Inflation Reduction Act in Action: Kentucky Tree-Farming Family Fights Invasives and Aids Woodland Recovery

Herb Loyd and his family own and operate a 1,060-acre tree farm in Fleming County, Kentucky. The farm is hilly, with about 120 acres of open field, 80 acres of field reverting to forest, and 800 acres of forest.

Recently, Herb received two Environmental Quality Incentives Program (EQIP) contracts funded by the Inflation Reduction Act to promote forest growth and rebalance the mix of species with native trees on 100 acres of forest and implement brush management to eliminate non-natives on another 34 acres.

The Inflation Reduction Act provides an additional \$19.5 billion for the Natural Resources Conservation Service (NRCS) to deliver financial and technical assistance to producers for Climate-Smart Agriculture and Forestry Mitigation Activities through existing USDA conservation programs like EQIP. When applied appropriately, these activities are expected to reduce greenhouse gas emissions or increase carbon sequestration.

The funds were used to implement practices such as forest stand improvement. Forest stand improvement is the manipulation of tree and shrub species composition, structure, or density to achieve desired forest conditions. Improving the forest stand can typically result in increased above and below ground carbon stocks over the long term as part of a healthy forest ecosystem.

In this case, several species of oaks, hickories, poplars, walnuts, and sugar maples that better represent the original forest and promote the prevalence of native animals, insects and bio flora were selected to remain, and non-native invasive species and trees damaged from earlier logging practices were eliminated. Invasive species can harm native species and their habitats and degrade forest resources.



Herb Loyd and his family own and operate a 1,060-acre tree farm in Fleming County, Kentucky. Photo Credit: Justin Pius, NRCS.

Removing them allows native species, which are adapted to the local conditions, to thrive and function better, including storing carbon.

When the tree farm was purchased by the Loyd family in the 1980s, it was not as productive as it could have been due to past misuse, disease, and encroaching invasive species. Earlier logging practices of cutting the best trees and leaving the worst, stringing fencing, grazing of animals in the woods without proper management, inappropriate use of burning, and not repairing damage after logging activities all degraded the woods from its original stature. Add to this the devastating American chestnut blight disease of the early 1900s that killed most mature American chestnut trees, once the dominant tree species in the eastern forest, in just a few decades. In addition, many immigrants brought a myriad of foreign plants here as ornamentals from their overseas homes, such as bush honevsuckle, tree of heaven, and multiflora rose, which have become invasive and significantly impact specific habitats.

Quick Farm Facts

Location: Flemming County, KY

Operation Type: Forestry

Climate-Smart Practices: Forest Stand Improvement, Brush Management

The Inflation Reduction Act (IRA)

IRA represents the single largest investment in climate and clean energy solutions in American history. It provides an additional \$19.5 billion over five years for climate-smart agriculture through existing NRCS conservation programs. nrcs.usda.gov/inflationreduction-act.

Climate-Smart Agriculture and Forestry (CSAF)

is an integrated approach that enables farmers, ranchers, and forest landowners to respond to climate change by reducing or removing GHG emissions (mitigation) and adapting and building resilience (adaptation), while sustainably increasing agricultural productivity and incomes. View the **practice list**.

How to Apply

Learn more about the exciting opportunities to use Inflation Reduction Act funds for forest land conservation at your local USDA Service Center, which you can find at farmers.gov/working-with-us/ USDA-service-centers.

INFLATION REDUCTION ACT IN ACTION



Recently, Herb Loyd received two EQIP contracts funded by the Inflation Reduction Act to promote forest growth, eliminate non-natives. and rebalance the mix of species with native trees. Photo Credit: Justin Pius, NRCS.

In their forest and in their fields, many generations of the Loyd family have been steadfast in their commitment to correcting and fighting these issues.

Herb feels it is about as easy to have high-quality forests and species as it is to have low-quality forests. "The amount of work involved is not tremendous," said Herb, "accomplishing it is fun and fulfilling."

Kentucky woods are most productive and healthy when they are populated with high-quality sawlogs, when they are creating habitat and food for native animals (squirrels, rabbits, native insects, native pollinators, deer, turkeys, etc.), and when non-native invasive species are not crowding out the natives.

Over the years, NRCS has been a crucial ally for Herb and the Loyd family, providing funding through cost-share contracts designed to address these natural resource issues and help advance conservation goals simultaneously.

"We want to thank NRCS for their support and encourage other tree farmers with similar intentions to consider NRCS programs for assistance," said Herb.



Herb Loyd (left) and Caleb Hardymon, a forester for the Kentucky Department of Forestry. Photo Credit: Justin Pius, NRCS.

