The Habitat Corner

BUFFERS PROVIDE CLEANER WATER FOR FISH, WILDLIFE AND AGRICULTURE

Just as veins and arteries carry blood through the human body, our streams and waterways carry life-sustaining water throughout our landscape. Tennessee is especially blessed with over 19,000 miles of streams, which along with lakes and other water bodies help Tennessee host the highest biodiversity of fish and wildlife of any inland state. Many of these species are aquatic, including numerous small nongame fish, crustaceans, and mollusks. Quite a few of the species are deemed "at-risk" due to water quality issues.

While not all of these species threatened by water quality issues are caused by agriculture or forestry practices, there are many farms where stream banks have had all or most of the trees removed, land is cropped close to the stream bank, or livestock have had unrestricted access to creeks, trampling up and down the stream bank resulting in pathways for increased sedimentation to enter the stream.

Adequate buffers filter sediments, pesticides, and excess fertilizer from entering the stream and causing chemical pollution or over-enrichment of nutrients that contribute to lower oxygen levels and excess aquatic plant growth. Reduced siltation helps many aquatic species that lay their eggs on rock substrates, whose reproduction is reduced when those eggs are covered with silt.

Restoring adequate riparian (streamside) vegetation along streams is one of the most valuable wildlife habitat practices. Riparian buffers contribute to cleaner water, benefiting both aquatic and terrestrial species, and provide habitat for a wide suite of land-dwelling animals and birds. Buffers reconnect other blocks of habitat, allowing animals to travel more safely from one area to another, and provide places to nest, forage, and find protective cover.

Programs offering buffers assistance often provide cost-share for exclusion fencing, alternative water sources and a hardened stream crossing when limiting livestock access to water bodies. Cleaner water from alternative water sources helps prevent livestock health problems as well as improve water quality downstream from the farm. Depending upon the severity of the stream bank problem, several programs will also fund non-vegetative (e.g. rock rip-rap) bank and in-stream improvements if warranted.

Buffers can also help farmers financially by keeping productive topsoil on crop fields and pastures from being washed away, improving crop and forage productivity. Trees, shrubs, and deep-rooted native warm season grasses help keep land from sloughing off into streams.

HABITAT AND PAYMENT OPPORTUNITIES:

There are more opportunities than ever before in federal and state conservation programs and better payments than ever before for re-establishing grass, shrub and/or tree buffers on both crop land and marginal pastureland along streams, wetlands, ponds, lakes and around sinkholes. Tree buffers restored under the Environmental Quality Incentives Program (EQIP) and Wildlife Habitat Incentives Program (WHIP) are paying up to approximately $4,000 an acre (a one-time payment that includes 15 years of "foregone income" to compensate for loss of agricultural production), and marginal pastureland along streams, sinkholes and wetlands can now be enrolled in the Conservation Reserve Programs' (CRP) CP29 and CP30 practices, which includes annual and incentive payments. To find out the practice choices that are available for your property, contact your local USDA Service Center or TWRA Private Lands Biologist (see www.twraprivatelands.org)

Correction: In the Winter 2011 issue "Habitat Corner," the author was incorrectly identified as Mark Gudlin. The correct author was Clint Borum, TWRA Private Lands Biologist.

"Helping Landowners and Wildlife Through Habitat Enhancement"

The Tennessee Wildlife Resources Agency has Private Lands Biologists that will assist you in developing a management plan for your property and a strategy to implement it. See www.TWRAprivatelands.org for who to contact for technical assistance and other useful information on habitat management and programs.