



PROTECTING AGRICULTURE HERITAGE



A large flock of birds, likely waterfowl, is captured in flight against a dramatic sunset sky. The birds are silhouetted against the warm orange and red hues of the setting sun. In the foreground, a body of water reflects the sky and the silhouettes of the birds. To the left, a large industrial structure, possibly a grain elevator or water tower, stands prominently. The overall scene conveys a sense of harmony between nature and industry.

CULTIVATING CONSERVATION

*NEW FUNDING FOR CLIMATE-FRIENDLY
AGRICULTURAL PRACTICES WILL PROVIDE A HOST
OF BENEFITS FOR PRODUCERS, WILDLIFE,
AND THE ENVIRONMENT*

By T. Edward Nickens



Dale and Lori Stevermer raise corn, soybeans, and pigs in south-central Minnesota. New funding from the Partnerships for Climate-Smart Commodities program will help them reduce greenhouse gas emissions while also conserving wildlife habitats and improving soil health and water quality on their Trails End Farm.

emissions on working lands. The US Department of Agriculture (USDA) used Commodity Credit Corporation dollars to fund the new Partnerships for Climate-Smart Commodities program, which provides grants for pilot projects that rely on climate-friendly practices to create additional market opportunities for US agricultural and forest products. DU recognized the tremendous potential of this new program for wetlands and waterfowl conser-

vation and is now working to help participating farmers and ranchers implement these practices on the landscape.

All told, DU is part of three large grants awarded through the new initiative. The USA Rice–Ducks Unlimited Rice Stewardship Partnership—founded in 2013—received \$80 million to reduce emissions on 300,000 acres of working rice lands. DU is also a partner on a \$40 million grant awarded to Trust In Food, the sustainability division of Farm Journal, to help producers in North Dakota and South Dakota improve their climate resiliency while maintaining profitable farming operations. And DU will partner on a \$20 million grant to the National Pork Board to increase the sustainability of US pork products by advancing climate-smart agricultural practices in Iowa, Minnesota, Missouri, and South Dakota.

That’s the program giving Stevermer new sustainable ways of working his land. In the past, he fertilized his crops once a year with swine manure held in pits in the basement of the hog barns. But swine manure produces high volumes of greenhouse gasses. With funding from the Climate-Smart Commodities program, he’ll be able to fertilize twice a year and utilize new equipment that disturbs the soil less than before. He’ll also have greater access to precision application equipment that works with an extensive soil-testing regime. That will enable him to literally write a turn-by-turn prescription for manure spreading that is tailored to the different soil types that exist on the Eighty-Acre Field and others on the farm. Together, those new techniques will reduce emissions of methane and other greenhouse gases, improve soil health, and reduce sediment and nutrient runoff, benefiting wetlands and water quality.

Dale Stevermer’s “Eighty-Acre Field” in south-central Minnesota is typically sown in soybeans or corn, but a wide swath of mature timber runs through the field like a giant, verdant Rorschach blot. Those woods are one of the reasons Stevermer’s grandparents purchased the farm in 1916. His grandmother loved the trees and the wildlife and the wildflowers that thrived there. “And she inspired my grandfather to buy this land because of those woods,” Stevermer says. They named the place Trails End Farm, and Stevermer has kept those woods intact, despite the fact that they make it harder, and more expensive, to farm one of the largest and most productive fields on his property.

Stevermer raises 2,000 head of finishing pigs each year and uses the swine manure to fertilize the corn and soybean fields that in turn feed his herd. At first glance, he would seem an unlikely partner for a Ducks Unlimited project. For starters, he’s not a duck hunter. And as a farmer, working with DU had never entered his mind. But these days mark a different time for agricultural producers, and a different and quite exciting new era for DU. Recognizing that much of the habitat that waterfowl depend on is located on private working lands and stewarded by farmers and ranchers, DU has embarked on a journey that is changing how the organization intersects with policy and advocacy for agriculture. This approach of sharing the road with farmers such as Stevermer is also opening up new possibilities for habitat conservation.

Last August, conservationists across the country were thrilled to see a new level of federal commitment to support innovative agricultural practices that reduce greenhouse gas

Where DU enters the picture is through its extensive experience working with producers “at the farm gate and the ranch gate,” explains Billy Gascoigne, DU’s director of agricultural and strategic partnerships. Coupled with DU’s science staff and long relationships with corporate partners working actively to reduce their carbon footprints, the pilot program will showcase to farmers across the region that climate-smart agricultural practices are also bottom-line-smart techniques. DU already had relationships with other project partners, such as the National Pork Board, Nestlé, Sustainable Environmental Consultants, Farm Credit Council, Millborn Seeds, and Farm Journal, which will help identify underserved producers on this landscape.

“This is not just feel-good stuff,” Gascoigne asserts. “We’re building a working lands program that deepens our relationships and provides a holistic array of conservation practices in the agricultural sphere. It’s indicative of DU growing our suite of services and turning to a more holistic approach of working with our partners.”



Since many important waterfowl habitats exist on agricultural lands, working with producers is essential to fulfilling DU’s conservation mission. DU is leveraging its longstanding relationships with farmers and ranchers to expand its conservation delivery on working lands, which also helps producers and rural communities thrive.



Cattle grazing is an important component of sustainable agriculture, especially in the Prairie Pothole Region. DU works with government agencies and other partners to help producers incorporate rotational grazing in their operations.



ED WALL MEDIA

Rice is among the most important agricultural crops for waterfowl, providing vital food resources for a large proportion of the continent's ducks and geese during winter. Rice lands also serve as surrogate wetlands for a variety of fish and wildlife species in areas where natural habitats have been lost.

RETHINKING RICE

The largest grant by both dollar amount and affected acres will help the USA Rice–DU Rice Stewardship Partnership extend its reach and introduce producers to new ways of climate-friendly farming. Growing and harvesting rice has a significant climate footprint, as it produces high amounts of greenhouse gases and consumes large quantities of water. But rice is critical for both humans and wildlife. Every day, across the planet, an astonishing 20 percent of the global population's caloric needs are met by rice. Winter-flooded rice is a stand-in for natural wetlands and supports more than 200 species of birds in the continent's major flyways.

The practices included in the new rice partnership grants will address more than 90 percent of a rice grower's greenhouse gas output and cut water use substantially—all without diminishing the value of rice lands for waterfowl and other wetland wildlife. "When you add the new funding to the fact that the rice industry is very supportive of cutting greenhouse gas emissions, it turns this partnership into a real winner," says Dr. Scott Manley, DU's director of conservation programs in the Mississippi Alluvial Valley.

P.J. Haynie couldn't agree more. A fifth-generation farmer from Reedville, Virginia, Haynie and his family grow row crops, including corn and soybeans, and two-thirds of their operation is committed to winter crops and double-crop soybeans. Haynie Farms grows rice and row crops on the family farm outside Reedville and on another 4,000 acres in Arkansas, where his family runs the only black-owned rice mill in the country. The Climate-Smart Commodities grant specifically targets rice growers willing to employ climate-friendly irrigation strategies to replace traditional rice agriculture.

Here's how it will work: Rice traditionally is grown in fields that are flooded for months at a time. But keeping standing water in rice fields requires large volumes of water and creates large volumes of greenhouse gases. In fact, the global production of rice creates 12 percent of all methane gas each year.

Applying these climate-smart practices will change the game significantly for rice. Through a practice called alternate wetting and drying, or AWD, farmers will install row irrigation, and once the field gets saturated, they will cut the water off until levels subside. "As long as the soils stay wet," Haynie says, "we can make a crop. Now we're trying to show farmers how this



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(From left) US Secretary of Agriculture Tom Vilsack was joined by USA Rice President and CEO Betsy Ward and P.J. Haynie, chairman of the National Black Growers Council, at the recent announcement of an \$80 million Climate-Smart Commodities grant. The funding will help farmers reduce methane emissions and water use on 300,000 acres of working rice lands across the United States.

can be done and incentivize and reward producers who change their farming practices."

Switching over to the new systems will take time, and there could be minimal yield losses as farmers fine-tune the approach. But that's where the grant funds come into play. They can help farmers make up for any yield differentials and help support producers who make the change.

The rice partnership also seeks to be proactive in reaching minority farmers. Haynie serves as chairman of the National Black Growers Council, an influential association that advocates for and educates black row-crop farmers on agricultural efficiency, productivity, and sustainability. He points to the fact that 34 percent of the grant funds will be spent in historically underserved communities. "This is a community of producers that has not been at the table when new agricultural initiatives come out," he says. "We hope to implement some of these new practices in 2023, so we are trying to reach out across our networks to identify the historically underserved communities that could benefit from such a targeted program."



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Ducks Unlimited partners with farmers and ranchers to implement practices that are tailored to address their needs while also conserving wetlands and other wildlife habitats. For example, DU field staff help producers monitor soil health and water infiltration on fields planted in cover crops.

NAVIGATING THE DIGITAL REVOLUTION

The remaining grant puts the crosshairs on a critical landscape for wetlands and waterfowl—the Prairie Pothole Region. As part of the \$40 million grant to Trust In Food, the sustainability division of Farm Journal, DU will help producers in North Dakota and South Dakota improve their climate resiliency while maintaining profitable farming operations. In an increasingly complex and global marketplace, helping producers navigate the changing digital landscape—from on-farm data management and technological advances in equipment to marketing and sales—will help them stay in business. Like the approach of the other grants, the Climate-Smart Connected Ag Project expands on the theme of keeping agricultural producers on the landscape and keeping their fields, forests, and wetlands working for wildlife.

Taken individually, the USDA Partnerships for Climate-Smart Commodities program meets farmers on their own lands, on their own terms, to help connect them to an ambitious attempt to positively impact every corner of the globe. But it wouldn't work without an emphasis on agricultural improvement, with the measurable benefits of reduced greenhouse gasses and water use.

Which is what brought Minnesota's Stevermer to the table in the first place: an emphasis on real-world application,

bottom-line protection, and groundbreaking partnerships. That and the opportunity to hang on to his beloved Eighty-Acre Field. "These programs are going to reach new producers because they are not government programs," Stevermer figures. "Partnerships with the Pork Board, DU, Nestlé, and others are pretty new, and while we're using government dollars and following a lot of their rules, there's enough that's unique about these programs to really appeal to producers."

It's an intriguing way to work. DU is leveraging its 86-year-old reputation to develop new, diverse partnerships based on a track record of on-the-ground project delivery. "We set out to be a go-to solution provider for our friends in agriculture," says Ed Penny, director of public policy for DU's Southern Region. "Now, this once-in-a-generation opportunity presents itself, and we have \$140 million in conservation partnerships aimed at helping farmers become more sustainable, both economically and environmentally."

Climate, global markets, and farm technology will change, but not the foundational role agriculture will play in a future marked by abundant waterfowl and healthy ecosystems. "In order to have wetlands in the future," Penny says, "we have to have a healthy farm economy and a healthy rural America."

SHAPING THE NEXT FARM BILL

THIS LEGISLATION REMAINS A
CORNERSTONE OF WETLANDS AND WILDLIFE
CONSERVATION ON PRIVATE LANDS

Renewed every five years, the Farm Bill has traditionally been the backbone of conservation funding on private agricultural lands in the United States. The current Farm Bill expires in September 2023, and the next one will steer federal agriculture programs until at least 2028. The various programs funded by

the Farm Bill provide billions of dollars for efforts to encourage environmental stewardship of farmlands, enhance working lands, and support land-retirement and easement programs. The consequences of Farm Bill programs can be enormous, and the rules and regulations can change from one bill to the next.

“We’re not expecting a big influx of new dollars into the conservation programs of the Farm Bill,” says Julia Peebles, DU’s Washington, DC-based agriculture and sustainability manager, “but we’re working toward tweaks and process changes that will help both producers and DU’s mission.”

Following are DU’s top priorities for strengthening the conservation value of the next Farm Bill.

MAINTAIN WETLAND PROTECTIONS

The policy of “conservation compliance” has helped provide an effective safety net for America’s farmers, the general public, and key wetlands and waterfowl habitats. The 2014 Farm Bill recoupled conservation compliance to crop insurance, and DU will continue to work with insurance, commodity, and conservation groups to generate bipartisan support for this important policy in the next Farm Bill.

CONSERVATION RESERVE PROGRAM (CRP)

DU is pushing for a modernization of CRP, which has been around since the 1985 Farm Bill. The program pays farmers to implement conservation-friendly practices on a portion of their acreage. While CRP remains important across agricultural landscapes, funding for the program has remained relatively flat despite rising inflation, and caps on how many acres can be enrolled in the program have been whittled down. DU supports revamping the program to make it more desirable for producers and will push for more dollars going toward the soil types that are impactful for wetlands.

REGIONAL CONSERVATION PARTNERSHIP PROGRAM (RCPP)

Established in the 2014 Farm Bill, RCPP encourages partnerships with producers to increase the restoration and sustainable use of soil, water, wildlife, and other natural resources at a regional level. DU will continue to support RCPP and work with producers to harness innovation in conservation and demonstrate the value that voluntary private lands conservation provides for wildlife and society.


EMERGENCY WATERSHED PROTECTION (EWP) PROGRAM

In the wake of a natural disaster, the Natural Resources Conservation Service (NRCS) is able to purchase easements in affected floodplains and hold the easements while damaged structures are repaired. While the current rules of the EWP Program allow reshaping and protecting eroded stream banks and establishing cover on critically eroding lands, enabling the NRCS to enhance, maintain, and create wetlands on lands damaged by natural disasters could boost habitat acres and the ecosystem services they provide.

WORKING LANDS

DU supports voluntary, incentive-based working lands programs, including the Environmental Quality Incentives Program and the Conservation Stewardship Program. These programs improve working lands across the country, including wetlands and other key waterfowl habitats, while also benefiting farmers, ranchers, and landowners.

AGRICULTURAL CONSERVATION EASEMENT PROGRAM

DU is emphasizing the need for managing easements under this voluntary program, underscoring the ongoing effort and monitoring required to ensure that the habitat and ecological values targeted by easements are being continually met. Particularly in the case of Wetland Reserve Easements, adding flexibility for ranchers to utilize grazing acreage would make the program more appealing to producers while maintaining its value for waterfowl and other wildlife. 

WILD FOREVER

by T. Edward Nickens

Once threatened by development,
Florida’s DeLuca Preserve is now permanently protected
for research, education, and conservation

Just beyond the blacktop of Florida's Turnpike, 40 miles west of the white sand shores of Vero Beach and north of Lake Okeechobee, lies the old, often overlooked Florida. It's a landscape of prairies cloaked with wire grass and saw palmetto. Savannas with an intermittent canopy of ancient pines. Florida cowboys and Florida cattle. Deep oak hammocks where the prints of Florida panthers and Florida black bears wend through the cabbage palms. This is the Florida that was, and that, incredibly, still remains in treasured places. And thanks to Ducks Unlimited and a groundbreaking suite of new partners, it's a vast preserve that will stay protected forever.

Last year Elisabeth DeLuca, widow of the cofounder of the Subway sandwich chain, donated 27,000 acres of wetlands, wet prairie, grasslands, and open canopy pine forests to the University

sparrows. Soaring pine savannas hold endangered red-cockaded woodpeckers. The DeLuca Preserve is located in the headwaters of the Everglades and contains nearly 7,000 acres of wetlands and wet habitats, which are home to sandhill cranes and mottled ducks—a signature Florida species. Such richness lies within a context of carefully managed ranchlands, where grazing cattle help maintain habitats that are crucial for endangered species.

"This new relationship puts DU's work squarely in one of the most iconic watersheds on the planet," says DU CEO Adam Putnam. "As a native Floridian I am proud that a huge parcel of land that was slated to be an entire new city is now going to be a vital wildlife corridor that is protected forever."

The agreement creates an exciting partnership between DU and the University of Florida. While the WAT-held conservation



of Florida and set up a conservation easement on every square inch with DU's land trust, Wetlands America Trust (WAT). The DeLuca gift is the largest easement ever received by WAT, and it puts into place a new relationship with one of the nation's premier universities. The DeLuca Preserve protects some of the best of what remains of wild, natural Florida, and it also gives DU pioneering new avenues for partnerships with research scientists, ranchers, and other local landowners.

The sweep of this new protected area is astonishing. Once slated for development as "Destiny," an entirely new city of a quarter-million people, the property is a single, contiguous block of more than 42 square miles. It's a mosaic of some of Florida's most imperiled habitats. Dry prairies on the tract are home to some one-third of the entire global population of endangered Florida grasshopper

easement details allowable activities on the property, the university's Institute of Food and Agricultural Sciences (UF/IFAS) will use the property as a living laboratory for research, education, and conservation of wetlands and working lands. Monitoring and management of such a large and complex agreement received a huge boost when Bass Pro Shops and the Cabela's Outdoor Fund provided significant resources to the Fish and Wildlife Foundation of Florida to help endow the WAT easement.

It was a complicated agreement, especially given the need to pay for monitoring and management of the easement details in perpetuity. "Our lawyers were working on this 18 hours a day," says Jerry Holden, director of operations in DU's Southern Region. "It's astounding the level of detail in a project like this. Every bit of minutiae, from building footprints to how wide roads could be, is



"A thousand people are moving to Florida every day. Protecting these areas is essential, or they'll soon be gone."

negotiated. And with 42 square miles, there was a lot to consider."

Dr. J. Scott Angle, vice president for agriculture and natural resources at UF/IFAS, says that ultimately what made the agreement possible "was the element of trust that emerged as we talked through the execution of this gift with DU. We could have been like two trains passing in the night, working for the same goals but not recognizing the synergism. But DU understood these opportunities and stepped right up."

As an academic institution, the university saw an opportunity to study and teach about the variety of ways that lands can be used, and how the impacts of those uses ripple through the ecosystem. "One of the unique aspects of the DeLuca property is the diversity of human use of that landscape," Angle says. "There are areas used for cattle operations and areas that look like they have barely changed since the pre-European settlement period. That enables us to study how working lands with cattle at different scales, or how managing for wildlife in different ways, impacts a much larger system." And the possibilities for the academic institution go far beyond present-day management. By using the property to train undergraduate and graduate students, and to possibly operate 4-H and other youth programs, new generations of researchers and natural resource agency scientists can be trained with hands-on projects.

That emphasis on research and academics has long been a pillar

of WAT, whose supporters have funded endowed professorships in waterfowl and wetlands research around the country. This new relationship, Putnam says, "takes those efforts to a higher level. We'll have research, education, and outreach to the next generations of wildlife

professionals and the next generations of ranchers and farmers, all working and learning together on this amazing piece of land."

While this is the first conservation easement procured in Florida by DU and WAT, it likely won't be the last. Already DU has conserved more than 33,000 acres in Florida through other programs, and the DeLuca project "will serve as a catalyst to expand our footprint in the state," says Emily Purcell, director of conservation programs in DU's South Atlantic Region.

Waterfowl and wetlands also gain because of the ripple effects—both financial and aspirational—that flow from such inspired projects. Agreements like this enable DU to leverage dollars that otherwise would not have been available. With projects on the scale of the DeLuca Preserve, one benefit is an increase in funds headed to crucial habitats in other high-priority areas such as the Prairie Pothole Region and the Gulf Coast.

"The donated values of these properties are eligible for many different uses," Holden explains. "We can take two dollars of the donated value of the DeLuca easement and match that for a dollar of value under the North American Wetlands Conservation Act

[NAWCA].” And grants from NAWCA could help secure funding for other Florida projects such as the \$21 million MK Ranch project in the Apalachicola Bay watershed and a planned 50,000-acre wetland restoration project in the Everglades.

Those projects might be miles from the pines and palmettos of the DeLuca Preserve, but they are intimately connected through DU’s expertise in leveraging dollars across the continent. “When we get millions of dollars of match value that can go to targeted projects off the actual property,” Holden says, “that puts a lot of fuel in the DU engine.”

Projects like this also fuel efforts to clean Florida’s waterways and send more water south to the Everglades. The DeLuca Preserve’s wetlands, sheet water, and groundwater flow south through the Kissimmee Chain of Lakes to Lake Okeechobee. That iconic body of water helps feed the famed River of Grass, sustaining both wild landscapes and human populations all the way to Florida Bay and even to the reefs and flats of the Florida Keys. “In some ways this protection is as important as anything that’s being done closer to Lake Okeechobee to clean up the groundwater flowing south in Florida,” says Andrew Walker, president and CEO of the Fish and Wildlife Foundation of Florida.

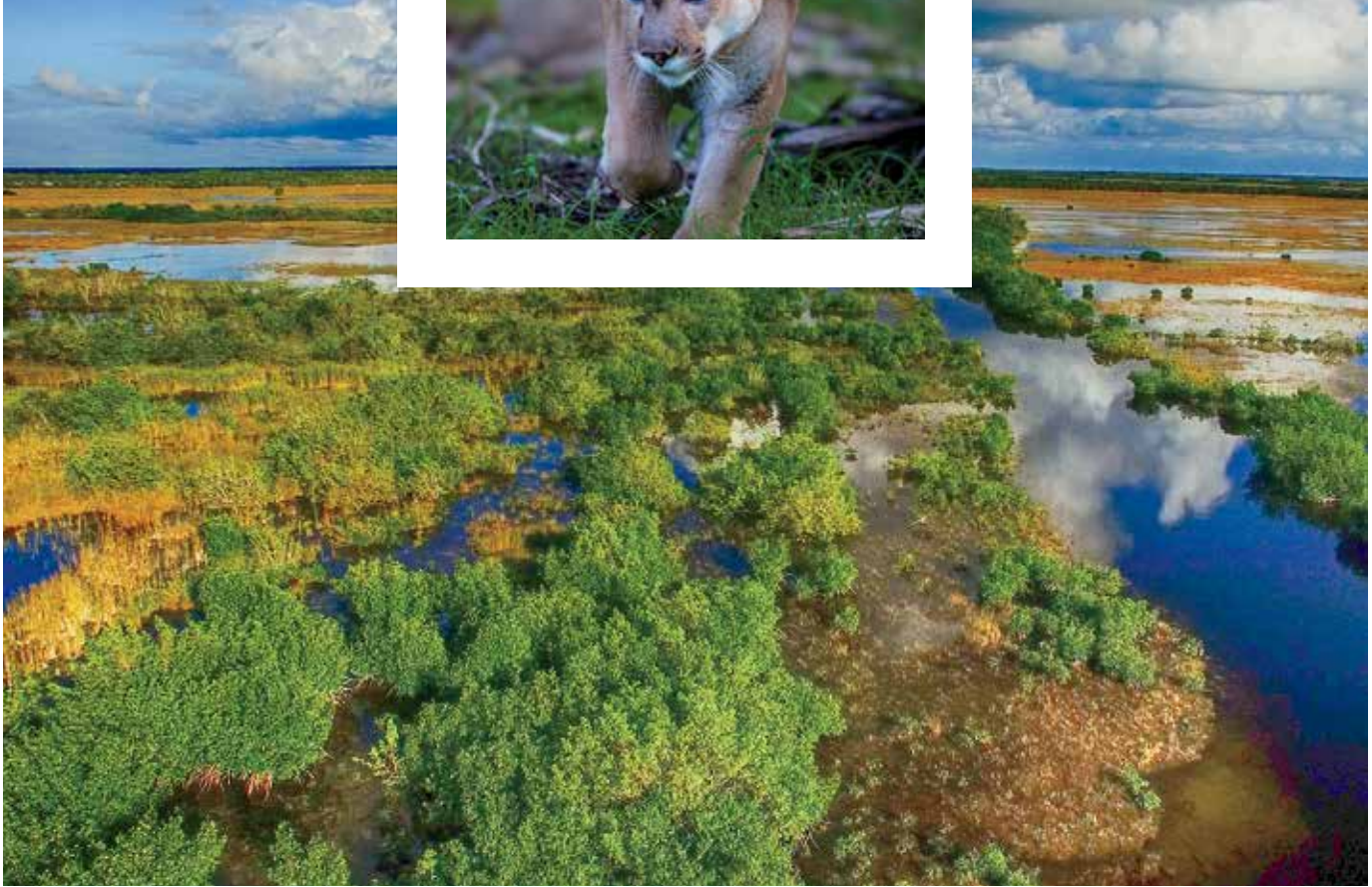
Projects on the scale of the DeLuca Preserve also serve as an inspiration to surrounding landowners who might be interested in a legacy gift. The DeLuca easement is a capstone in the Florida

Wildlife Corridor, a planned 18-million-acre swath of protected lands that will stretch from the Panhandle to the Everglades. Already Florida black bears and Florida panthers roam the DeLuca Preserve, and it provides continuity to the adjacent 54,000-acre Kissimmee Prairie Preserve State Park. But other ranch and agricultural property owners nearby might soon understand how their lands could fit into a vast interconnected assemblage of public and private conservation lands, and help Florida retain the assets and values that have long informed its natural heritage and rural culture. “A thousand people are moving to Florida every day,” Angle says. “Protecting these areas is essential, or they’ll soon be gone.”

That’s the prospect that helped make this project happen. If the DeLuca Preserve embodies a new kind of partnership, it also is indicative of an expanding definition of what conservation can be. DU is earmarking resources for conservation work in areas that matter to people as much as to ducks. Protecting areas with the potential for intense population growth “increases the social relevance of DU’s work and grows our conservation footprint,” Holden says.

“We’re doing a lot, but there’s so much more to do. We need to find another gear.” Wins such as the DeLuca easement pay dividends in inspiration as much as Apalachicola land protection and water quality.

Few understand that as keenly as Carlton Ward Jr. An eighth-generation Floridian, National Geographic photographer, and cofounder of the Florida



“THIS IS A LEGACY-DRIVEN
PROJECT THAT WILL STAND
THE TEST OF TIME.”

Wildlife Corridor Coalition, Ward has explored the DeLuca tract on foot, in a helicopter, and with drones. In 2012, he and two colleagues walked and paddled from Everglades National Park to the Okefenokee Swamp of Georgia, “meandering like a Florida panther or Florida black bear,” he says, and crossed the DeLuca Preserve on their 100-day journey. “This conservation agreement is transformative,” Ward explains. “It’s a tremendous stepping-stone for the Florida Wildlife Corridor, and it drives home the concept of shared ground. I’ve been out with cowboys moving their cattle across the same prairies that are the last stronghold for Florida

grasshopper sparrows. It really showcases how the same piece of land, thoughtfully managed, can work for both wildlife and human needs. It gives me a lot of hope.”

And it sets the stage for a new chapter in wild Florida. “This is a legacy-driven project that will stand the test of time,” Purcell says. “This family took the opportunity to write the future of their property. Whether it’s 100 acres or 27,000 acres, something special happens when a landowner recognizes that they have a rare asset and decides, ‘I want to make sure this stays this way forever.’”





DEAN PEARSON



MICHAEL FURTMAN.COM

On the northern plains, ranchers play a crucial role in conserving wetlands and grasslands for breeding ducks and other wildlife

by ANDREW MCKEAN

CATTLE AND CONSERVATION

Gary Anderson has seen his neighbors in Phillips County, Montana, try just about everything to make a living off their dryland farms. A realtor in the small, close-knit community of Malta, not far from the Saskatchewan border, Anderson has built a career helping his neighbors sell the home place or buy adjacent land to expand their operations, and he has spent many hours talking with them over farmhouse coffee about what the future holds. For the last couple of years Anderson has promoted a strategy that allows his neighbors to increase their profits, pay down debt, and slowly heal land that has struggled to produce reliable income for the past century. All of which is also helping put more ducks in the fall flight.

THE STRATEGY: partner with state and federal agencies to apply an alphabet soup of conservation programs to protect native prairie and restore marginal cropland to grass for cattle production. “You could call it money in the mattress,” Anderson says of payments land-owners receive for enrolling in conservation programs. “They allow producers to remain on the land, and in many cases turn a marginal operation into a profitable one. They also happen to be very good for ducks.” The public investment in these ranch lands keeps carbon in the soil, helps sequester additional carbon, filters water, and reduces soil erosion. All of these numerous positive public benefits that come from well-managed private lands are recognized as “ecosystem services.”



BILLBUCKLEYPHOTOGRAPHY.COM

Gary Anderson and his wife, Barb, work with other ranchers in northeastern Montana to conserve wildlife habitat.



DEAN PEARSON

CATTLE AND CONSERVATION

Anderson, who is a farmer and rancher himself, says the biggest obstacles to participation in conservation programs are a lack of awareness of the benefits and the complexity of the sign-up process. That's where Ducks Unlimited's Bob Sanders comes in. As manager of conservation programs in Montana, Sanders and his team of two DU biologists spend weeks at a time in Phillips and neighboring counties, meeting with farmers, ranchers, conservation partners, and bankers to pitch the benefits of prairie grass not only to producers' bottom lines, but to the natural systems that evolved with this undulating landscape of flowing hills and glacial depressions.

"Intact grasslands have existed in this part of the northern plains since the last glaciers receded over 7,000 years ago," says Sanders, who guides qualifying producers through bureaucratic thickets. "From an ecological standpoint, prairie-pothole wetlands are dependent on the grasslands around them to filter water, hold the soil, and prevent invasive plants from gaining a foothold. If you conserve the grass, you conserve the potholes too."

Since the northern plains were opened for homesteading more than a century ago, the prairie has been plowed under as successive generations of grain farmers have made bumper crops in wet years and gone bust when drought inevitably returned. In his travels, Sanders has seen firsthand how productive the prairie landscape can be, both for raising ducks and for growing grain. But he has also noticed that pasture lands are often more resilient than crop fields when conditions get tough.

"People ask me all the time: What does DU do in Montana?" Sanders says. "I tell them that our business is keeping ranchers in business. What do you need as a rancher? Grass and water. It turns out those are the same things that keep ducks in business around here."

Water is especially precious in northeastern Montana, which receives less than 13 inches of precipitation in the form of rain and snow annually. Farming is a more reliable venture in eastern South Dakota, which has rich soils and receives about twice as



In a semiarid climate, ranching often provides a more reliable return than crop production. The grass and water that sustain cattle herds can also be good habitat for nesting ducks.

much precipitation. This area of South Dakota also has some of the highest densities of wetlands on the northern plains, and just as Sanders observes in Montana, wetlands plus grass equals prodigious numbers of ducks and resilient prairie ecosystems.

Bruce Toay, Sanders' DU counterpart in South Dakota, notes that landowners are under economic pressure to plow native rangeland or continue farming land that is currently in row-crop production. This pressure is especially strong in this vanguard of the grain belt, which expands north each year with the development of shorter-season corn and soybean varieties.

"We see conversion of grassland fluctuate with the markets," Toay says. "There was a particularly big boom in corn and soybeans during the late 2000s, and we lost a ton of prairie over about a five-year period. Since then, many producers are recognizing



that farming marginal ground no longer makes sense for their operations. We can help these landowners restore that ground back to grass that can be managed for cattle grazing. Restoring prairie and establishing grazing systems can be expensive, but we've seen that improving the health of native landscapes not only benefits the ecosystem, but also producers' bottom lines."

One of the producers who has worked with DU in partnership with South Dakota Game, Fish and Parks and the USDA Natural Resources Conservation Service (NRCS) is Briann Larson, who lives near Kimball. His place includes land that his grandfather, father, and uncle always kept in native prairie. "When corn hit eight dollars [per bushel], a lot of that prairie got plowed up," says Larson, who notes that as corn prices have climbed this year many of his neighbors are



TODD J. STEELE

Easement programs provide incentives for landowners to return marginal croplands back to native grass species. A rich mosaic of wetlands and grasslands is maintained through rotational grazing.

considering converting more grassland into a crop rotation. "You have to remember that corn isn't always going to be eight dollars or even six dollars. There will be a market correction and it will come down. But you can never replace the native sod."

Larson is coming as close as he can, returning some 2,000 acres of former cropland to grass, using intensive rotational grazing practices to encourage the growth of native grass species and eliminate nonnative ones like brome and Kentucky bluegrass. "It's a process, which is sometimes slower than I'd like," Larson says. "When I started out, I never knew what switchgrass or big bluestem looked like. Now, I'm not only seeing those, but also Indian grass and leadplant—indicators that we're moving in the right direction."

He has enrolled his land in a perpetual conservation easement, which provides financial benefits for landowners but also comes with some voluntary limitations. "The cash and support for infrastructure is obviously a benefit," Larson says. "But so is seeing nature and wildlife respond. Mother Nature doesn't like a monoculture. She wants to see a variety of plants out there, the same variety that drew my grandfather to this place. The only two stipulations with the easement are I can't plow my grass under, and I can't hay my place until after July 16. The drawbacks? I'll have fewer acres of cornstalks or cover crops to graze, and I have



GARY KRAMER.NET



DAVID STIMAC.COM

Species that benefit from healthy grasslands include pronghorns and greater prairie chickens.



PHOTOS: BILL BUCKLEY PHOTOGRAPHY.COM

to deal with mature grass hay. But by putting the land in a conservation easement, I can run this place from my grave, and that is deeply satisfying to me.”

Easement terms differ according to state, region, and ecological priority. Larson’s farm, located in the heart of South Dakota’s top duck-producing region, is an especially high-priority candidate for conservation.

Northeastern Montana is also defined as an ecologically important landscape for waterfowl and declining species such as sage grouse and grassland songbirds.

“We’re impacting about 10,000 acres annually in Phillips County alone with US Fish and Wildlife Service grassland easements,” on land adjacent to Bowdoin National Wildlife Refuge and satellite waterfowl production areas, Sanders says. “The USFWS easements have been popular because their requirements are basic and simple: keep the grass right side up, graze it as you normally would, and you’re good to go.” If landowners choose not to sign an easement, they can opt simply to restore the grass.

Larry Smith, who owns a ranch in Phillips County, recently enrolled in a Wetland Reserve Easement (WRE) administered by the NRCS. “It was a win-win for both of us,” Smith says. “My kids all want to be ranchers instead of farmers. Working with the WRE and DU was a very good way for us to accomplish what my family wants. We have a large reservoir and other wetlands on our place, and from a habitat perspective, putting the adjacent land back in grass should be a benefit.”

In total, Smith is returning more than 1,500 acres of former cropland back to grass, and he’s fully aware that he’s giving up the ability to grow grain on that ground for the next 30 years—the duration of the easement. “I can’t



Briann and Lisa Larson have restored 2,000 acres of cropland to grass on their South Dakota property.

PHOTOS: DEAN PEARSON



farm it, but I’m getting a heck of a grazing system in return,” he says. “They’re paying 75 percent of the costs to fence and develop a water system that will help distribute cattle across a series of internal pastures.” The idea is to have cattle graze intensively before moving on to the next pasture, which studies have shown benefits native grasses.

The realtor Anderson, whose business acumen shapes his perspective of such transactions, quantifies the cost of farming in this region versus ranching under the terms of an easement. “A lot of the land in this county



Working cattle ranches support an abundance of wildlife, including mule deer, pheasants, and gadwalls.

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DEAN PEARSON

it when they take over the operation decades from now.

His neighbor, Anderson, has turned into an unexpected promoter of grassland easements in his remote Montana community. “Even 10 years ago, bankers around here didn’t know about the value of easements,” Anderson says. “Now, if you go into a bank with a letter from an easement provider, bankers know that represents real value. They’ve seen cases where easement money has kept an operation in business.” And, if family farms and ranches stay in business, Anderson adds, so do the small towns that depend on them.

While the cultivation of row crops will always be important on the northern plains, managing grassland for cattle in this region offers a more sustainable and profitable alternative for many producers. And more grass on the landscape to buffer wetlands and streams provides cleaner water and a host of other ecological benefits that accrue year after year.

From a waterfowl standpoint, keeping grasslands intact is crucial

to maintaining the Prairie Pothole Region’s reputation as the continent’s Duck Factory. “Ducks nest in adjacent uplands up to two miles away from wetlands,” Sanders notes. “But only if those uplands have adequate cover during nesting season.”

Anderson has noticed how restoring adjacent prairie amplifies the productivity of the glacial potholes that pock his place. “You can see it happen,” he says. Breeding pairs of ducks will cover the seasonal water early in the spring and then slowly disappear as hens disperse to nest in the uplands. “Where we have healthy pasture for cattle, the biologists tell me nesting success is high. All I know is the cow trails lead to water, and those trails are like highways for broods of little ducklings heading to the wetlands.”

Based in northeastern Montana, Andrew McKean is a longtime writer and editor who reports on a variety of subjects pertaining to the outdoors and conservation.

under consideration for easements came out of the Conservation Reserve Program a few years ago, and those landowners are faced with the question: ‘Do we farm it again?’” Anderson says. “The way grain prices have been over the last decade, it’s not that appealing. So you look at cattle, but there are costs associated with converting land to grazing. Then an easement partner comes along and cost-shares with you for water lines and fences, which can be as much as \$10,000 per mile.

“For me, it’s a no-brainer,” Anderson continues. “You’re increasing the capacity of your ranch, and you’re getting a bonus check for the easement that can help reduce your debt. It’s kind of like selling your place but still owning it.”

For Smith, who looked at easement opportunities from other agencies, the NRCS program fit his operation best. Because he didn’t place a perpetual easement on the land, his grandchildren will have the option of doing something different with

CATTLE AND DUCKS: PARTNERS IN CONSERVATION

Recognizing the value of pasturelands to wildlife, and the role of ranchers in conserving wildlife habitats and open spaces, Ducks Unlimited is partnering with livestock producers to conserve and protect habitats in important areas for waterfowl across North America. To help strengthen these partnerships, in August of last year DU, the Public Lands Council, and Safari Club International signed a Memorandum of Understanding (MOU) with the National Cattlemen’s Beef Association (NCBA), outlining the groups’ shared commitment to conservation of natural resources through sustainable multiple use. Later in 2020, the US Fish and Wildlife Service was added as a signatory to the MOU.

“Ranchers, conservationists, and recreational land users all share a deep commitment to protecting our open landscapes and responsibly managing vital ecosystems and wetlands,” said NCBA President Jerry Bohn. “Last year, NCBA was proud to stand with Ducks Unlimited and reaffirm that commitment by entering a historic Memorandum of Understanding with the US Fish and Wildlife Service. We see a lot of value in this partnership, both in Washington, DC, and across the country. The partnership promotes programs that bring our communities together in conservation work that encourages biodiversity and builds a business model that will be economically sustainable for future generations.”



SCOTT FINK



GOOD EARTH

DU'S INNOVATIVE SOIL HEALTH INITIATIVE BUILDS

COMMON GROUND FOR CONSERVATION ON WORKING LANDS

IN THE PRAIRIE POTHOLE REGION

by Jennifer Boudart



“
PARTNERSHIPS
WITH PRODUCERS ARE CENTRAL
TO DU'S WORK ON THE PRAIRIES.
”

Billy Gascoigne, DU

The Prairie Pothole Region has always been a top conservation priority for Ducks Unlimited due to its importance to waterfowl and other wildlife. Indeed, this vast geographic area—which spans portions of three Canadian provinces and five US states—is often called the “Duck Factory” because of the amazing numbers of waterfowl that are raised here. Since the majority of the land is privately owned and managed for agriculture, partnerships with producers are central to DU's work on the prairies. In Montana and the Dakotas, DU and the US Fish and Wildlife Service have permanently protected more than 1.5 million acres of intact grassland and wetlands via the purchase of conservation easements from private landowners. These agreements, which allow cattle grazing and other wildlife-friendly agricultural practices to continue, are a powerful tool for conserving waterfowl habitats on working lands.

In addition to the highly popular easement program, DU has recently expanded its conservation footprint on the prairies through its new Soil Health Initiative, which helps farmers adopt a suite of regenerative agricultural practices. These practices rebuild healthy soils, which in turn increase productivity and profits for producers while also conserving wetlands, providing upland cover for wildlife, improving water quality, and reducing soil erosion.

“Regenerative agriculture and soil health have given us a connection that we had been seeking for years,” says Bruce Toay, DU's manager of conservation programs in South Dakota. “We knew that if we could find a way to partner with producers and help them adopt these practices, everyone would benefit.”

DU biologists and agronomists work one-on-one with farmers to select the agricultural practices that are right for their particular operations and land use goals. DU staff then provide technical assistance to help them implement these practices and monitor improvements in soil health and profitability over time.

Importantly, DU works with the USDA Natural Resources Conservation Service (NRCS) and other partners to share upfront costs incurred by landowners. “This shift has to make sense financially—that's priority one for producers—and it can be hard to justify big initial expenses for new practices,” Toay says. “For example, many producers who would like to graze livestock on cropland don't have fences or water availability. Putting in that infrastructure can cost tens of thousands of dollars depending on the size of the project, so we help landowners secure financial assistance to reduce those economic burdens.”

Wetlands America Trust Trustee John S. Dale is a leading proponent

SCALING UP SOIL HEALTH



DU's Soil Health Initiative recently received a significant financial boost from an \$8.73 million Regional Conservation Partnership Program grant awarded by the USDA Natural Resources Conservation Service. DU, along with a broad coalition of partners in North Dakota, South Dakota, and Montana, is using these funds to launch a multistate program called Scaling Soil Health in the Prairie Pothole Region. The program will help DU expand its soil-health outreach by setting up contracts with additional landowners, creating demonstration projects, and working with the Soil Health Institute to conduct on-site monitoring to collect "before and after" environmental and economic data for producers.

DU is leading the program with support from the following agency and nongovernmental partners: the Soil Health Institute, Soil Health Academy, South Dakota Soil Health Coalition, South Dakota Grassland Coalition, and North Dakota Grazing Lands Coalition Ranchers Stewardship Alliance. Additional partners include the US Fish and Wildlife Service; Montana Fish, Wildlife and Parks; US Fish and Wildlife Service Partners for Wildlife Program; North Dakota Natural Resources Trust; North Dakota Wildlife Federation; North Dakota Department of Environmental Quality; South Dakota Game, Fish and Parks; Second Century Habitat Fund; Beadle Conservation District; and Millborn Seeds.

of DU's Soil Health Initiative. "A win-win solution for both ag producers and conservationists is the only way any of these programs will remain durable," Dale says. "I have been in the investment business for over 47 years, and a mutually beneficial agreement is the only thing that lasts. Sanctions have a role to play but have limited effectiveness. We have to take the lead to help find ways to enhance soil productivity while protecting the overall resource. This is what true conservation is all about."

DU's Soil Health Demonstration Farm, located just south of Huron, South Dakota, gives producers and other partners an opportunity to see regenerative agricultural practices firsthand. The 310-acre farm is managed in conjunction with the NRCS and Beadle Conservation District, which recently signed a Memorandum of Understanding with DU to assume ownership of the property. Funding from a Bush Foundation Community Innovation Grant has helped install infrastructure on the farm and extend outreach to encourage more visitors to tour the property.

Located in the heart of the James River Valley, the farm features a mix of cropland embedded with numerous small, shallow wetlands. A number of these wetlands had previously been degraded, so DU restored their hydrology. Four treatment plots have been developed to demonstrate soil-health practices, and a perimeter fence, cross-fencing, and a water-delivery system were installed for livestock.

DU's Soil Health Initiative receives funding from a number of public and private sources, including the Regional Conservation Partnership Program, which is administered by the NRCS; the North American Wetlands Conservation Act; and donations from DU major donors and corporate partners. In North Dakota, DU was awarded more than \$1 million in competitive grant money from the state's Outdoor Heritage Fund to launch a statewide soil-health program called the Cover Crop and Livestock Integration Project (CCLIP).

"It's been an extremely successful program," says Jonas Davis, DU's director of conservation programs in Montana and the Dakotas. "It's allowed us to reach a new audience of landowners who didn't work with us before. They like our program because we assume some of the upfront risks."

That was the case for Cody Kologi and his wife, Medora, who live with their three children on Prairie Hills Ranch 25 miles southeast of Bismarck, North Dakota. The Kologis purchased the ranch in 2014. Most of the property consists of native grassland, which they manage for cattle grazing. The Kologis started out as a very conventional cow-calf operation. "We did things the way our families had done them when we were growing up, but after a few years we were struggling financially," Cody recalls. "We knew if we kept doing things the same way, we wouldn't be ranching for long."

The Kologis became interested in grazing on croplands as a more cost-effective



Cody Kologi and his wife, Medora, live with their three children on Prairie Hills Ranch near Bismarck, North Dakota. Planting cover crops has helped the Kologis save on labor and inputs, which has made their operation more resilient.

Alexis Young



Derek Helms

Kody Aesoph and his wife, Emma, raise cattle in central South Dakota. Kody began rethinking conventional agriculture back in 2018, after a massive dust storm sandblasted the fields on his family farm. "It made me realize something wasn't right," he says. "There had to be a better way."

way to feed their cattle, but they could not afford the investment needed to install water lines. They were encouraged to contact DU about cost sharing these improvements and soon enrolled in CCLIP. "We started with the water line project, and it snowballed from there," Cody explains. "We've also cost shared with DU to plant cover crops and install mobile electric fencing. We use that fencing every day to move our cattle, and it's taken our grazing operation to a whole new level."

High-impact, low-frequency grazing has enabled the Kologis to graze more cattle on the same area of land, and they're seeing new species of native plants return now that the uplands have had a chance to rest and recover. Moreover, planting cover crops has helped the Kologis save on labor and inputs, which has made their operation more resilient. Despite extreme drought conditions this year, they were able to grow cover crops that provided much-needed forage for their cattle.

While the Kologis enrolled in CCLIP for financial reasons, they have developed a passion for soil health. "Now we focus on fertile soils, thriving plants, healthy animals, and healthy humans. We kind of complete the whole circle from the ground up," Medora says.

Having DU in their corner has meant a lot, Cody adds. "It's great to have someone

not only cheering you on but telling you it's okay when something fails and is willing to help you try again. That's been a huge help," he says.

Kody Aesoph and his wife, Emma, raise cattle in central South Dakota. Kody



Cassie Axt, DU

Upland cover restored through DU's Soil Health Initiative reduces erosion, improves water quality, and provides nesting habitat for ducks and other birds.

began rethinking conventional agriculture back in 2018, after a massive dust storm sandblasted the fields on his family farm. "I spent a lot of time on the tractor observing how much damage that dust storm did to

our soil and our farm ground," he says. "It made me realize something wasn't right. There had to be a better way."

A few years later, Kody was ready to begin implementing soil-health practices on the farm, but he couldn't convince his family to make the transition from conventional farming. So he went into business with his father-in-law, who was open to trying soil-health practices on his ranch. Kody began looking for assistance to establish grazing infrastructure on the property and eventually connected with DU. "Last fall I had DU come out and take a look at the landscape. They were really excited about the amount of waterfowl habitat they observed. There's a lot of standing water, and most of our ground is touching a little lake or a slough in those spots."

DU has since shared the cost of various fencing and water-delivery projects with Kody. Most of the ranch consists of native prairie grassland, with only about 10 percent in cultivation. DU helped Kody plant 550 acres of cover crops on this land and is now studying how the upland cover benefits nesting ducks.

Kody has also implemented a rotational grazing plan, in which cattle are moved every five days. A portable water-delivery system, consisting of a solar-powered pump and tanks, supplies water to his cattle as he moves them around the

*"We want to champion these folks
so they can reach out to their neighbors and help
them do the same things to retain more
wetlands and grasslands on the landscape
for people and wildlife."*

property. "I chose to fence off the smaller water holes and pump water out of them because I don't want the cattle to disturb or contaminate the water. We've really seen benefits in terms of water quality and healthy wetland habitat," he explains.

Both the Aesophs and the Kologis take pride in raising food in the healthiest way possible. They're keen to help local consumers understand the value of their products and the importance of supporting local producers like themselves. And they're committed to managing their land sustainably to build a legacy for their young children.

They've also come to see DU in a new light. "When I found out DU was willing to cost share with me, I was surprised," Kody says. "I thought DU was all about buying easements, competing with farmers and

ranchers. But all that has changed. I really feel like I'm collaborating with DU to put this investment to good use."

Steven Dvorak, an agronomist with DU in South Dakota, says this is a common reaction among farmers in his area. "I'll bump into a producer I've worked with in other capacities, and they're surprised to find out about what DU is doing," he says. "They are very curious about our soil-health program, and why we are involved." Dvorak says that interest gives him an opportunity to explain the many benefits of partnering with DU. "They find out we are a lot more farmer friendly than they may have realized, and we have many of the same objectives," he says.

Jonas Davis echoes that sentiment. "We have such great relationships with folks on the ground who see we are there

to help. Maybe we didn't see eye to eye on things in the past but now they see us as a valuable partner. We want to keep those cattle on the land, and we want producers to be successful. We don't want to lose any more pasture to conversion. We have built tremendous relationships with producers, and we now have landowners who advocate for us in their communities. We want to champion these folks so they can reach out to their neighbors and help them do the same things to retain more wetlands and grasslands on the landscape for people and wildlife."

Jennifer Boudart enjoys writing about science and conservation for readers of all ages. She is a frequent contributor to Wetlands America and Ducks Unlimited magazines.

BUSH FOUNDATION GRANT SUPPORTS SUSTAINABLE AGRICULTURE

Through a Community Innovation Grant, the Bush Foundation of Minnesota is investing in great ideas and the people who power them by partnering with Ducks Unlimited's demonstration farm and outreach program in South Dakota's James River Valley. With an aspiration to reduce the fragility of these working farms and ranches, DU is helping landowners pay for and implement sustainable farming practices and share this information through peer-to-peer interactions with their neighbors. DU's goal is more than sustainable farms; the organization wants to sustain farmers' livelihoods and nurture their conservation ethic for the land. This grant from the Bush Foundation helps make DU's work with farmers and ranchers possible and gives producers opportunities to see regenerative agricultural practices on the landscape firsthand, which is a crucial part of the education process required to encourage landowners to adopt these practices in their operations.

Dean Pearson



FARMING IN THE MISSISSIPPI DELTA

LONGTIME DUCKS UNLIMITED MEMBER, FIRST GENERATION FARMER

By: **Emily Austin**, Ducks Unlimited Corporate Relations & External Affairs Manager & **Meaghan Huseman**, Ducks Unlimited Conservation Specialist

The Mississippi Delta is a distinct landscape nestled between the Yazoo and Mississippi Rivers. Rich in culture, this area was once one of the top cotton-growing areas in the nation. Today it is quickly becoming known for soybeans and rice.



Walt Rambo and his wife Ashley are proud first-generation Mississippi rice producers. “In 2014, we had our first crop of rice,” said Walt. “My grandfather once told me you have to grow what your ground is suited for. My ground is suited for rice and soybeans. Eventually, I would love to transition to all rice.” The Rambo’s currently farm 1,300 acres that rotate between the two crops.

A Ducks Unlimited member since a young age, Walt knows the relationship between agriculture and waterfowl is an important one. “Ducks need loafing areas; they look for lots of surface area,” Walt said. “When we flood our rice fields in the winter, we provide this. The ducks that migrate through the Delta are looking for somewhere to rest, without hunting pressure.” While passionate about duck hunting, Walt also sees how important it is to provide quality bird habitats. Implementing Rice Stewardship recommended practices helps their property offer this much-needed habitat.

In 2017, Trinity Long with the NRCS approached Walt and Ashley about enrolling their farm in the RCPP to help with production and resource management. Walt sits on the state board of directors for Soil and Water and knows firsthand how critical resource water is for farmers and the cost to irrigate fields. Now, as a participant in the Rice Stewardship, Walt can attest to the cost savings producers experience by implementing recommended practices. “The tailwater recovery practice has truly

changed the face of our farm. Thanks to this technique, we are almost 100 percent self-sufficient on 300 acres.” By switching to surface water irrigation, Walt has significantly improved his rice and soybean harvest.

While water is a concern for rice producers, so is finding just the right type of rice to grow. Historically, Walt has grown seed rice, but in the 2022 growing season, he planted row rice for the first time. By implementing practices encouraged by the program, Walt has been able to streamline his operations, resulting in lower emissions and decreasing his carbon footprint. Growing row rice also provides the opportunity to utilize the “no-till” farming practice.

Walt is a passionate duck hunter but a true conservationist at heart. “I have always told our kids (Addison, 16 and Wyatt, 12) that you must care for your resources. One of the most critical resources we have is water. Working our land under the technical guidance of the Rice Stewardship helps us to make the best use of this resource while helping us as farmers produce a quality product.”

According to Walt and Ashley, the future of rice farming is the younger generation. “I think it’s important to get young folks involved in agriculture,” he said. “We must show them how important it is to preserve and create habitat.”

Walt Rambo talks to DU’s Ethan Adkins about harvest timing.





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