



KDF Corner

by Pam Snyder

Forty-eight percent of Kentucky is forestland—that is 12.4 million acres of forests. The Kentucky Division of Forestry (KDF) mission is “to protect, conserve and enhance the forest resources of the Commonwealth through a public informed of the environmental, social and economic importance of these resources.” The division offers a variety of programs and services for landowner assistance in forest health, forest management, and wildland fire protection. KDF staff are trained and prepared to respond quickly to various types of emergencies and natural disaster situations that could potentially impact Kentucky.

This past year, Kentucky has been devastated by extreme weather patterns that caused multiple tornadoes in Western Kentucky (December 2021) to historical flooding (July 2022) in Eastern Kentucky. The state was in various degrees of drought conditions by late October 2022 (Drought Index Map). The division responded to each of these natural disasters.

Over an 11-day period, forty-six KDF employees helped with tornado response and cleanup. The catastrophic flooding event in Eastern Kentucky occurred July 27-28. Ninety employees were deployed for on-the-ground assistance with debris removal as saw crews and ten employees coordinated response efforts at Kentucky’s Emergency Operations Center. By early November, all division employees were engaged in fighting wildland fire activities and the KDF Fire Mobilization Plan was initiated. The division requested assistance from out-of-state fire resources from five



KDF crews work diligently to extinguish fires.

states (VA, PA, MS, TX, and AR). It was the first time in six years that the division had mobilized for fire and requested assistance from other states. It was an unprecedented year for natural disasters in Kentucky, and the division-deployed personnel to assist Kentuckians after each disaster.

Extreme weather patterns are often associated with climate change. The definition of climate change includes long-term natural changes based on solar cycles or human causes, such as burning fossil fuels. Many factors affect climate change, and it is important to understand how trees play a vital role in mitigating or capturing carbon dioxide.

Trees capture carbon dioxide from the atmosphere through photosynthesis, and it is locked within their growth rings or wood fiber. Forest ecosystems or forested stands act as carbon sinks. Trees reduce carbon emissions by sequestering the emissions. Carbon sequestration allows for trees to aid in the process called “climate adaptation.” The adaptation process allows for minimizing or lowering the impacts of climate change incrementally. Examples are planting trees (riparian buffers, shelterbelts, orchards, and afforestation projects) to sequester more carbon or landowners managing their forestland sustainably for long-term purposes creates vigorous, healthy forests. Natural resource professionals can utilize climate adaptation and resiliency principles while developing forest management plans for landowners. Again, it is important to understand the vital role trees play in mitigating climate change and properly managed forests are the key element in the process.

Photos courtesy: Pam Snyder

About the author: **Pam Snyder**, is the Forest Management Chief with the Kentucky Division of Forestry and works on a variety of forest management needs for private landowners, farmers, and governmental agencies. She is one of the editors of the Kentucky Woodlands Magazine.

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