

## FIA and Why It's Important to Kentucky

## by Pam Snyder

Foresters use a lot of acronyms to shorten the names of federal programs such as "FIA." It stands for "Forest Inventory and Analysis" a program that is sponsored and funded by the U.S. Forest Service and is the nation's continuous forest census. The FIA program traces its origin back to the McSweeney-McNary Forest Research Act of 1928. This law initiated the first forest inventories starting in 1930 in the United States. The FIA program shows forest trends that are likely to appear 10 to 50 years out and it assesses whether current forest-management practices are sustainable long term. The FIA program has changed dramatically over the decades from periodic to annual surveys to collecting data about forested area, location, species, size, tree health and tree growth, mortality, harvest removals, wood production, utilization, forest ownership, soil, understory vegetation, tree crown conditions, and coarse woody debris (https://www.fia.fs.fed.us/). The U.S. Forest Service makes grant funds available to the

## Kentucky is 48% forested, which roughly means it has 12.3 million acres of forestland.

Kentucky Division of Forestry in order to have FIA foresters on staff. These foresters have the duty and responsibility of measuring inventory plots across Kentucky, and they currently visit approximately 14-20% of the established plots on an annual basis. Kentucky has 4,304 permanently established plots across the state on a 6,000 acre grid system and 2,345

plots are forested. Each plot center is permanently marked with a metal pin. The crews utilize a metal detector to scan the ground and sometimes they find it occupied by other woodland animals. Currently, 62,887 non-forested acres revert to a forested condition annually. The FIA crews go places most Kentuckians can only imagine, and they have been to these inventory plots multiple times over the years and have many memories. The crews usually work in teams of two.



Above: FIA plots have more than just trees on them!

Left: Steven Rogers, FIA Forester, using a clinometer to measure tree height.

12

One crew shared a recent story. While working in Warren County on a reverting non-forested plot that had a lot of blackberry briars with ripened berries and other young vegetation, one crew member accidently kicked a log located near the briars. She picked some of the berries and noticed immediately a very bad aftertaste. As they continued to go about their work, the other crew member noticed a foul odor and they continued working the plot and got it completed. Realization set in: They had disturbed a skunk! Although the crew was not directly sprayed, their equipment, clothes, vehicle, and hotel rooms



Tammy Rogers, FIA Forester, uses a variety of equipment to measure and record forest inventory data.

to get permission to access the established plots on their property. The Phase 2 plots are designed to cover a 1-acre sample area in size and contain subplots and microplots (see figure 1). All the inventory plot data is recorded on electronic field recorders. The Forest Inventory Analysis data and tools are available online via the USDA Forest Service website (https://www.

fia.fs.fed.us/tools-data/index.php). The FIA data is utilized by various programs: the National Woodland Owners Survey, National Timber Products Output Survey, Urban Forest Inventory, Logging and Fuelwood Production Survey, and others. The FIA data is crucial to providing inventory data that affects policy, forest management, and forest economic decisions at the state and national level.

In 2018, Kentucky's forestry sector employed more than 26,500 people directly and had a total economic contribution over \$13.5 billion dollars. So if you see individuals dressed in bright orange forestry cruising vests and hardhats on your property, send them a big thank you for playing a key role in helping the Commonwealth of Kentucky have updated forest-inventory data through the national USDA Forest Inventory and Analysis Program.

## 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.

Kentucky Division of Forestry, 300 Sower Blvd. 4th Floor; SE, Frankfort, KY 40601; E-mail: pamela.snyder@ky.gov; Phone: 502.782.7184.

Subplot: 24.0 ft radius Azimuth 1-2 =  $360^{\circ}$ Azimuth 1-3 =  $120^{\circ}$ Azimuth 1-4 =  $240^{\circ}$ Microplot:  $1 \odot$   $1 \odot$ 

Figure 1. The forest inventory plots are designed to cover a 1-acre area. Plots contain numerous subplots and mircroplots.



had to be steam/deep cleaned. The final note from the crew and moral of the story was tomato juice does

Prior to visiting a

contact the landowner

plot, a forester will

not work.

