

The Growing Business of Cover Crops



P.A. White

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COVER PHOTO: Ryan Stockwell

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Executive Summary

The Great Recession of 2008 devastated America's economy; hundreds of banks failed, entire industries fell into bankruptcy and the stock market plummeted. While recovery is well underway, Rural America continues to struggle.

America's rural economy faces many unique challenges:

- Increased productivity in the agriculture sector leads to decreased employment
- High poverty, low income
- Declining population
- Shrinking labor force (able bodied, between ages 20-64)
- Smaller educated population
- Limited access to health care

The Growing Business of Cover Crops hopes to inform and inspire Rural America about the burgeoning growth in the use of cover crops: non-commodity crops used to protect soil and nutrients. Farmers are making the shift to cover crops rapidly, creating gaps of opportunity for the rural entrepreneur to build new small businesses.

In doing so, they will not only make a living to support their families, they will improve their local economies through job creation and provide much needed services to farmers. Moreover, they are becoming part of the movement in today's agriculture, shifting from conventional practices to sustainable, healthy and future-friendly farming.



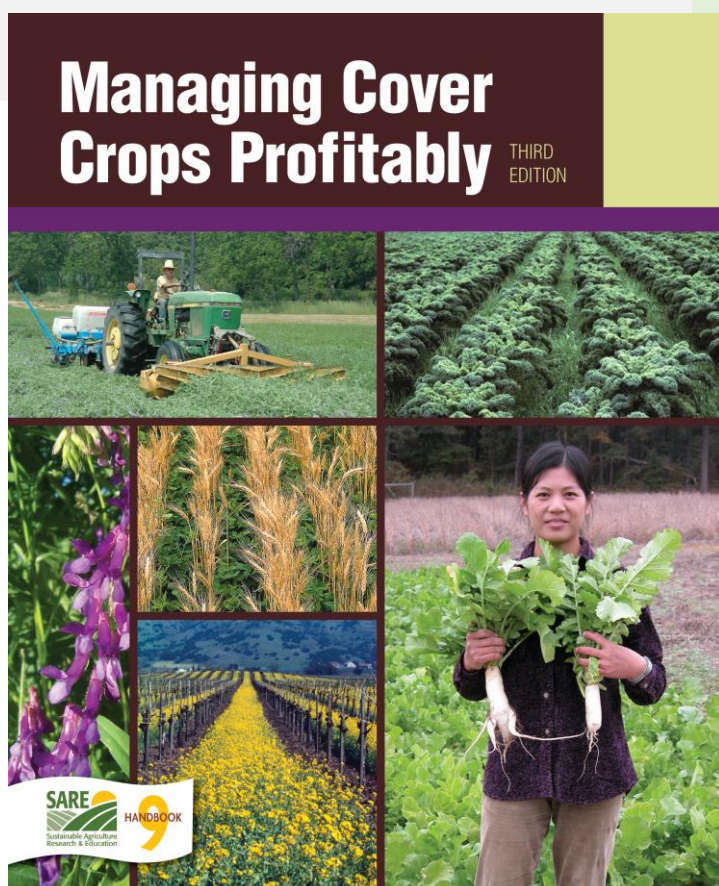
What is a cover crop?

Most people are familiar with the concept of a crop: farmers plant cash crops one season and harvest in the next. Cover cropping is the practice of planting a second, unharvested crop in coordination with the cash crop to prevent wind and water erosion, reduce nutrient loss and leaching and improve soil health and quality. Farmers grow cover crops in a variety of ways, including growing them year round as a living mulch, planting after harvest or intercropping by growing the cover between rows of the cash crop. While not harvested, cover crops can be grazed or mowed for forage.

What are the benefits of using cover crops?

According to the Sustainable Agriculture Research and Education program's (SARE) successful book, "Managing Cover Crops Profitably," cover crops provide both economic and ecological benefits such as:

1. Reduce fertilizer costs
2. Reduce the need for herbicides and other pesticides
3. Improve yields by enhancing soil health
4. Prevent soil erosion
5. Conserve soil moisture
6. Protect water quality
7. Help safeguard personal health



THE RISE AND FALL (AND RISE) OF COVER CROPS

Throughout agricultural history, farmers have taken advantage of the many benefits of using cover crops. During the Roman Empire, Greek and Roman farmers used legume cover crops to improve soil quality in their vineyards. In the late 1700s, lupines were used throughout northern Europe to improve sandy soils.

By the 1860s, cover crops were common practice in American agriculture and remained so until the 1950s. Cover cropping was largely abandoned by the late 1950s when conventional agriculture turned to synthetic fertilizers.ⁱ Readily available and comparatively inexpensive, synthetic fertilizers replaced cover crops for enhancing soil fertility and significantly changed how cropland was managed. Today's generation of farmers grew up with widespread use of fertilizers and herbicides and little or no understanding of cover crops.

With just 5 percent of the world's population, the U.S. uses nearly 12 percent of all the nitrogen fertilizer produced globally.ⁱⁱ

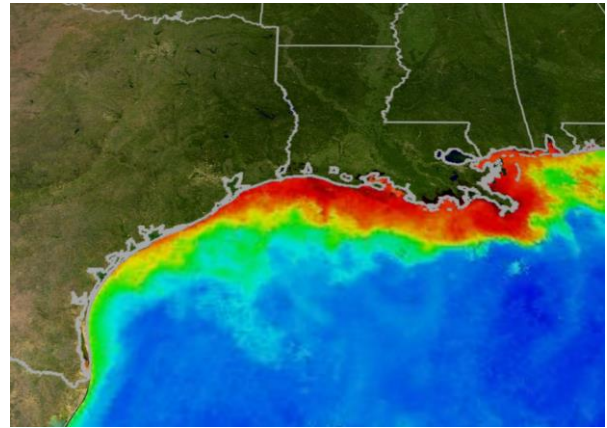


Thomas Jefferson and George Washington – founding fathers and accomplished agricultural innovators – both experimented with grasses and legumes in rotation with tobacco, wheat and corn.ⁱⁱⁱ

In the United States, increased fertilizer use and soil erosion have taken a toll on our environment. In the 2000 National Water Quality Inventory, states reported that agricultural nonpoint source (NPS) pollution was the leading source of water quality impacts on surveyed rivers and lakes, **the second largest source of impairments** to wetlands and a major contributor to contamination of surveyed estuaries and ground water.

Reaching the end of the 20th century, the burgeoning environmental movement led to a growing interest in sustainable agriculture, based on modern ecology. Minimum and no-till farming, crop rotation and integrated pest management became more common. Congress and USDA caught up by offering programs such as the Conservation Reserve Program and Sustainable Agriculture Research and Education (SARE).

Currently, land grant universities and agricultural research are looking to the past, seeking beneficial plants and practices that can be incorporated into modern farming systems to supplement or replace manufactured inputs.



Water pollution, largely from agricultural nutrient runoff has caused hypoxic dead zones in water bodies such as the Gulf of Mexico.

Farmers are experimenting with new species and cultivars, tractor implements and irrigation methods in adopting cover crops on their land.

Cover crops are increasingly utilized by farmers and promoted by agronomists for the multiple benefits they contribute to soil and crop management systems. Producers who follow a sustainable agriculture ethos understand that cover crops are an essential element of successful sustainable farming systems. Investing in cover crops is a bold but highly productive strategy for a farming system that will be healthy over the long term, both economically and ecologically.

Types of Cover Crops

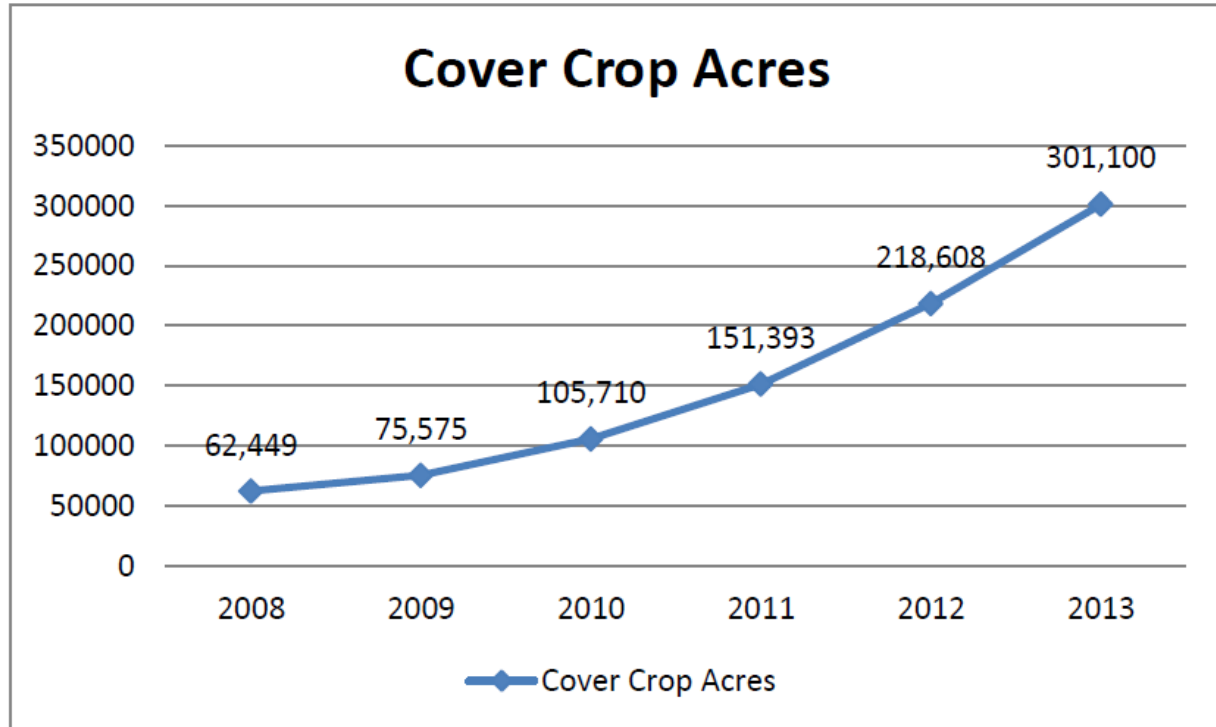
The key to successful cover cropping is selecting the species or mixture of species to help achieve specific goals and suitable for your growing season. For instance, legume cover crops (clover, hairy vetch, field peas) fix atmospheric nitrogen into a form plants can utilize. Non legume species (rye, oats, turnips) recycle existing soil nitrogen and other nutrients to reduce leaching losses.



Photos: Lara Bryant

HOW MANY ACRES UNDER COVER CROPS?

- The Conservation Effects Assessment Project (CEAP), a collaborative effort led by NRCS found only **2 percent** of acres in the Upper Mississippi River Basin were planted to cover crops during the 2003 to 2006 period.
- Using data from seed dealers cross checked with data from the National Agricultural Statistics Service (NASS), the National Wildlife Federation estimated that the total acreage of cover crops in the Mississippi River Basin in 2011 was **between 1.8 and 4.3 million acres**, less than 2 percent of the total cropland area.
- In late 2012 and early 2013, the North Central Sustainable Agriculture Research and Education (SARE) program and the Conservation Technology Information Center (CTIC) surveyed more than 750 farmers from 36 states who grow cover crops. Respondents reported a **37.75 percent increase in cover crop acres** from 2012 to 2013. SARE has set a goal of 20 million acres of cover crops in the U.S. by 2020.^{iv}
- According to Practical Farmers of Iowa, aerial seeders in Iowa reported a 200 percent increase in cover crop seeding business from 2010 to 2013.
- The 2013 Census of Agriculture revealed 133,124 farms using cover crops on 10.3 million acres nationwide.



SARE 2012-2013 Survey - Total cover crop acres by year for all cover crop user survey respondents.



THE GROWING BUSINESS OF COVER CROPS

Now that they are making a comeback, cover crops are among today's exciting frontiers in agriculture. Many farmers want to take advantage of the many benefits of cover crops but don't have the expertise or time, so they are increasingly turning to outside help for everything from seeds to termination.

The 2012 SARE survey of cover crop farmers found that nearly half of all respondents reported challenges with time, labor and increased management. The survey also found that farmers are willing to pay an average amount of **\$40 per acre** (\$25 per acre for cover crop seed and an additional \$15 per acre for establishment costs), either for their own cost of planting or to hire a contractor to do the seeding of the cover crop.

The 2012 NASS Ag Census reveals that the average farm size in the U.S. is 420 acres.

*Therefore, the average farmer with 420 acres has **\$16,800** to spend toward establishing a cover crop each year.*

As more farmers adopt cover crops, more farmers will need support businesses to help them get cover crops successfully incorporated into their rotations and systems. And as the demand for cover crop support grows, so does the income potential.

At several points in the life cycle of a cover crop, the rural entrepreneur will find opportunities:

1. Crop advisers
2. Seeds (growing, cleaning, selling)
3. Planting/termination
4. Grazing

CROP ADVISERS

Farmers rely on their crop advisers to provide guidance in agronomy including species selection, nutrient management and best management practices. The exact nature of the work carried out by agricultural consultants varies depending on the type of service they offer and the type of employer, but essentially they offer the support and solutions their clients need to ensure their business is running efficiently and effectively.

Typical activities include:

- meet and consult with producers to evaluate their needs, identify and provide solutions to overcome potential problems such as diseases in crops
- advise on nutrient inputs and crop protection products
- collect and analyze data on crops and yield
- provide pest control measures and plans
- provide input on more efficient methods for growing crops
- prepare operating plans
- conduct field trials to address problems, plan and implement improvements
- liaise with seed and input businesses to research products, costs and monitor the impacts of potential changes
- research and relay information on relevant developments in agriculture industry

\$62,600

mean salary for a crop adviser

- Bureau of Labor Statistics

The American Society of Agronomy offers a voluntary certification program for crop advisers to provide a benchmark from professional crop advisers. The steps to certification are:

1. Pass two comprehensive exams;
2. Meet the experience requirements, including two years of experience, at least a Bachelor of Science degree in an agronomy related field or four years' experience with no degree;
3. Apply for the CCA Credential by documenting your education and experience, sign the code of ethics; and
4. Once certified, earn 40 hours of continuing education every two years and pay annual renewal fees.



Crop advisers with expertise and experience with cover crops will be in demand. Farmers will need crop advisers who can recommend the correct cover crop species to use in each crop rotation, when to seed, when to terminate, stay on top of both the science and rules, regulations of cover crops.

ENTREPRENEUR SPOTLIGHT

Mike Plumer
Conservation Agriculture
Consultant
Creal Springs, Illinois

Before Mike was known as the “Cover Crop Guru,” he spent 34 years as an agriculture and natural resources educator with the University of Illinois. These days, his official title is conservation agriculture consultant and coordinator for the Illinois Council on Best Management Practices. He helps producers successfully integrate cover crops into their rotations from Maryland to Oregon and from Austria to South Africa. In the last few years, Mike has made more than 130 presentations, reaching over 14,000 farmers.

Mike has been promoting the use of cover crops for three decades and has witnessed the recent revival. Now, when he speaks at field days and farm shows, many attendees have very specific, sophisticated questions about cover crop varieties, seed mixtures, planting options and management techniques.



"It's important for farmers to have the right help when they are starting out with cover crops. Because cover crops require a totally different set of management skills to be successful."

Mike Plumer



SEED

Per the laws of supply and demand, as more farmers are planting cover crops, they will demand a greater supply and variety of cover crop seed. In some areas, demand is so high, seed price increases and supplies dwindle in early fall.

Nearly **20 percent** of the farmers who responded to the SARE survey identified lack of available seed as a challenge in growing or using cover crops.

How can rural entrepreneurs find opportunities in cover crop seed?

1. Production
2. Processing
3. Sales and distribution

GROW IT (Production)

Seed growers produce and harvest seed from plant material for the purpose of distribution, storage or sale. In order to produce seed which is true to type, seed growers must use carefully regimented techniques to maintain genetic diversity and identity. **Genetic purity standards** are established by state seed laws and seed certification agencies to assure growers that the seed they buy is labeled accurately by crop and variety.

Today, most of the cover crop seed used in the U.S. is grown in Oregon, known as the “Grass Seed Capital of the World.” Winter annuals such as legumes and cereal grains are produced in the northeast and Canada while tropical summer legumes are produced in Hawaii.^v Going forward, the quantity and variety of cover crop seed will need to be increased to meet demand.

CLEAN IT (Processing)

Once seed is harvested, it must be cleaned and checked for purity and viability. Seed is run through machines to remove chaff and excess plant material, making it easier to sow the seeds through mechanical planters and reduces the risk of fungal or bacterial infection during storage.

Seed processing facilities range in size from Mom and Pop operations to massive, multi-million dollar enterprises. Renk Seed’s processing facility in Sun Prairie, Wisconsin was designed to move up to 600 bushels of corn or soybeans an hour and can store 600,000 bushel in bulk and bagged seed in the warehouse.

As demand for certified cover crop seed grows, the current infrastructure and protocol will not be able to process all the needed cover crop seed in addition to the commodity and specialty crop seed they are already processing. Also, farmers need more cleaning facilities, within close proximity to their operations so they don’t have to travel long distances.

SELL IT (Sales, distribution)

A typical seed sales representative is an agribusiness professional with multiple years of industry experience, and is often also considered a crop adviser. She or he may work independently or directly for a seed company, such as DuPont Pioneer, Great Lakes Hybrid or Beck’s. Seed dealers must enjoy talking to farmers, building relationships and closing sales and need reliable transportation and storage facilities such as a shed or warehouse.

Many seed dealers are also farmers themselves, so they save on personal seed costs and create additional income while setting their own schedule. With any sales business, a successful seed dealer needs to deliver high quality products and the best service to customers. The larger seed companies offer sales training, professional agronomic support and competitive incentive programs, offering trips or other bonuses for top sellers.

A seed dealer license is required for selling seeds except those packaged in containers of 8 ounces or less by a registered seed labeler. Seed dealers must renew their license annually and pay a license fee based on gross receipts from the sale of seed for the preceding license year.

\$53,000

*average salary for a
seed sales representative
- Indeed.com*

ENTREPRENEUR SPOTLIGHT

Green Cover Seed
Keith and Brian Berns
Bladen, Nebraska

The Berns brothers run a 2000 acre farm in Nebraska where they use and research cover crops in their no-till cropping system. In 2008, they took their cover crop use to a new level by starting a cover crop seed business.

"We got kind of excited about the potential for this, but seed was really hard to find and so we were going and getting seed and bringing it back and other people were saying 'Get some of that for us!' So we said maybe we can sell this stuff."^{vi}



"We started out just selling seed to a few people, a few thousand pounds and this year, we'll have 2,500 customers in 50 states and move around 8 million pounds of seed."

Keith Berns



PLANTING and TERMINATING

Some farmers wait until after harvesting a cash crop to plant a cover crop. In that case, they can use a drill or broadcast seeder as with any other crop. However, there are advantages to planting a cover crop before harvest. Planting early allows the cover crop to establish before the weather becomes too cold.

In order to plant a cover crop prior to harvesting the cash crop, special equipment is required to distribute seed without damaging the standing crop. Farmers can choose between high clearance planters or aerial seeding from airplanes and helicopters.

And because cover crops aren't harvested like cash crops, farmers may also need **unconventional equipment** to terminate the cover crop. Either way, farmers are not likely to own the necessary equipment, creating additional opportunities for the rural entrepreneur to thrive.

EQUIPMENT

Equipment manufacturers are not yet offering many high clearance seeder options so some rural entrepreneurs have gotten creative by retrofitting or adapting existing equipment. Few farmers can purchase special equipment or can take the time to retrofit their existing equipment.

*The rural entrepreneur could buy or retrofit **specialized high clearance equipment** and provide cover crop seeding and terminating services, saving the farmer time and money.*

ENTREPRENEUR SPOTLIGHT

Don and Matt Birky
On Track Farming
Gibson City, Illinois

The father and son team, Don and Matt Birky run On Track Farming, a successful custom harvest operation in rural Illinois. With the increased popularity of cover crops, they developed a customized highboy with 10'6" clearance to plant into standing corn in August. Aptly named "High Roller," the highboy includes a modified 60 foot wide boom with 30 inch center nozzles that blasts seed at 80 miles per hour.



The High Roller is especially valuable in Illinois where the high density of wind turbines can make it difficult for farmers to use aerial seeding services.^{vii}

"The state conservation department was looking for a way to seed cover crops in standing corn in August.

They had heard about a few of the extreme machines that have come out of our shop, and called with the challenge. Three months later we went to the field with the High Roller."

Don Birky

AERIAL SEEDING

Small planes and helicopters are often used to spray pesticides onto fields or “crop dusting.” Those same airplanes can be easily modified for aerial seeding. Flying 10 to 50 feet above the field, the airplane broadcasts the seed from a hopper that is attached to the underside of the plane.

Aerial application reduces soil compaction and may be preferable when wet soil or other conditions make drilling difficult. There are 1,350 aerial application businesses in 46 states, most are owner/operators. Annually, the agricultural aviation industry treats **71 million acres** of cropland, mostly corn, wheat, soybeans, rangelands and alfalfa. In addition to commercial pilots’ licenses, ag pilots must also be registered as commercial pesticide applicators and meet federal requirements for low-level aviation operations.^{viii}

The demand for aerial seeding is increasing with the popularity of cover crops and from the farmers' perspective, aerial application is **cost-competitive**. Prices vary widely from state to state, but aerial applicators may charge \$8.50 to \$12 per acre while drilling or broadcasting seed costs between \$12 and \$22 per acre.^{ix}

Depending on the size and type of seed, applicator planes can carry enough seed to plant between 12 and 100 acres on each trip. Helicopters carry smaller loads but they can land to reload closer to the planting site. Airplanes hold larger loads but need a half mile to turn around and a runway to land and reload that may be miles away. Number of total acres planted, number of trips to and from the runway and turns across the field while planting all influence the price per acre.

Organic growers provide another niche market for aerial applicators. Regulations will allow a conventional pesticide applicator to fly cover crop seed onto organic farms, but they must thoroughly wash their equipment prior to seeding an organic operation.^x



The National Agricultural Aviation Association (NAAA) represents the industry and provides continuing education on safety and environmental stewardship.

<http://www.agaviation.org/>

ENTREPRENEUR SPOTLIGHT

Lauren Greenhoff

Leading Edge Aerial Spraying
Dell Rapids, South Dakota

Growing up on a farm, Lauren Greenhoff developed a strong work ethic and passion for farming, but he always had his eyes on the skies. As a teen, he worked three jobs to pay for flying lessons to get his private pilot's license. He bought his first plane in 1991, but it wasn't until 2005 when Lauren combined his love for flying with his passion for farming to become an aerial applicator. He went through training, received his certifications and after gaining experience with an existing company, he purchased his own spray plane and his business took off.



Recently, local growers began voicing interest in planting cover crops into standing crops, so Lauren added aerial seeding to his services, increasing his business and giving him another way to use his love of flying to support his passion for farming.^{xi}

"I have been applying cover crops for about 5 years. The interest and amount of farmers doing it grows every year."

Lauren Greenhoff



GRAZING

Generally, cover crops are planted for the many benefits such as erosion control and nutrient retention, rather than with the intention of harvesting. However, if done with proper management, cover crops offer great potential for dual use to provide valuable forage for livestock without losing the soil improvement benefits. Marrying the two can add economic value to a conservation practice that may take years to show a profit through improved soil quality.

Cover crops and grazing are mutually beneficial in many ways. Cover crops provide excellent opportunities to produce supplemental forage for ruminant livestock, allowing pastures a rest while extending the grazing season on land that would otherwise sit idle and bare until the following spring. After grazing, need for commercial fertilizer and herbicide drops.

Cover crops and grazing are also **economically compatible**. During drought, permanent pastures are often too dry to sustain herds so livestock producers have to pay for hay or other stored forages to feed their cattle, sheep or other ruminants.

The cost of hay has skyrocketed and availability dwindled, leaving many cattlemen with no alternative but to liquidate their herds.

Cover crops can provide an economical option for feeding livestock through fall and winter. A mix of grasses, grains, legumes and brassicas offer high quality, high yielding and fast growing forage, delivering 1.5 to 3 tons of dry matter/acre. Cattle can gain up to 3.5 pounds/head/day when grazing cover crops over the winter. Instead of selling calves in October, cattlemen can keep them another 65 to 85 days, **adding another 100 pounds** to each calf – and considerably more profit.^{xii}

With land and feed being the biggest expenses for a livestock operation, there are a handful of win-win scenarios for livestock producers and crop farmers to work together:

1. **Crops + livestock:** Row crop farmers who also have livestock can grow cover crops to provide grazing over fall and winter. Savings on hay will offset the costs of growing cover crops.
2. **Crops – livestock:** Row crop farmers who do not have livestock can grow a grazing cover crop and rent to local livestock producers. The rent income will offset the cost of the cover crop and the cover crop will still provide the soil quality improvement benefits to the row crop farmer.
3. **Crops and livestock:** A row crop farmer could partner with a livestock producer to cost share cover crops on the farmer's land, providing soil quality benefits to the farmer and fall/winter grazing to the livestock producer.
4. Grazing specialists or forage agronomists could add “**grazing matchmaking**” to their portfolio, finding farmers with land in need of cover crops to partner up with stockmen in need of grazing opportunities. The service could include recommending the cover crop that best fits the farmers' rotation while providing the highest nutrition to the herd.

GRAZING SPECIALIST

The American Forage and Grassland Council (AFGC.org) offers a certification program for forage and grassland professionals.

Educational requirements

- Bachelor's degree in agronomy, soils, animal science, natural resources, range science

Experience requirements

- At least five years grassland resource management actively demonstrating professional competence in the science and practice of actively managing pasture, hay or grazed crop land.



ENTREPRENEUR SPOTLIGHT

Laura Paine
Grazing Broker
Southwest Badger Resource
Conservation and
Development Council
Platteville, Wisconsin

More than twenty years ago, Laura began her career at the University of Wisconsin researching the wildlife habitat value of various agricultural practices, including managed grazing. Since then, grazing and conservation have been a constant thread running through her work with UW Extension and Wisconsin's Department of Agriculture. Today, Laura is the Southwest Badger Resource Conservation and Development Council's grazing broker, bringing together landowners and cattlemen with grazing leases that benefit both partners and the environment.



A beef grazer herself, Laura shared her personal and professional philosophy in a recent interview with AgriView. "I think we, as farmers, need to see ourselves as stewards of one of the most important resources on the planet, the land that our food is grown on. The best way to do that is by managing in a way that both produces a product and protects the resources for future generations."

"I think we, as farmers, need to see ourselves as stewards of one of the most important resources on the planet, the land that our food is grown on."

Laura Paine



SUPPORT AND FUNDING SOURCES

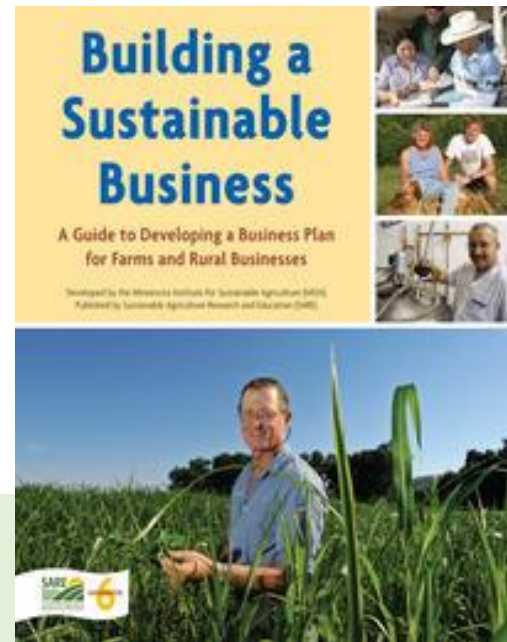
Small business is the greatest economic driver in America, where **60 to 80 percent of all new jobs** are created by small businesses. A majority of Americans – over 57 percent of the workforce – is employed by the 28 million small businesses in the U.S.^{xiii}

Because small business is vital to America's economy, government at federal, state and municipal levels provides many incentives and support programs to encourage and incentivize small business.

Now that you are inspired to start your cover crop related business, this chapter provides resources to help you create a business plan and find financial assistance.

First things first, you will need to **develop a business plan**. Whether you are just starting up or merely improving or expanding an existing operation, you will need to sketch out a plan that will ultimately be your roadmap to share with potential partners, lenders or investors.

Luckily, the Minnesota Institute for Sustainable Agriculture (MISA) and USDA's Sustainable Agriculture Research and Education (SARE) branch created an excellent tool to walk you through each step, "*Building a Sustainable Business: A Guide to Developing a Business Plan for Farms and Rural Businesses*." The guide is divided into five chapters, covering marketing, operations, human resources and finance with each step:



1. Identify Values

What's important to you?

2. Review History and Take Stock of Your Current Situation

What have you got?

3. Clarify Your Vision, Develop a Mission Statement and Identify Goals

Where do you want to go?

4. Strategic Planning and Evaluation

What routes can you take to get where you want to go?

5. Present, Implement and Monitor Your Business Plan

Which route will you take and how will you check your progress along the way?

SHOW ME THE MONEY – GRANTS AND LOANS

With your new business plan in hand, you may need financial support to help get you started. In addition to your local bank or credit union, check out the myriad of government programs designed to help small and starting businesses.

The **United States Department of Agriculture's (USDA) Rural Development** department is "committed to helping improve the economy and quality of life in rural America." USDA Rural Development is best known for supporting public services and facilities in rural areas such as water and sewer systems, housing, health clinics, electric, telephone and emergency services. They also promote economic development by providing technical assistance, grants and loans to agricultural producers and cooperatives to start and improve their operations.

The **Rural Business Development Program** includes:

The **Intermediary Relending Program (IRP)** supports sustainable economic development by retaining and creating jobs in disadvantaged and remote communities. Through IRP, USDA lends money to economic development intermediaries such as non profits and public entities who pass through the funds to rural businesses and entrepreneurs who otherwise would be unable to qualify for other financing.

The **Rural Microentrepreneur Assistance Program (RMAP)** provides loans and grants to Microenterprise Development Organizations (MDOs) to help businesses with 10 or fewer employees. MDOs then set up revolving loan funds to pass through micro loans (\$5000 to \$50,000) as well as provide training and technical assistance to eligible small businesses.

Visit your local USDA Rural Development [office](#) for hands on help and to apply for any of these programs.

<http://offices.sc.egov.usda.gov/locator/app?state=us&agency=rd>

For Fiscal Year 2014, \$18.9 million in IRP loans are available, and \$25.4 million in RMAP loans and grants are available.

Value-Added Producer Grants (VAPG) assist agricultural producers enter into *value-added activities related to the processing and/or marketing of bio-based value-added products* with the intention of generating new products, creating and expanding marketing opportunities and increasing producer income. Grants are awarded on a competitive basis, with priority given to beginning or socially-disadvantaged farmers and ranchers, smaller family farms and cooperatives. Grants can be used for projects such as:

- economic planning activities, feasibility studies, business plans
- working capital expenses, processing costs, marketing and advertising, inventory and salary
- cannot be used to purchase property, equipment or facility construction

Small Socially-Disadvantaged Producer Grants (SSDPG) provide technical assistance to small, socially-disadvantaged agricultural producers through eligible cooperatives.

Rural Cooperative Development Grants (RCDG) are intended to improve the economic condition of rural areas by assisting non profits and higher education institutions in the startup, expansion or improvement of rural cooperatives and other business entities.

Business and Industry Guaranteed Loans (B&I) help new and existing rural businesses by USDA guaranteeing up to 85 percent of the loan through local, private lenders, lowering the lender's risk and allowing for more favorable terms for the recipient. The program is open to cooperatives, non profits, partnerships, Indian tribes and individuals for loans up to \$10 million. Loans can be used for projects such as:

- business conversion, expansion, repair, modernization or development
- purchasing land, buildings or facilities
- purchasing equipment, machinery, supplies or inventory



[Prairieland Foods](#) is a locally-owned and operated business in Hallam, Nebraska. With the support of a B&I Guaranteed Loan for \$650,000, Prairieland purchased a new dairy processing facility to meet the growing demand for local, source-verified supply of milk and, eventually, a diverse array of dairy products.

The [**U.S. Small Business Administration**](#) is an independent agency of the federal government established to help Americans start, build and grow businesses through their extensive network of field offices and partnerships with public and private organizations. SBA generally does not make direct loans to small businesses but assists those in need of financing through loan guarantees and partnerships with non-profit lenders. SBA's Loan Programs include:

[**General Small Business Loans**](#) provide help for businesses that meet eligibility requirements such as demonstrating adequate need, investing personal assets prior to seeking financial assistance and not being delinquent on debts to the federal government. Small businesses work directly with their local banks and Community Advantage lenders to borrow funds. The loans are partially guaranteed by SBA, allowing the lender and the Agency to share the risk.

The [**Microloan Program**](#) provides funds through designated intermediary lenders for loans up to \$50,000 to help small businesses start up or expand. Microloans can be used for working capital, inventory, supplies, machinery or equipment. Proceeds from an SBA microloan may not be used to pay existing debt or to purchase real estate.

The [**Intermediary Lending Pilot Program**](#) also provides loans through community based entities. Because this is a pilot program, there are currently only 36 lenders throughout the nation.

[**Real Estate and Equipment loans**](#) are available to for-profit companies with net worth less than \$15 million with a feasible business plan, a demonstrated need and the ability to repay the loan on time from the projected operating cash flow of the business.

The [**U.S. Department of Commerce's Economic Development Administration \(EDA\)**](#) strategically invests in development efforts that foster job creation in economically distressed areas of the United States. EDA efforts such as technical assistance, post-disaster recovery assistance and strategic planning are built on two key economic drivers: innovation and regional collaboration. Visit your local EDA regional office for more information.

The [**National Rural Economic Developers Association**](#) is dedicated to the advancement of rural economic development through providing education and networking opportunities.

RESOURCES

Managing Cover Crops Profitably (SARE) explores how and why cover crops work, and provides all the information needed to build cover crops into any farming operation.

<http://www.sare.org/Learning-Center/Books/Managing-Cover-Crops-Profitably-3rd-Edition>

Building Soils for Better Crops (SARE) is a one-of-a-kind, practical guide to ecological soil management, now expanded and in full color. It provides step-by-step information on soil-improving practices as well as in-depth background—from what soil is to the importance of organic matter.

<http://www.sare.org/Learning-Center/Books/Building-Soils-for-Better-Crops-3rd-Edition>

Building a Sustainable Business (SARE) brings the business planning process alive to help today's alternative and sustainable agriculture entrepreneurs transform farm-grown inspiration into profitable enterprises.

<http://www.sare.org/Learning-Center/Books/Building-a-Sustainable-Business>

SBA's Small Business Resource Guide to starting and expanding your business, with information on counseling, training, capital, contracting, disaster assistance, business advocacy, local directories and more.

http://www.sba.gov/sites/default/files/files/resourceguide_national.pdf

WEBSITES

Midwest Cover Crops Council

<http://www.mccc.msu.edu/>

USDA Sustainable Agriculture Research and Education Cover Crops topic room

<http://www.sare.org/Learning-Center/Topic-Rooms/Cover-Crops>

Practical Farmers of Iowa Cover Crops page

<http://practicalfarmers.org/member-priorities/cover-crops/>

ENDNOTES

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