for buffer placement.

2. **Prepare the site:** Treat areas with invasive grasses before planting.
3. **Select and plant vegetation:** Use native plants suited to local conditions.
4. **Maintain the buffer:** Regularly check and manage the buffer to ensure its effectiveness.
5. **Install fencing:** Protect the buffer by limiting livestock access.

More information about streamside buffers can be found at <https://bit.ly/46zdvhe> and <https://bit.ly/4fnn4nr>. For information on developing streamside buffers, contact the Carter County office of the University of Kentucky Cooperative Extension Service. Educational programs of the Cooperative Extension Service 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 expressions, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability.

#### **Upcoming Events:**

- The **Grayson Farmer's Market** is open on Saturdays from 9:00 AM until noon and on Thursdays from 2:00-6:00 PM. The market is located in the shed behind the Extension Office. The **Olive Hill Farmer's Market** is located in the Save-a-Lot parking lot and is open on Saturdays and Wednesdays at 8:00 AM and Mondays at 3:00 PM until sell out each day. There will be a pop-up market on the first Tuesday of the month in the Friendship & Chapel House parking lot from 6:00-8:00 PM.
- **Lazy Susan Workshop** – August 27<sup>th</sup> - UK Robinson Center for Appalachian Resource Sustainability -
- **Little Sandy Beekeepers Meeting** – Tuesday, September 3<sup>rd</sup> at 6:30 PM- Speaker: Dr. Amanda Skidmore, KY State Apiarist; Topic: Introduction & Native Plants for Bees