

## Urban Farm Marketing Cooperative Supports Local Growers in Indiana

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Four urban farms in Indianapolis have created IndyGrown, a collaborative marketing presence for urban farms. Each farm is distinct in size, location, and personality, but all share similar farming practices and philosophies. Using sustainable growing practices, IndyGrown farms are creating green space in the urban core and repurposing vacant land in Indianapolis.

With support from a 2012 NCR-SARE \$21,070 group Farmer Rancher grant, four Indianapolis farms joined forces to create the IndyGrown brand, define the growing standards for IndyGrown farmers, test marketing strategies, train farm members in Good Agricultural Practice (GAP) procedures, purchase post-harvest wash stations, conduct farm tours, and more. The member farms include Big City Farms, South Circle Farm, CUE Farm at Butler University, and Growing Places Indy.

“IndyGrown was created to be used as a distribution, marketing, and capacity-building tool for existing and future urban farms in Indianapolis,” explained project coordinator and urban farmer, Matthew Jose. “There were several farms/farming initiatives that had been established in Indianapolis, and we felt like a more collaborative approach could benefit all of us, in terms of financial stability and public presence, as well as lay the groundwork for a more-formalized resource network for potential and future urban farmers.”

IndyGrown farmers worked with the director of the Business Ownership Initiative in Indianapolis to develop a mission statement and set of shared values for IndyGrown, followed by a series of common goals and objectives that could allow the group to begin working as a supportive and influential presence for new and existing urban farms.

They created an IndyGrown brand with a website, logo, and marketing materials. They also established growing standards for IndyGrown farmers relating to safe soils, organically-based growing practices, and post-harvest practices focusing on food safety. These standards will be used to determine farmer membership for IndyGrown, and as a marketing tool.

The IndyGrown farms offer tours to provide Indianapolis residents with an opportunity to visit the IndyGrown farms and talk with the farmers about the unique aspects of their operations. Jose says each farm works to improve their own particular site through the regular application of compost, the use of cover crops, and the occasional use of organically-approved pest controls.

Indygrown is exploring the ways in which they can support new and future growers; Jose says maintaining that conversation and strengthening the network, in spite of setbacks and incredibly busy and demanding schedules, is a vital part of IndyGrown’s work.

“As small farms steadily increase in number and become a more visible presence throughout the country, it will become more attractive, and necessary, for individual farms to collaborate with others, so as to more forcefully voice their opinions on issues related to the continued success of small farms (such as land use policies, institutional purchasing requirements, and agricultural training programs),” said Jose. “I hope that IndyGrown will become a sought-after resource for urban farming efforts within



Matthew Jose’s Big City Farms is one of four farms that form IndyGrown, a distribution, marketing, and capacity-building farm collaborative in Indianapolis. Photo courtesy of Matthew Jose.

Indianapolis and elsewhere. We have already begun weighing in on proposed zoning changes that will affect the viability of urban agriculture, in addition to discussing the possibility of new farming ventures and businesses. I think that this dual effort (on the policy front, as well as the practical applications) will be the primary way that IndyGrown will affect and improve the long-term place of urban agriculture.”

Read more about IndyGrown’s NCR-SARE Farmer Rancher Grant project online on the SARE project reporting website. Simply search by the project number, FNC12-868, at <http://mysare.sare.org/> or contact the NCR-SARE office at [ncrsare@umn.edu](mailto:ncrsare@umn.edu).



*Marketing Strategies for Farmers and Ranchers* offers snapshots of the many alternatives to marketing commodities through conventional channels. Read it online for free at [www.northcentralsare.org/Marketing-Strategies](http://www.northcentralsare.org/Marketing-Strategies).



# Learn About Applying for Grants for Sustainable Agriculture

NCR-SARE has online resources to help you learn more about writing proposals for NCR-SARE's grant programs. Read tips, tutorials, and watch videos online at [www.northcentralsare.org/Grants/Write-a-Successful-Grant](http://www.northcentralsare.org/Grants/Write-a-Successful-Grant)

## Grant-Writing Assistance

Did you know that the Michael Fields Agricultural Institute Grant Advisor can advise you on how to improve your farming business? If you are an urban farmer, beginning farmer, limited resource farmer, or a member of a historically socially disadvantaged group in the Midwest, you are invited to contact grants advisor **Deirdre Birmingham** for free grant advising from the Michael Fields Agricultural Institute. Contact grants advisor, Deirdre Birmingham, at (608) 219-4279 or [deirdreb4@gmail.com](mailto:deirdreb4@gmail.com) for more information.

## SARE State Coordinators

SARE sustainable agriculture coordinators in every state and island protectorate are charged with training agriculture professionals in sustainable practices and sharing SARE project results with them. State coordinator responsibilities include professional development—promotion, networking and coordination, especially of SARE-related activities—and communication and evaluation. **Learn more about your SARE State Coordinator and view documents about funded grants in your state by visiting NCR-SARE online at [www.northcentralsare.org/State-Programs](http://www.northcentralsare.org/State-Programs) or contact the NCR-SARE office at [ncrsare@umn.edu](mailto:ncrsare@umn.edu).**

# Grant Highlights

Learn more about exciting SARE-supported projects! Use the project number listed with these projects to find more information at [www.MySARE.sare.org](http://www.MySARE.sare.org), or follow NCR-SARE on Facebook or Twitter to receive regular updates like these.

With SARE support, **Rufus Isaacs** published a general framework and examples of approaches for enhancing pollinator richness and abundance, quantity and quality of pollen on stigmas, crop yield, and farmers' profit, including some benefits detected only through long-term monitoring. This is SARE project LNC08-297.

**Tom and Susan Barnes** have been working to develop a goat meat market in the Black Hills region of South Dakota with support from a SARE grant. This is SARE project FNC12-846.

**Practical Farmers of Iowa** received SARE support to test a variety of winter small grains as cover crops to determine which grains could be effective cover crops and also produce a quality grain crop, even when planted at a later than optimal date for typical grain planting. This is SARE project LNC09-313.

With SARE support, **Kizzi Roberts** is researching swine relationship data in order to help producers plan swine mating to maintain genetic diversity. This is SARE project GNC10-145.

With a SARE grant, **John Henry Nenninger** developed a non-chemical product he calls a "salt box" to stop hive beetle larvae from reaching suitable soil to pupate. This is SARE project FNC10-843.

In conjunction with their SARE grant, **Green Lands Blue Waters** developed a new publication, *Continuous Living Cover Manual*, that focuses on agroforestry, cover crops, and perennial forage. This is SARE grant project ENC13-141.

## Explore SARE's Online Topic Rooms

## NCR-SARE Elects Carissa Spencer to Administrative Council

Carissa Spencer was recently elected as a new Administrative Council member for NCR-SARE.

Spencer is a State Agronomist with the Natural Resources Conservation Service (NRCS) in Minnesota. Prior to her service with USDA-NRCS, Spencer served as a Sales Agronomist for NEW Cooperative and United Western Co-op. She holds a bachelor's degree in agronomy from Iowa State University.

## 2015 NCR-SARE Farmers Forum at NPSAS

The annual NCR-SARE Farmers Forum will be held at a new location this year - the 2015 Northern Plains Sustainable Agriculture Society (NPSAS) Conference. The Farmers Forum is an annual event giving farmers, ranchers, researchers, and educators the chance to share information about sustainable agriculture practices with a national audience.

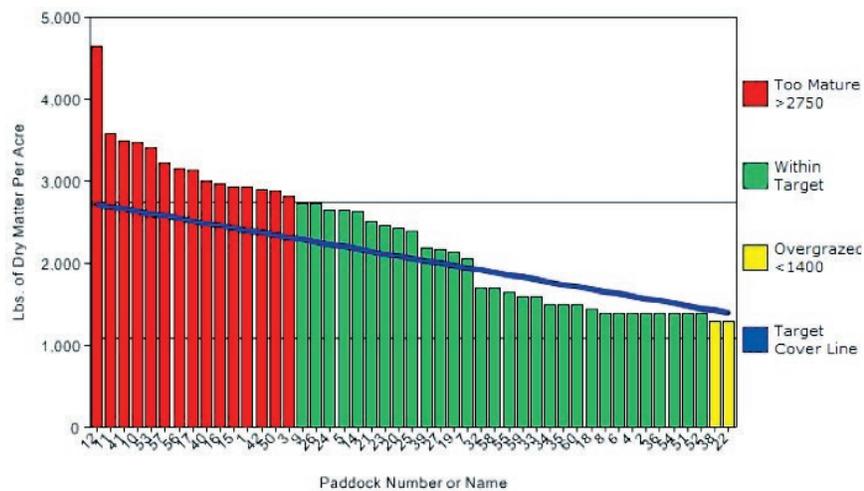
The event will take place January 22-24, 2015 in Aberdeen, South Dakota. For more information visit, <http://www.npsas.org/news-events/winter-conference.html>



SARE Topic Rooms are organized collections of multi-media information on important topics in sustainable agriculture. Current topic rooms include: cover crops, local and regional food systems, season extension, and small ruminants. More topic rooms are in development. Visit SARE's topic rooms at [www.sare.org/Learning-Center/Topic-Rooms](http://www.sare.org/Learning-Center/Topic-Rooms)

# Grazing Wedges Help Producers Maintain Forage

by Andrea Slotke and Marie Flanagan



This grazing wedge was created with online software developed by University of Missouri Extension. Producers collect pasture data, enter the values into the online database, and are supplied with a histogram of relative pasture cover in each of their paddocks.

A grazing wedge is a tool for visualizing forage inventory in different pastures. It visually represents the quality and quantity of forage dry matter available both now and during the next round of grazing, enabling farmers to plan pasture management accordingly. Cattle graze good quality forage (not too mature) without overgrazing and risking poor regrowth.

In 2009, Justin Sexten at the University of Missouri received a \$148,137 NCR-SARE Research and Education grant to teach pasture budgeting techniques designed to match beef cattle nutrient requirements to the forage system while strategically managing input costs, pasture quality, and carrying capacity.

“As pasture rent and input costs increased, the need to be able to inventory the pasture resource and monitor changes and productivity over time increased,” said Sexten. “The grazing wedge serves as an excellent forage quality monitor, particularly useful in dairies, whereas in a beef production system forage quality is often displaced by quantity. Increasing basic forage and nutrition knowledge for beef producers provides the foundation to build a sustainable grazing system,” said Sexten. “Basic knowledge allows producers to make educated changes in cattle and forage management practices regardless of seasonal or environmental changes.”

In association with the grant, 35 producers were provided with grazing kits consisting of a charger, 3 to 1 fence reel, polywire, posts and handle, and a *Missouri Grazing Manual*. Seven producers sampled pastures over three years managed with grazing wedges to determine forage quality. Sexten says that during the droughts of 2011 and 2012, the grazing wedge

offered an excellent forage inventory tool to manage pasture and hay resources. Because of the historic drought experienced by producers across the Midwest, producers had to address recovery from the 2011 drought as well as the excessive heat in June and July of 2012. By early July, most producers observed little or no forage regrowth. They were encouraged to stop grazing pastures at a residual height of 1,500 pounds of dry matter per acre to minimize opportunities for weed growth, and to allow rapid regrowth when rain returned. Producers who were able to keep cattle from grazing residual forage observed increased regrowth when a late-season storm system brought rain to most of the state. The results of the 2012 forage sampling indicate crude protein and energy (TDN%) were sufficient to excessive for all stages of beef cattle production. Generally, fiber concentrations (NDF%) increases and NDF digestibility declines as the growing season progresses, indicating the optimal time to harvest excess forages is before June. The data from this study indicated that forage quality in pastures managed with wedges could provide sufficient nutrient concentrations to meet or exceed nutrient requirements of cow-calf systems.

According to Sexten, the use of grazing wedges improved the ability of the producers to maintain ideal pasture residual to optimize regrowth while minimizing weed infestation following drought. Once pasture growth resumed, producers used the grazing wedges to inventory pastures and determine the availability of stockpiled forage. Feed and forage purchases were based on inventory at the end of the growing season. Sexten says producers are maintaining forage in a vegetative state with minimal overgrazing, resulting

in improved forage quality and increased production.

A beef producer in central Missouri commented on the grazing kits received during the project: “We increased cow numbers from 170 to about 230 head in anticipation of buying an additional 80 acres of pasture early in 2013. The sale didn’t occur at the anticipated time, but by using the temporary fencing and moving the cattle more frequently on existing acres, we were able to maintain the additional cows through the summer of 2013 without feeding hay, buying additional feed, or selling cows to reduce numbers. Without the fencing material, we would have run out of feed.”

“The grazing wedge offers the opportunity to evaluate pasture productivity over time for long term users, while short term users can use the wedge as a pasture inventory tool to manage grazing and stored forages,” said Sexten. “Long or short term improvements in forage management offer producers improved profitability while maintaining the pasture resource; that is sustainability.”

As part of their project, they developed an online grazing wedge calculator for producers. Find it online at [www.grazingbeef.missouri.edu](http://www.grazingbeef.missouri.edu). With this tool, grazing wedges can be created quickly after producers upload pasture data from their farm each week of the grazing season.

Read more about this NCR-SARE Research and Education project online on the SARE project reporting website. Simply search by the project number LNC09-309, at <http://mysare.sare.org/> or contact the NCR-SARE office for more information at [ncrsare@umn.edu](mailto:ncrsare@umn.edu).



# Managing Drought Risk on the Ranch

Tonya Haigh presents information about minimizing ranch drought risk at the Gudmundsen Sandhills Laboratory in the sandhills of Nebraska. Photo by Marie Flanagan.

Producers throughout the nation continue to grow increasingly concerned about water scarcity. Farmers, ranchers, and agricultural educators are exploring new approaches to the challenges associated with water shortage and drought.

The National Drought Mitigation Center, (NDMC) based in Lincoln, NE, has a mission of “helping people and institutions develop and implement measures to reduce societal vulnerability to drought, stressing preparedness and risk management rather than crisis management.” In 2011, **Tonya Haigh, a researcher at the NDMC, received a \$56,366 NCR-SARE Professional Development grant to increase the technical support available to help rangeland managers mitigate and plan for drought.**

“While drought is a normal part of climate, it is certainly a threat to the financial and natural resource health of Great Plains ranches that rely on non-irrigated rangeland,” said Haigh. “The drought of the early 2000s led to reductions in grazing capacity, irrigation capacity, and winter feed production, sale weights and weaning percentages, in brood herd numbers, and owner equity. Drought’s impacts may affect the ecological health as well as the financial health of a ranch operation for decades to come.”

According to Haigh, drought losses can be significantly minimized through ranchers’ efforts to prepare for drought. She explained that the purpose of her project was to share what the NDMC had learned about what rangeland managers could do to come through drought with minimum damages to both the ecological health of the ranch AND the financial health of the ranch.

Haigh and her team interviewed ranchers from across the Great Plains region who use drought planning and management strategies to minimize drought impacts in their operations.

Based on what they learned, a “Managing Drought Risk on the Ranch” website was built to provide ranchers with a structure for their own drought plan, and to provide resources, information, and tools to help them take these recommended steps. The NCR-SARE Professional Development grant was used to train agricultural professionals in using the drought planning website and related resources, and to encourage them to work directly with rangeland managers on drought planning.

The project developed a 5-part webinar series targeted to agricultural professionals and advisors working with ranchers. More than 260 individuals registered for the webinar series, from SD, NE, KS, MN, MO, as well as MT, WY, CO, OK, TX, and AZ. Registrants included more than 40 extension educators and more than 55 NRCS employees, as well as farmers and ranchers, representatives of State Grazing Lands Coalitions, Forest Service (State or Federal), The Nature Conservancy, Pheasants Forever, U.S. Fish and Wildlife, tribal colleges, state/tribal/county/local governments, universities, State Conservation or Natural Resource Districts, and other non-profits. In addition, South Dakota State University Extension advertised and offered live viewings of the webinars at eight regional extension centers throughout South Dakota, with more than 70 attendees.

Before the webinar series began, Haigh says many of those who registered for the webinar series were not confident (or not sure) in their ability to use monitoring, planning, and decision-making resources. After the webinar series, based on her survey results, 60% had more confidence in their ability to make drought-related decisions, monitor drought, set critical decision-making dates, assess drought

impacts on forage production, evaluate pastures during drought, write a drought plan, and identify relevant drought indicators.

“What this tells us is that ranchers have more, and more confident, sources of advice out there for putting together a drought plan for long term sustainability,” said Haigh.

Haigh says the ranchers they worked with to develop the program said their drought plans have paid off during past droughts. “They pointed to the health of their grass and quality of their rangeland. Some said that because of their efforts to adjust stocking rates at the earliest sign of drought and their grazing methods, they had avoided degrading their resource base and recovering their operations faster than they would have without a drought plan. And one rancher said their drought planning process had actually helped reduce their debt level,” said Haigh.

Read more about this NCR-SARE Professional Development project online at <http://drought.unl.edu/ranchplan/Overview.aspx> or on the SARE project reporting website. Simply search by the project number ENC11-126, at <http://mysare.sare.org/> or contact the NCR-SARE office for more information at [ncrsare@umn.edu](mailto:ncrsare@umn.edu).

*Smart Water Use on Your Farm or Ranch* spotlights innovative, SARE-funded research into a range of conservation options. Read it for free at <http://www.sare.org/Learning-Center/Bulletins/Smart-Water-Use-on-Your-Farm-or-Ranch>



# Treating Small Ruminant Intestinal Parasites with Fruit By-Products

Sheep and goat enterprises offer diversification opportunities for small and limited-resource farmers. Control of internal parasites is a primary concern for many sheep and goat producers and is particularly challenging in humid areas. Resistance of intestinal parasites to commercial anthelmintics (drugs that are used to treat parasitic infections), and the inability to use commercial anthelmintics for certified organic food production present challenges.

A recent graduate student of The Ohio State University, Dr. Shirron LeShure, PhD, has been working with small ruminants since she was an undergraduate student at Tuskegee University in 2003. She wanted to research areas that would address producers' rising concerns about intestinal parasite resistance to current commercial anthelmintics, and build on preliminary research she conducted at Tuskegee University, which showed indications of efficacy of pomegranate husk extracts against helminth/worm parasites.

"Emphasis is being placed on decreasing the use of synthetic drugs in food animal production, and there are a limited number of drugs approved by the Food and Drug Administration for some of the minor species like goats and sheep," said LeShure. "Yet, intestinal parasites are among the primary health risks to the growth and survival of small ruminants."

LeShure received a \$9,900 NCR-SARE Graduate Student grant to examine the naturally occurring anthelmintic properties of certain fruit by-product extracts against intestinal parasites in small ruminants.

LeShure extracted potentially anti-parasitic bioactive compounds (e.g. tannins and polyphenols) from by-products of the pomegranate and grape industries, and then investigated the effects of pomegranate husk and grape pomace on the life stages of the helminth worm parasite in cooperation with five farmers, two organic and three conventional. LeShure was especially enthusiastic about the idea of using byproducts for treatments.

"The roots of the project itself — taking a

waste product that has limited value and adding value — to me, that's the epitome of sustainable agriculture," said LeShure. "It's utilizing something that would be thought of as waste to make something useful."

According to LeShure's data, grape pomace and pomegranate husk showed efficacy against larval helminth stages. Additionally, grape pomace showed efficacy against egg hatchability and larval development, and pomegranate husk was able to decrease adult activity. Given that, LeShure says it may be possible to decrease transmission of infestation.

"When we actually saw efficacy on the bench top...inactivating eggs, immobilizing larvae, and killing parasites overall, I was ecstatic!" exclaimed LeShure. "I started thinking about next steps, and was incredibly motivated to keep the work moving to animal trials."

Looking ahead, LeShure thinks that grape pomace and pomegranate husk could both potentially have practical application in becoming a natural anthelmintic for small ruminants and aiding in integrated pest management. LeShure says more in-depth studies need to be conducted to verify and finalize application parameters, but she is extremely optimistic about the results and the implications for sustainability.

"This research gives an opportunity to provide a value-added component to the fruit industry and to improve the health, growth, and efficiency of production of small ruminants," said LeShure. "The discoveries made from this research provide an opportunity for internal parasite control of animals in organic production practices. These aspects will aid in providing for a more efficient and affordable food system and improving economic viability of food production systems that can lead to economic benefits for both the plant and animal industries, while reducing dependency on chemical anthelmintics to assist in improving animal health and productivity."

Read more about this NCR-SARE Graduate Student project online on the SARE project reporting website. Simply search by the project number GN12-161, at <http://mysare.sare.org/> or contact the NCR-SARE office for more information at [ncrsare@um.edu](mailto:ncrsare@um.edu).



With SARE support, graduate student Shirron LeShure explored the treatment of intestinal parasites with fruit by-product extracts. Photo courtesy of Shirron LeShure.

**Agricultural Innovations** Fact Sheet 

### Sustainable Control of Internal Parasites in Small Ruminant Production

Margo Hale and Linda Colley, National Center for Appropriate Technology/The National Sustainable Agriculture Information Service (ATTRA) and Southern Consortium for Small Ruminant Parasite Control



**Geographic Applicability:**  
Humid areas, including the tropical regions of North America and the eastern United States.

Sheep and goat production is a growing enterprise for small and limited resource farmers. Small ruminants (sheep and goats) are adaptable to many different production systems and can be raised with relatively few inputs, but they face large production challenges. Control of internal parasites, especially gastrointestinal nematodes including *Haemonchus contortus* (barberpole worm, stomach worm), is a primary concern for many sheep and goat producers and is particularly challenging in humid regions. Grazing animals ingest infective larvae from grass and shorter forages. The larvae develop into adults in the abomasum (true stomach) of ruminants. The adult parasites feed on blood in the abomasum and lay their eggs, which are excreted in the ruminant's feces. The life cycle continues when the eggs hatch and larvae develop on pasture, where they can be ingested by the grazing ruminants.

Internal parasites have become more difficult to manage in small ruminants because of the parasites' increasing resistance to all available chemical dewormers. Parasite problems negatively impact the animals' health, reduce productivity and increase treatment costs. Pastures with heavy stocking rates in high-rainfall regions are especially vulnerable to the buildup of parasites. The cost of internal parasite infection includes treatment expense, reduced animal weight gains and performance, and even animal death.

In response, the Southern Consortium for Small Ruminant Parasite Control (SCSRPC) has investigated several methods of sustainable gastrointestinal nematode parasite control, including Smart Drenching (including FAMACHA®), copper oxide wire particles (COWP), condensed tannin-containing plants, specifically sericea lespedeza (*Lespedeza cuneata*), selection of resistant breeds and other alternative methods. This fact sheet provides basic information on each approach and cites resources for training and further information.

**Inside this fact sheet:**

- Introduction
- Smart Drenching
- FAMACHA®
- Copper Oxide Wire Particles
- Sericea Lespedeza
- Resistant Breeds for Parasite Control
- Other Methods
- Continuing Research
- SARE Research Synopsis
- References
- About The Southern Consortium for Small Ruminant Parasite Control (SCSRPC)
- Further Resources

SARE Agricultural Innovations are based on knowledge gained from SARE-funded projects. Written for farmers, ranchers, and agricultural educators, these peer-reviewed fact sheets provide practical, hands-on information to integrate well-researched sustainable strategies into farming and ranching systems. The articles are written by project coordinators and published by SARE.

The Southern Consortium for Small Ruminant Parasite Control has investigated several methods of sustainable gastrointestinal nematode parasite control, including Smart Drenching (including FAMACHA®), copper oxide wire particles, condensed tannin-containing plants, specifically sericea lespedeza (*Lespedeza cuneata*), selection of resistant breeds, and other alternative methods. *Sustainable Control of Intestinal Parasites in Small Ruminant Production* provides basic information on each approach and cites resources for training and further information. Read it for free at <http://www.sare.org/Learning-Center/Fact-Sheets/Sustainable-Control-of-Internal-Parasites-in-Small-Ruminant-Production>



## 2013-2014 COVER CROP SURVEY REPORT

A SYNOPSIS OF THE INFORMATION COLLECTED DURING THE 2013-2014 COVER CROP SURVEY.

# Analyzing the 2013-2014 Cover Crop Survey

by Steve Werblow

The 2013-2014 cover crop survey report documents yield boosts, soil benefits, and ag retailer roles.

For the second year in a row, a national survey of farmers has documented a yield boost from the use of cover crops in corn and soybeans, as well as a wide variety of other benefits. The survey—which was funded by NCR-SARE and carried out by the Conservation Technology Information Center (CTIC)—also details the challenges and benefits farmers expect from cover crops, data on the costs of seed and establishment, and insight into how farmers learn to manage cover crops.

In all, 1,924 respondents—both users and non-users of cover crops—completed the survey in the winter of 2013-2014. Of the total, 639 provided data comparing corn yields on similar fields with and without cover crops. They noted an average yield increase of five bushels per acre, or 3.1 percent, on fields that had been planted to cover crops before corn. Comparing yields in soybeans, 583 farmers reported an average boost of two bushels per acre, or 4.3 percent, following cover crops.

### Environmental Impacts

Those increases, while significant, are lower than the boost discovered in a similar survey last year by SARE and CTIC, which saw improvements of 11.1 bushels (9 percent) in corn following cover crops and 4.9 bushels (10 percent) of soybeans after cover crops. Rob Myers, Regional Director of Extension Programs for NCR-SARE and an agronomist at the University of Missouri, points out that much of the difference in yield impact between the two years of surveys may be attributed to the drought in 2012, which highlights the moisture-management benefits of cover crops.

The new report also reveals other benefits farmers gain from planting cover crops, including increases in soil organic matter, reduced soil erosion and compaction, improved weed control, the availability of “free” nitrogen through soil fixation by legumes, and others.

### Dramatic Growth in Acreage

“These many benefits of cover crops are reflected in the rapidly rising rate of adoption from 2010 to 2013, when cover crop acreage among survey respondents increased by 30 percent per year,” says Myers.

Of course, both users and non-users of cover crops recognize that the practice can add challenges to the average crop rotation. Users and non-users alike ranked the time and labor required to plant and manage cover crops as their biggest concern. Establishing the cover crops, seed cost, and selecting the right cover crops for their operations also ranked high for both groups of farmers.

“The survey reveals a widespread perception among farmers that cover crop seed and seeding costs are high,” says Chad Watts, project director for CTIC. “It also shows that the median cost for cover crop seed was \$25/acre. This points to a clear need for detailed research into the economic benefits of cover crops, and the return on investment that they can provide. Such research is currently ongoing—in fact, CTIC is engaged in a USDA-funded study on the economics of cover crops in seven Midwest states right now.”

### Incentive Surprise

“One of the most surprising findings of the survey was that 63 percent of the cover crop users said they had never received cost-share assistance or payments to grow cover crops,” Myers points out. “In fact, only eight percent said they only plant cover crops when they receive financial assistance. Our conclusion is that incentive payments can be very important to some farmers—either to get them started with cover crops or on an ongoing basis—but that the benefits of cover crops become apparent pretty quickly and inspire farmers to continue with the practice.”

Landowners also were reported to view cover crops favorably. More than half the cover crop users—61 percent—said their landowners were

very supportive or somewhat supportive of cover crops on rented or tenant-shared acreage.

### Ag Retailer Role

The new survey report delves into another new direction, exploring the role of agricultural retailers in supporting cover crops. Farmers said ag retailers can assist most by helping them assess changes in the soil resulting from cover crop use, guiding changes in nutrient management plans to account for cover crops, and providing advice and service for termination. Help with seed selection and custom seeding also ranked high on the lists for both users and non-users of cover crops.

“Ag retailers are widely respected for their agronomic knowledge, and it’s clear from this year’s survey that farmers are willing to look to them for insight and services related to cover crops,” says Myers. “That creates great opportunities for ag retailers to expand their offerings and expertise, and for farmers to tap into local expertise that can help them manage cover crops to their best advantage.”

### Other Insights Abound

The SARE-CTIC survey features a wide range of other insights about farmers’ experience with and perceptions about cover crops, including:

- Seventy-one percent of the cover crop users seed their own cover crops.
- Nearly half (48 percent) of the cover crop users apply a herbicide for termination; tillage and choosing species that winter-kill are each employed by about half as many growers (21 percent and 20 percent, respectively).
- Winter cereals are by far the most popular cover crops, planted by 73 percent of respondents. Legumes and brassicas are each planted by 55 percent of respondents. About one-third (34 percent) of the cover crop users plant a multiple-species mix.
- Cover crop users say they learn most about cover crop management through trial and error. Local workshops are the second-most popular source of insight, followed by online research and regional meetings.

“The farmers who shared their time and perspective on this survey have done a lot to teach us about on-the-ground perceptions and realities of cover crops, and about the types and sources of information that we can provide to support the adoption of these remarkable tools,” says Watts.

The 2013-2014 SARE-CTIC Cover Crop Survey Report is available online at [www.sare.org/covercropsurvey](http://www.sare.org/covercropsurvey).

# Milwaukee Urban Farm Program Fosters Cultural-Based Learning

Fieldhands and Foodways blends agriculture education with African and African American history and culture at Alice's Farm in Milwaukee, WI. Photo by Josiah Williams.



In Milwaukee, Wisconsin, land that was once farmed by abolitionist Deacon Samuel Brown has blossomed into a 2-acre community garden known as Alice's Garden. Alice's Garden offers agricultural, historical, and cultural-based learning opportunities. It also honors its historical underground railroad setting, where Brown provided safe passage to Caroline Quarlls, the first documented runaway slave to seek refuge in Wisconsin.

For more than 15 years, Venice Williams has taught youth about sustainable farming, community cultural development, and economic agricultural enterprises for the global landscape. In 2010, Williams received a \$2,000 NCR-SARE Youth Educator grant to support Fieldhands and Foodways, a program at Alice's Garden that blends agricultural education with African and African American history and culture.

"Conversations about my ancestors, both African and Native American, throughout my childhood academic education, never celebrated their agricultural knowledge and skills," said Williams. "Africans were not stolen from their homeland during the slave trade simply because of the 'need' for free labor. They were also taken

because of their ability to cultivate land and produce an incredible crop. Fieldhands and Foodways was created to honor those ethnobotany traditions, and to help reshape the telling of the story of brown people, farming, and food. It was also created to pass those traditions on to the next generations."

Hundreds of children, teens, and adults have studied and planted in the Fieldhands and Foodways project area with their schools, churches, and/or community groups. The program has birthed new partnerships, and 120 students from Carroll University, the University of Wisconsin-Milwaukee, and Marquette University have been engaged in the project over the past two years.

"It is almost impossible to know exactly how many people are impacted by Fieldhands and Foodways," said Williams. "Often, people are profoundly moved by just the reading of the four large signs in the Fieldhands and Foodways project area at Alice's Garden."

Williams explained that in the African American community, the relationship between the people and the land is complicated and burdened. She says that Fieldhands and Foodways is a "sustainable" agricultural project on several levels.

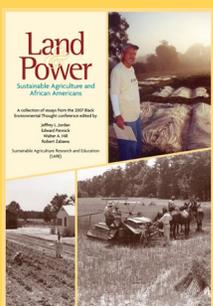
"It removes a layer of shame, and even anger, and replaces it with a cloak of pride and knowledge about the agricultural and culinary heritage of our people. It reintroduces farming as something to value, and work that is filled with dignity. It teaches the many ways our ancestors respected the land, employed sustainable growing methods, and fed their families and communities," explained Williams.

Williams believes that implementing urban agriculture from a historical, ethnic and cultural context offers participants a deeper self-understanding and invites them into a relationship with food and land that expands well beyond the growing and consumption. She says their interactive and hands-on approach to education engages students in a manner that absorbs their interest and accelerates learning.

Looking forward, Williams is excited about a new rice research project in conjunction with Marquette University. Rice might seem like an unlikely fit for an urban farm in Milwaukee, but Williams explained that many Africans were brought to the sea islands of Georgia and South Carolina specifically because of their ability to grow rice. Working with community elders and teens, biological studies students, and professors they have identified a cold-resistant strain of rice from Africa that they should be able to grow.

"Sustainable agricultural education needs to begin as early as possible if we really want young people to claim farming as a viable career path," said Williams. "In the long term, as this project continues to develop and expand, it will nurture and produce more farmers from urban areas."

Read more about this NCR-SARE Youth Educator project online at [www.alicesgardenmilwaukee.com/programs/fieldhands-and-foodways.html](http://www.alicesgardenmilwaukee.com/programs/fieldhands-and-foodways.html) or on the SARE project reporting website. Simply search by the project number YENC10-034, at <http://mysare.sare.org/> or contact the NCR-SARE office for more information at [ncrsare@umn.edu](mailto:ncrsare@umn.edu).



*Land and Power: Sustainable Agriculture and African Americans* places African American farmers, their cultural traditions, and the historical circumstances they have faced squarely in the forefront of

the sustainable agriculture movement. Read it for free online at <http://www.sare.org/Learning-Center/Books/Land-and-Power>



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**ABOUT NCR-SARE**

NCR-SARE has awarded more than \$50 million worth of competitive grants to farmers and ranchers, researchers, students, educators, public and private institutions, nonprofit groups, and others exploring sustainable agriculture in 12 states.

NCR-SARE funds cutting-edge projects every year through grant programs.

Are you interested in submitting a proposal for a NCR-SARE grant? Before you write the grant proposal, determine a clear project goal, and engage in sustainable agriculture research on your topic. Need help determining which program is best suited for your project? Go to <http://www.northcentralsare.org/Grants> for more information, or contact the NCR-SARE office.

For more information about any of the NCR-SARE grant programs, go to <http://www.northcentralsare.org/Grants> or contact the NCR-SARE office at 612-626-3113 or [ncrsare@umn.edu](mailto:ncrsare@umn.edu).

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**GRANT PROGRAM TIMELINES\***

**Farmer Rancher\***

Early August - Call for Proposals Released  
Mid November - Proposals Due  
March - Funding Decisions  
Spring - Funds Available to Recipients

**Graduate Student\***

March - Call for Proposals Released  
Early May - Proposals Due  
Late July - Funding Decisions  
September - Funds Available to Recipients

**Research and Education\***

August - Call for Preproposals Released  
Late October - Preproposals Due  
Late January - Full Proposals Invited  
April - Full Proposals Due  
Late July - Funding Decisions  
Fall - Funds Available to Recipient

**Professional Development Program\***

Late January - Call for Proposals Released  
Early April - Proposals Due  
Early August - Funding Decisions  
October - Funds Available to Recipient  
Note: The next call for proposals will be released in January 2015.

**Youth Educator\***

Early August: Call for Proposals Released  
Mid November: Proposals Due  
March: Funding Decisions  
Spring: Funds Available to Recipients

**Partnership\***

Early August: Call for Proposals Released  
Late October: Proposals Due  
March: Funding Decisions  
Spring: Funds Available to Recipients

\*Timelines are subject to change.

NORTH CENTRAL REGION SUSTAINABLE AGRICULTURE  
RESEARCH AND EDUCATION PROGRAM

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Photo by Brett Blaauw