



**USA
TODAY**

SPECIAL EDITION **U.S. DEPARTMENT OF AGRICULTURE**

FREE
2025 EDITION



AT THE HELM
Secretary Rollins
sets new course

TECH TRENDS
Robots and apps
aiding industry

**REGENERATIVE
RESEARCH**
Grants fund
future farming

FOOD SAFETY
Policies combat
illnesses, bird flu

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2025 SPECIAL EDITION
DEPARTMENT OF AGRICULTURE



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Agriculture is a multifaceted industry.

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FOOD & DRUG ADMINISTRATION

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SUSTAINABILITY

Future-Focused Farming

Regenerative agriculture can protect the environment and help growers build business

By Kit Bernardi

THE TERMS SUSTAINABLE, CLIMATE-SMART and regenerative have cropped up over the years to describe agricultural practices that restore land health and address climate change's environmental impact.

Robert Bonnie, former under-secretary for farm production and conservation (FPAC) at the Department of Agriculture (USDA), says the generally interchangeable terms "are all concerned with implementing practices that conserve the environment and cost-efficiently help farmers, ranchers and forest owners produce quality products while, at the same time, be stewards of their lands."

FUNDING SOLUTIONS

Farm Bill and Inflation Reduction Act funds support many of the USDA's climate solutions programs. Because regenerative agriculture practices require long-term investments, training and time to show measurable results, "This is where the USDA steps in to provide support through various resources including funding, research and collaborative public-private partnerships," Bonnie says.

Since 2021, USDA's Regional Conservation Partnership Program (RCPP) has granted 334 awards totaling more than \$3 billion. Since its inception in 2014, RCPP has given 812 awards involving more than 4,000 partner organizations, with more than \$4 billion in Natural Resources Conservation Service funding amplified by another \$4 billion in partner contributions.

Examples of RCPP projects are wildlife habitat and native plant species restoration, which leads to biodiverse ecosystem stability. The USDA works with Native American cultures to improve water quality, protect at-risk wildlife species and manage sustainable bison grazing practices. Technology-driven

initiatives, sometimes called "precision agriculture," deliver fertilizer exactly where needed, thereby avoiding runoff. New technology also helps conserve water and reduce livestock methane gas emissions.

According to an October 2024 Partnerships for Climate-Smart Commodities (PCSC) report, more than 21,000 enrolled farm producers and operations of all sizes voluntarily implement

812
GRANTS
UNDER THE
REGIONAL
CONSERVATION
PARTNERSHIP
PROGRAM

SOURCE: USDA

climate-smart production practices. These include conservation tillage, soil carbon amendment, growing cover crops and prescribed grazing.

Affected commodities include fruits, vegetables, grains, livestock, hemp and timber. Funds are paid out over the five-year lifespans of the projects.

MODELING SUCCESS

The Heifer Ranch Center for Regenerative Agriculture in Perryville, Ark., is a recognized

model for how regenerative agriculture farming principles and practices can successfully heal the environment while producing at scale.

The 1,200-acre ranch is an accredited Savory Global Network Hub with the Savory Institute, the world's largest and longest-operating grassland rehabilitation organization. Recently, Heifer Ranch also received certification from the Audubon Ranching Conservation Program. It monitors and recognizes ranches that regenerate grasslands, which provide healthy habitat for declining bird species.

"The center's focus is to train

CONTINUED »



Heifer Ranch's
Donna Kilpatrick

HEIFER RANCH CENTER FOR REGENERATIVE AGRICULTURE

SUSTAINABILITY

Technology-driven Regional Conservation Partnership Program initiatives include precision agriculture – delivering fertilizer exactly where needed – and those that conserve water and reduce livestock methane gas emissions.



Taking young chickens to pasture at Heifer Ranch



Cattle at Heifer Ranch



Chickens in Heifer Ranch's prairie schooner

HEIFER RANCH CENTER FOR REGENERATIVE AGRICULTURE

farmers and food system actors how to incorporate regenerative principles to manage the complexity of working with nature towards ecosystem health," says Director of Regeneration Donna Kilpatrick, who oversees all of Heifer Ranch's agricultural operations. In addition, "Our mission is increased biodiversity, farmer profitability and farmer quality of life."

This year, Heifer Ranch will host day-long and multiday training programs for farmers and those interested in regenerative food systems. The in-depth sessions are taught by staff experts and guest instructors who are leaders in their respective fields. Also, the ranch's free, instructional YouTube

videos reach a worldwide audience. Its curriculum covers a variety of topics including holistic livestock and grazing management; sheep and poultry production; regenerative land management; and beekeeping.

Because transitioning from conventional farming methods — often implemented for generations — can seem overwhelming, Kilpatrick recommends implementing one or two regenerative agriculture principles to start. Another tip: "Find a community of other regenerative farmers to connect with for peer-to-peer learning, idea sharing and support," she says.

Suzanne Hunt is co-owner of her family's seventh-generation farm and

certified sustainable winery, Hunt Country Vineyards in Branchport, N.Y. She is also vice president, policy for Generate Upcycle, a global leader in sustainable infrastructure for food waste, compost and wastewater.

"Every generation has to figure out how to be successful during the historic challenges of their time, and ours is climate change," Hunt says.

Over the past two decades, the farm and winery have implemented a number of science-based practices. These include enhancing soil health, growing a diversity of crops, maintaining the farm's natural wild and pollinator habitats and investing in energy efficiency and renewable energy systems.

Mulch, compost and biochar increase soil carbon levels and moisture and nutrient holding capacity. Nearly all heating, cooling and electricity are generated onsite via solar and geothermal systems, and some farm vehicles operate on electricity.

Wide-scale adoption of regenerative agricultural practices requires a multifaceted, long-term commitment of resources and collaborative partnerships, Bonnie says.

"The hope is that accomplishments survive the pendulum swings of Washington and regenerative agriculture's approach becomes just the way farmers and ranchers do business in the future," he says.