

Kentucky and Tennessee Agriculture

EXECUTIVE SUMMARY OF OUR STRATEGY



The Nature Conservancy is working with farm groups, supply chain corporations, public agencies, universities and other partners to promote large-scale, science-based practices that safeguard our waters and lands while empowering farmers to meet the rising demand for food, fuel and fiber. © Mike Wilkinson

Farms make up half of the world's habitable land area. Crucial to our very survival, 95% of our food is still a product of the ground beneath our feet. The Nature Conservancy (TNC) understands the critical role of working farms and recognizes the vast potential for farmers, as original land stewards, to continue to be allies in conservation.

In our Tennessee and Kentucky ag program, we believe that we can do the most good for the environment by also trying to do the most good for farmers. We know that some ag conservation practices offer distinct competitive advantages to farmers. We want to accelerate adoption of these practices by showing the benefits, by helping to provide the technical support needed to succeed, and by spreading the word. We also know that not all ag conservation practices are feasible without additional financial support. For these, we want to develop new incentives and new funding vehicles.

Ultimately, we will succeed when we have worked with partners to create wins for the environment, for farmers, and for all people who call Tennessee and Kentucky home. We have developed a two-state agricultural strategy to guide our program in the coming years.

The prongs of our strategy are as follows:

- **Foundational Development:** Identifying and addressing critical knowledge gaps and relationship-building with stakeholders.
- **Edge of Field:** Accelerating the adoption of conservation practices that are immediately adjacent to production areas.
- **Demo to Scale:** Demonstrating and communicating the farm benefits and environmental performance of ag conservation practices.
- **Supply Chain:** Using market forces and increased corporate social responsibility to incentivize change on agricultural lands.
- **Farmer Advisor:** Increasing the number of trusted advisors and agricultural retailers influencing farmers to adopt soil health and nutrient efficiency practices.

Ag Conservation Practices

Soil Health

No/Reduced Till: Specialized equipment and techniques eliminate or minimize soil disturbance caused by ploughing or other mechanical cultivation, reducing soil and nutrient run off, increasing water holding capacity and sequestering carbon.

Cover Crops: A crop, usually grown over the winter, that maximizes the time each year that living plants are capturing nutrients, sequestering carbon and keeping the soil protected.

Nutrient Stewardship

4R Principles: Applying the right type of fertilizer at the right time, in the right amount and at the right place increases crop use efficiency and reduces nutrient runoff.

Variable Rate Application: With the help of modern guidance technology, fertilizer is applied at rates that are customized to specific areas in a field, increasing efficiency and reducing nutrient loss.



Cover crops, such as this crimson clover and rye mix, are one of several ag conservation practices that provide environmental benefits while also providing short term and long term benefits to farmers. © Zach Luttrell

Farmers in Tennessee and Kentucky have made great strides in terms of adoption of conservation practices that help keep soil and nutrients in place. Both states lead the nation in adoption of reduced tillage practices, and cover crop adoption is also on the rise. However, the soil and topography in much of Tennessee and Kentucky are drought-prone and erodible and there are indications that the intensity of ag-related nutrient contribution remains significant.

To build on the existing momentum of ag conservation, our two-state ag program over the next several years will prioritize the western half of both states, where there is the highest row crop concentration. The watersheds receiving the most ag-related nutrients, such as the Red River, the Lower Green River, Bayou De Chien and the Obion River, are of particular interest. An expansion of on farm conservation in these watersheds will protect water, fish and other wildlife while also delivering greenhouse gas reduction and increased carbon sequestration.

By 2025, we want to contribute to a 30% increase in cover crop adoption and edge of field practices in our priority watersheds. By 2025, we also want to help expand practices that increase nutrient application and use efficiency on 10% of row cropped acreage in these same areas.

We can't do it alone. We are interested in finding common ground with other organizations and creating real change through meaningful partnerships. Across the country, TNC works with farm groups, ag retailers, supply chain companies, universities, public agencies, and other non-governmental organizations (NGOs). We deliver value convening partners around initiatives, managing projects, fundraising, offering a global perspective in combination with local presence, and contributing third-party credibility that is non-partisan and science-based.

If you and your organization have an interest in building an agricultural system that is more sustainable for both the environment and the farmer, we'd like to talk to you. Let's find out how we can make a difference together.

Edge of Field

Vegetated Buffers and Waterways:

Prairie strips, field borders, riparian buffers and grassed waterways slow down surface runoff, stabilize flow, reduce erosion and filter out nutrients while also sequestering carbon and providing wildlife habitat.

Structural Practices: Bioreactors, constructed wetlands, two stage ditches and similar engineered structures slow runoff, reduce erosion, capture nutrients, and some provide wildlife habitat.

Learn About Us

From humble beginnings over a century ago and a 60 acre tract of protected forest, The Nature Conservancy has grown into one of the most well-respected conservation organizations in the world. While our work today has expanded beyond land protection, TNC owns and manages over half a million acres of farm and ranch land in the United States, including around 50,000 acres of cropland. As landowners ourselves, we understand the importance of generating an income today while also preserving and improving the land resource for tomorrow.

Ag Director Zach Luttrell developed a passion for agriculture on a family farm in North Mississippi. Years spent growing row crops and baling hay created a connection to the land, a love of nature, and an awareness of the bond between conservation and farming. He envisions a tomorrow where farmers and nature thrive better together.



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