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Publication Sponsors

Beginning Farmer and Rancher Development Program of the National Institute of Food and Agriculture

Publication Partners

The Northeast Beginning Farmer Project hosted by the Cornell Small Farms Program at Cornell University The Greenhorns

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Serve Your Country Food

There's currently a movement underfoot! A recent groundswell of young farmers are fostering an agricultural movement with farmers who have worked the land for generations. With this underway, our government is recognizing the need for more young farmers and implementing programs to encourage them, while organizations are offering support networks, training opportunities, and resources to help them get started. The Greenhorns and the Northeast Beginning Farmers Project are two examples of such organizations and have joined together to create the Field Journal. This project was supported by the Beginning Farmer and Rancher Development Program of the National Institute of Food and Agriculture, USDA, Grant # 2009-49400-05878.

Project Partners

The Greenhorns is a non-profit organization whose mission is to recruit, support, and promote young and beginning farmers in America. "The Greenhorns" is also the title of their documentary film, which explores the state of the young farmer in America today. They put on events and produce new media and resources for and about young farmers. Projects include a blog, weekly radio show, wiki, guidebook, young farmer mixers, and educational outreach and research in K-12 classrooms. Please visit the website to join the mailing list and keep your ear to the ground:

www.thegreenhorns.net

The Northeast Beginning Farmer Project

provides support for new and diversifying farmers and is hosted by the Cornell Small Farms Program at Cornell University, a land-grant institution. Their mission is to foster the sustainability of diverse, thriving small farms that contribute to food security, healthy rural communities, and the environment. They do this by encouraging small farms-focused research and extension programs and fostering collaboration in support of small farms. They have produced a "Guide to Farming in New York State," a "Voice of Experience" video series, and an online resource center. Learn, plan, and connect on the website:

www.nebeginningfarmers.org







Welcome to the Field Guide!

Farmers in the United States are collectively entering a stage of mass farm turnover. Over 40% of farmers are over 55 years in age, and while these individuals are still hale, hearty, and enthusiastically growing the food for the nation, they are seeking to develop a new generation of young farmers ready, willing, and able to take over their successful businesses, grow new farms and new technologies, and bring agriculture into the 21st century.

Agricultural education in America has developed a stigma – parents, teachers, and community members often see agricultural careers like farming as poor options for today's youth. However the agriculture community NEEDS fresh young blood, and this career field offers an incredibly rewarding financial and personal path for youth with a passion for stewardship, environmentalism, global nutrition, technological innovation, and the great outdoors. A farmer is at the root of every calorie you consume. A farmer grows the crops, cares for the animals, and promotes the responsible use of the land under his or her stewardship. These individuals are entrepreneurs, innovators, idealists, and community leaders. Farming is a valuable occupation, and a viable career field with incredible opportunities for growth and advancement. As a career, it offers the opportunity to work your way from intern to owner, apprentice to master, small business entrepreneur to large scale industrial agricultural conglomerate. Careers are available for individuals at any level of mastery with a wide range of interests – a quick look over the agricultural career inventory sheets given to FFA students shows no fewer than 22 different agricultural industry topics!

Numerous research studies have shown that the best way to foster a love and respect for the environment in our children is to help them get their hands dirty. This love for growing and the outdoors our communities have fostered has led to a renewed interest in all aspects of agriculture, and we look to a new generation of youth to refresh the agricultural industry with their enthusiasm, hard work, and fresh ideas.

The best way to encourage an aspiring young farmer, whether it be a friend, neighbor, child, or even yourself is to help them get their hands dirty! Hands-on experiences, whether it be through job shadowing a farmer, working an on-farm job, developing an agriculture student project, or even starting an agricultural business are the most fun, most challenging, and most rewarding method of exploring this exciting career field. Potential mentors are everywhere – the curious aspiring farmer only need ask around and a bevy of welcoming farmers, extension consultants, agricultural educators, FFA leaders, 4H instructors, and fellow farming enthusiasts will be offering educational resources, opportunities to get involved in clubs, shows, and fairs, and tours of their favorite farms and gardens.

We welcome you to our Young Farmer Fieldbook, and hope it will be a helpful guide you as you consider a future in farming. Ask yourself questions as you read this book, and contact us with your comments and ideas. Our job is to help YOU succeed in farming, and we can't wait to have you join us 'in the field'.

Cornell University Department of Horticulture & Cornell University Teacher Education



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Getting Started

Why Farm Now?

Because your country needs you! We hope you will use this book as a first step on your path. The best way to use this book is to make notes, jot down questions you need to answer, and scan the **resource section** for books and online sites where you can find additional information. You will also find a list of farmers and mentors who can help. The journey to a successful agricultural career starts with a lot of investigation, research, and most of all, getting your hands dirty. Let's get started!

Who Is This For?

The resources, practices and strategies outlined in this **Field Journal** is for anyone involved with the food system – which is anyone who eats food! It's focus is to encourage youth of many ages to consider farming as a career, in particular youth in middle and high school. This can happen inside a school classroom, at a 4H club meeting, or after school in your own kitchen – inspiration knows no bounds.



How To Use

This isn't just any ordinary journal, this is **The Field Journal for Beginning Farmers**, your ticket to becoming involved in the JOB of farming, working the land and serving food to your country. We hope that the stories and ideas in the **Field Journal** will inspire you to take on the call to serve your country food and consider farming as a patriotic career path. Spread the word, get inspired and take action:

Inspiration - Use this as inspiration to get students, your family or people in your life excited about farming, even if you can't make a full time commitment!

Resource - Use this as the starting point for putting together your own resources on how to intern and start your own farm or garden. The final chapter is a summary of resources culled from farmers, educators and experts in the agriculture movement, so make sure to check it out! Share more through the National Young Farmer's Coalition network and NE Beginning Farmers Project!

Action - Take action and experiment with growing food, start a pop-up restaurant, a roof-top garden, a homesteading operation or work for a farm in your community.

THIS LAND IS OUR LAND





Stories from the Field

Farming is a valuable part of our economy and daily life, but we don't often hear stories from farmers working the soil and growing our food, especially those new to the field. In the last few years, these new farmers have stepped up to answer the call to farm—here's why:

Evan and Rachel Gregoire at Boondockers Farm in Portland, OR:

"Growing the community is so important, and we want to empower other people to grow their own food, and understand what we're doing. That's the most important piece, it's the education, and the empowerment."

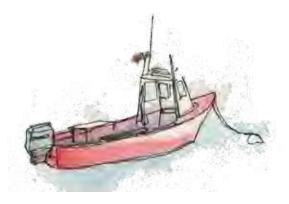


Matt and Jen Schwab at Inspiration Plantation in Ridgefield, WA:

"We got into farming after inheriting the property in 2004 and looking at ways to generate an income from the land. Around that same time Matt read "Omnivore's Dilemma" by Michael Pollan, followed by books written by; Joel Salatin, Wendell Berry, Masanobu Fukuoka, and Bill Mollison. Over the next few years we attempted to grow nursery stock on the farm but because we didn't live on the farm and we both had full time jobs we weren't very successful. In 2008 we decided to sell our house, move to the farm and create a new life for ourselves."

Dana Gentile at Darlin' Doe Farm in Saugerties, NY:

"I am a meat goat farmer. My partner Abbi and I started our farm, Darlin' Doe Farm, in October 2009. We are currently renting land in Saugerties, NY for our small herd of meat goats. We believe in a natural and holistic approach to raising healthy livestock. I enjoy working with animals on a daily basis. I like growing my own meat and becoming a local source for naturally raised goat meat. Being able to provide my family, friends and customers with healthy, high quality meat is why I became a farmer."



Brendan Smith at Thimble Island Oyster Farm in the Long Island Sound:

"I've been working the sea on-and-off my whole life. At 15 years old I quit high school to work the lobster boats out of Lynn, MA; later I fished cod and crab boats on the Bering Sea. As overfishing decimated the cod stocks, I headed back to my birthplace of Newfoundland to try my hand as a fish farmer growing halibut and salmon. But all the while as I worked these jobs, I witnessed first-hand how our oceans are imperiled from the twin threats of commercial fishing and climate change. I came to realize that I needed to change my relationship with the sea. So after some late nights reading up on how to "green the seas", I decided to become an oysterman."

Pawel Buda and Kelly Firkins of Delabu Farm, Minnesota:

"I discovered my love for farming in Montana. After graduation from Clemson University in Biosystems Engineering, I decided I didn't want to be an engineer; I wanted to create solutions by developing local food systems."

"Our vision is to be a model for how to revive elements of that old kind of agriculture alongside the kind of agriculture that has sustained our communities in the last several decades."



Jacob and Courtney Cowgill of Prairie Heritage Farm, Montana:

"We both left Central Montana as young adults for school and careers but came back as soon as we possibly could. We wanted to find a way to make a life in Central Montana but we also wanted to give back to the communities that raised us and to be part of sustaining and reinvigorating the culture and economy of rural Montana. So, we started a farm. Our farm is in a lot of ways the kind of farm that existed in this region 50-100 years ago: diversified, small-scale and locally based. Our vision is to be a model for how to revive elements of that old kind of agriculture alongside the kind of agriculture that has sustained our communities in the last several decades."



Cara Fraver and Luke Deikis at Quincy Farm in Schaghticoke, NY

"Running an organic farm feels like a way to affect change with the daily motions of my life. We will work to improve the land where we will live and make it more fertile and healthy every year. Farming provides me with super-high quality food and the opportunity to talk to others about eating and cooking. In addition to the idea of connecting with people over such an intimate and important thing as food, I am constantly tested by the day-to-day challenges farming provides. It tests my skills of observation, mechanics, human interaction, on-the fly decision-making and even my math skills."

Farming Futures

Cowboys and pioneers have always been American icons, but it is the farmer who planted the seeds of American prosperity by feeding our growing country and being a careful steward of our land. The farmer is a patriot: hard-working, independent, productive, community-spirited, and self-made. Through the centuries our American farm economy has stayed strong through good and troubled times, pursued innovation and improvement, and continued to find new and creative ways to grow food efficiently and responsibly.

But the call to farm is more urgent now than ever. While only 1% of the population is involved in farming, our US agriculture is collectively entering an era of mass farm turnover. Over 40% of farmers are now over 55 years in age. While these individuals are still hale, hearty, and enthusiastically growing the food for the nation, they need a new generation of young farmers ready, willing, and able to take over their successful businesses and continue to carry agriculture into the 21st century.

The good news is that the number of young farmers (those under the age of 35) has doubled since 2002. These young farmers come from all sorts of backgrounds, and start farming for many reasons. The **USDA** (**United States Department of Agriculture**) is supporting the young farmer movement by inviting more new farmers to take on the duty of serving our country food and by providing new educational programs and resources aimed at helping young people learn more about this vital and exciting career.

NEW FARMERS WANTED

To farm is to partake in a new civil revolution. Any individual who chooses to answer the "call to farms" can start to farm For many farmers, the very act of farming goes hand in hand with reviving their local economies and growing stronger communities.

The call to farm comes from the land, the country, the economy, the environment, the health system, and the **food system**, as well as our families, friends, new immigrants and so many others. All are urging and supporting you to join in forging a new farm destiny. It's the responsibility of each **citizen farmer** to take a greater part in forging a new food system and leading your community into the future. How will you respond?





A Brief American Farm History

Farming is an ancient practice. As the United States population has grown and changed, the demand for food has remained. Take a look at this timeline that highlights America's farming heritage.

Approximately 4,000 years ago, natives of North and South America begin practicing farming. These indigenous peoples domesticate, breed and cultivate a large array of plant species including corn, potatoes, squash, tomatoes, beans, and sunflowers. These species now constitute 50–60% of all crops in cultivation worldwide.

1492 Columbus arrives in the Americas. The European explorer discovers the continent while in search of new trade routes with Asia and introduces a new era of inter-continental trade and travel.

1783 The American Revolution frees the new nation's economy from the restrictions of English control and taxation. Rivers and streams provide many sites for constructing mills and infrastructure necessary for early industrialization. A vast supply of natural resources provides opportunities for trade.

17th century Pilgrims, Puritans and Quakers fleeing religious persecution in Europe begin settling on the east coast. They bring with them plowshares, guns and domesticated animals like cows and pigs, and learn from Native Americans how to farm on the new continent. The European colonists initially farm crops like corn, wheat, rye, oats, sugarcane, rice, cotton and tobacco that are sent back to Europe.



1848 Gold is found in the hills of California, and 300,000 people rush west to find wealth in the first year. This rush prompts the extension of railroads and launching of steamships throughout the country, and results in the establishment of hundreds of villages and towns.

1803 The Louisiana Purchase adds 828,000 square miles to the territory of the United States of America.

1811-1869 Fur trappers and traders establish foot-paths towards the western coast, leading to the development of the Oregon Trail and enabling large-scale western migration. Western expansion spreads over 400,000 new settlers, ranchers, farmers, miners and businessmen from the Mississippi River to the West Coast.

1862 The passage of the Morrill Land Grant College Act calls for the establishment of "land grant universities" to teach agriculture and mechanic arts. That same year, the Homestead Act is passed which gives 40 acres of land to anyone willing and able to farm it successfully.

1914 The Smith-Lever Act funds the creation of the Cooperative Extension Service, run through the land grant universities. Cooperative Extension helps answer agricultural questions, conducts research, and introduces new agricultural technologies and practices.



1914-1945 During both World Wars, the US government promotes civilian "victory gardens." These gardens provide nearly 40% of domestic produce, allowing commercially grown crops to be made available for military use.

1933 As part of the New Deal, President Roosevelt promotes the Farm Security Act and the Agricultural Adjustment Administration because he believes there can be no true prosperity in the country without successful farming.

1934-1936 The Dust Bowl, a period of severe ecological and agricultural damage in the central USA caused by severe drought, wind erosion, farming on marginal lands, and decades of farming without the benefit of crop rotation, fallow fields, and cover crops to promote topsoil stability. Central states lose thousands in population as farmers abandon failing farmland or lose farms to foreclosure.

1962Cesar Chavez, American farm worker, labor leader, and civil right activists, founds the National Farm Workers Association (which later became United Farm Workers).

1980s Following a decade of cheap credit when many farmers took on debt to expand farm operations and meet global demand, skyrocketing interest rates and plummeting commodity prices put many farmers out of business because they couldn't repay their loans. This period of mass farm foreclosures known as the Farm Crisis is very similar to the more recent 2007 Housing Crisis when many families lost their homes.

2000 The USDA implemented the National Organic Program to define organic growing standards (such as methods that do not utilize synthetic pesticides and chemical fertilizers), enforce organic regulations, and certify growers utilizing these practices.

1997 The Flavr Savr tomato was the first genetically modified food to be approved by the Food and Drug Administration for sale in the United States. Scientists used genetic engineering techniques to introduce DNA into the tomato plant to make it more resistant to rotting and thus have a longer shelf life.

2007 The National Farm to School Network was founded to provide assistance to local programs in all 50 states working to bring farm-fresh food directly to school cafeterias.

2008 The US Farm Bill establishes the Beginning Farmer and Rancher Development Program to create education, resources and support for new farmers. US Secretary of Agriculture Tom Vilsack announces the national need for 100,000 new farmers in the next 5 years.



🛂 A Farm Career

No farmer will tell you that their job is easy, but they will tell you how rewarding it can be. Hardships come in many forms, particularly getting access to land and to financing. Yet, the rewards of farming are many; self-reliance and self-development, and the chance to invent and figure out new, creative ways to work. It also means being your own boss.

Farming is a sound career investment. Everyone needs to eat! People are working in the local food system all around the urban, suburban and rural landscape. Farmers have access to the best food and develop deep community connections. Here are some examples of the many exciting farm careers out there:

Farmacy Herbs

Mary Blue is the founder of Farmacy Herbs, an urban farm and holistic health and education center in Providence, Rhode Island. On a quarter acre of land, Mary grows vegetables and medicinal herbs that are crafted into a variety of products including teas, tinctures, salves, creams, and syrups.

Inspiration Plantation

Matt and Jen Schwab own and operate Inspiration Plantation in Ridgefield, WA. Inspiration Plantation is a 24 acre diversified family farm that specializes in pasture raised animals. They raise chickens (for meat and eggs), turkeys, lambs and pigs, with plans to raise ducks, geese and squab.

Conuco Farm

Hector Tejada started Conuco Farm and independent business, an 11-acre farm in upstate New York. Mr. Tejada has 82 CSA shares in Brooklyn, he attends the market on 175th St. every Saturday, and he has just opened a spot at the Union Square Market in Manhattan. He has many long rows of greens, okra, eggplant, tomatoes, peas, melon, and squash. He grows any delicious vegetable you can think of.







Farmer Advice

If you don't know a thing about farming, don't count yourself out! Many new farmers start with zero experience and learn along the way. All these farmers emphasize the importance of learning new things every day, whether it's through getting their hands dirty as an apprentice, finding a farmer mentor, reading books, taking classes, visiting other farms and businesses, or learning on their own farm through trial and error.

What do all many new farmers share in common? They often started their farming careers with an apprenticeship, or a job working on someone else's farm. Hands-on learning is the best way to gain the experience you will need to farm on your own someday.

Below is advice from several new farmers to those who want to farm. Each of these young farmers has encountered the challenges of a farming career and stuck with it. By learning needed skills, some easy and some hard, and making connections with other farmers and your local community, you can figure out a way to start farming, too!.

Rachel Gregoire at Boondockers Farm in Portland, OR:

"Diversify and find a niche. If you go into the game with something unique, there are so many species that are in need of conservation, you can start there... Start with biodiversity, something unique, something special, and market that and make it work."





Anne Eschenroeder at Phillies Bridge Farm Project in Gardiner, NY:

"Just do it. You just have to get involved and try. Take classes. Read books. Go online."

Caitlin Arnold and Holly Mills at Sidewalk End's Farm in Portland, OR:

"Work for and learn as much as you can from other people. Join apprenticeships and internships for a few years to make sure you actually like it. Educate yourself about the realities of farming, national and local farm policy, and what people in your area want and need. Learn where you live and farm and try to figure out what will make the most sense for where you are. Consider that unless you are already wealthy, you will certainly be real poor for at least a few years. Get okay with being poor. Save your money. Figure that you might have to start, quit, start over, try something different before you really get your

Pawel Buda and Kelly Firkins at Delabu Farm in South Central MN:

"Go to as many farm related activities as you can and if possible – volunteer. There are so many people that you'll meet and work with that have great information and ideas!"





Notes

2 LEARNING TO FARM





21 Move to a New Beat

Young people can serve our country food! You can create new relationships between the country and the city and improve access to good food in your community. You can collaborate with all kinds of people: farmers, chefs, families, friends in different towns to launch a CSA or food processing kitchens, make jam, collect honey, age cheese, raise animals, harvest fruit, sow grain, and bake bread. Your farm business can bring money, better food and more jobs to your community. You can be an active member of a growing young farmer community across the country.

Being a farmer is a great career path with many perks! You can work outside everyday, enjoy the outdoor world, improve your land, and eat the freshest foods. Living on the land, producing good food for people who you love and supporting your family all at the same time – what could be better than that?

Getting Started

Farming requires on-going education, careful planning, personal strength, and patience. Developing your farm business can take time, but there are many steps you can take today to move towards becoming a great farmer

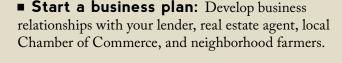
■ **Get strong!** Start being more active every day: lift weights, stretch, walk.

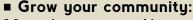
■ Manage your money: Start managing your

money save money, pay off debt, set a budget, develop accounting skills and basic business spreadsheets.

Get schooled:

Identify your strengths and weaknesses, attend classes on agriculture-related topics, participate in farmer training and field days, visit farms of all sizes and types, volunteer, do a work study, job shadow a farmer, get advice from farmer mentors.





Meet other aspiring and beginning farmers through resources suggested here and existing farm networks in your town, improve relationships with landowning friends and family, get involved in community events, develop farmer friendships, get involved in your local 4H, FFA, Grange, Farm Bureau, or County Fair.

■ **Get working:** Do internships and apprenticeships, get a farm job, work at a farmer's market. Accustom yourself to service, learn to love a hard job well done. Apply yourself fully to the task at hand. Feel good for what you can produce with your applied energy.



Ways to Participate in the Farming Movement Today

Take a Class

You can learn more about what it takes to bring the food you eat from the farm to your table through low cost and free classes are available through your local extension office, non-profit agricultural organizations, schools, and clubs. Look for opportunities to learn more about composting, canning, gardening, small business development, animals, solar energy, and more. You can also check your community pages for calendars of events, and sign up for agricultural topic newsletters and blogs to learn more about what opportunities are available near you.

Support a Farm Near You

Purchasing from local farms can be a great way to learn more about what types of farms, crops, and animals are common in your region, and can be a wonderful method for getting to know farmers in your

community. Visit roadside stands, farmers markets, CSA's, and CO-OPS to sample local products, purchase your groceries, and soak up knowledge.

Share What You Know

Agriculture classes in schools, 4H, FFA, and other youth agricultural clubs are always looking for volunteers. Help mentor youth as they explore agricultural topics, and enjoy the benefits of learning from the youth. Offer to help out with community classes and events where you have the benefit of a little expertise, whether it's in cooking, composting, or raising rabbits. Sharing what you know with a humble spirit will open your opportunities to learn more from others.

Visit Farmer's Markets and Support Local Food

Many neighborhoods have farmers markets that provide a marketplace for locally produced goods. Farmer's markets are a great place to develop relationships with local farms, ask questions, and get to know what's going on in the region. Supporting farmers markets puts money directly into the hands of farmers. To show support the farmers in your community, you can submit positive feedback and reviews online and in letters to your local newspaper, and being to pay attention to the new businesses in your town—who they are and what they do.









Start a Garden or Small Scale Farm

Begin your farm journey with a first step into the world of gardening and small-scale farming. Whether it's a garden on a small patch of community land, an urban roof garden, or window box filled with edible plants, there are many ways to make small scale agriculture productive and satisfying.

If you don't have access to land, don't need to feel discouraged. Gardens and mini-farms are popping up in cities all over the world. All you need is a container, some soil, and a seed and you are on your way to growing your own crops. Urban farmers have even embraced keeping city chickens and urban bees. Some farms have gone mobile, and are planted in the back of trucks, while others are vertical and attached to building walls! By getting your hands dirty on any scale, you are learning more about farming, and learning to appreciate the complexities of nurturing growing things into a product you can harvest.

Support a Community Garden

You probably have a local community garden in your area, and if there isn't - start one! The best way to get used to growing and caring for plants and animals is to learn to do it with community members and friends. In the process of experimenting, you'll gain a better understanding of how agriculture works and gather ideas for your future farm. A community garden can also be a great place to launch a small farming business.. Use the garden as a platform for bringing people together, growing food and cultivating a community.

Celebrate Local Farmers at the County Fair

Many communities host a county fair each fall. Get involved in the fair by volunteering to set up competition events, visiting the barns, and chatting up the farmers showcasing their hard-won ribbons on fantastic crops and healthy young animals. Submit your own vegetables and animals to the competition and see how you stack up against your neighbors. Engage in some healthy competitive bragging and enthusiastically embrace the joys of the community harvest.





Stories from the Field

The Ladies of the Phillies **Bridge Farm Project**

It doesn't take long to notice that food is the passion at Phillies Bridge Farm Project in Gardiner, New York. Boasting an impressive 65 acres, the farm has been protected through a land trust since 2002. Phillies Bridge Farm Project is more than your average farm: education is an important part of their mission. Amie Baracks, the 2010 Education Director, oversees Farm Camp, school visits, Growing Together, and adult workshops that focus on sustainable agriculture. Phillies Bridge is a not-for-profit organization, and, while the Board of Directors helps with fundraising and fiscal

management, while the unique farm operations and rests in the hands of six young dynamic women who know food and want to share their knowledge with anyone keen on learning.

One of these young women is farm manager Anne Eschenroeder. Anne is not new

to farming. Between earning a certificate in Ecological Horticulture from the University of California Santa Cruz and an undergraduate degree in Environmental Studies and Anthropology, she has learned a thing or two about dirt. She manages the farm's 220 member CSA, delivers to seven different restaurants, and runs the six acres of land that make it all possible.

The farm was abuzz when I pulled into the grassy parking lot: farm-camp children were playing with the hose and the smell of zucchini bread was in the air. Education Director Amie Baracks greeted

by Ashley Morford

me with a warm smile and said "Let's eat!" While enjoying the food made by the women, I asked what the most difficult part of being a young farmer was. Each agreed that finding secure land and guidance is hard. Amie said, "It is just hard to know what to do.," noting that it is really difficult for a young farmer to find a work/life balance. She has farmer friends who work so hard on the farm in July that they end hurting themselves.

The young women are hopeful about the future for

young farmers. They advise young farmers to "just do it" while laughing at the corporate culture they took the motto from. To be a success in farming, they said, young farmers just have to get involved and try things out.

After lunch, each farmer quickly darted off to individual tasks and I join Amie and another young farmer named Mary-Kate for herbal tea and zucchini bread with the kids. The children attending Farm Camp told me the name

of the herbs in the tea, yelling "Lemon Balm!" and "Chamomile!" and "FENNEL!" in unison.

After a lovely visit and tasty farm-cook meal, I walked to the car and heard Amie lead the kids in a thankyou song: "...Blessings on the fruit, and Blessings for the trees". Even in a short visit to the teaching farm, I learned a lot about what the motivation, hard work, and excitement of small group of young farmers could do--- from educating youth about the earth and food to creating community and space to enjoy and celebrate it together.



Getting a Farm Education

If you are serious about farming and discovering whether farming is the career for you, handson experience is the best teacher. Hands on experience on farms involves low-paid work but has high educational value in which a new farmer learns from an experienced farmer. Be prepared to work very hard at all phases of your farm career, but particularly in the beginning. There is a lot of hard work and a hierarchy of skilled tasks in farming, and you'll have to test yourself by doing the lower-rung duties before you move on to higher level tasks. You'll get to be outside most of the time and even repetitive farm tasks (like weeding and shoveling manure) can be peaceful and interesting, giving you time to dream about your own farm.

There are many ways to gain a farm education and experience; here are some of the most common:

Job-Shadow

A job shadow is a short term opportunity to follow a farmer around through their daily tasks and observe their day to day occupations. This generally does not involve a great deal of handson work and is a good first step in exploring a farm career.

Apprenticeship

A farm job where you are unpaid or paid a low rate is typical because you are usually housed and fed wonderful fresh food, and are learning on the job. A good apprenticeship opportunity will explain up-front how much of your time will be spent learning versus actively working. Farmers act as mentors, and teach about why each task is important, when it should be done, and go into detail about the finer aspects of the farm as a business.

International **Apprenticeships**

World-Wide Opportunities on Organic Farms (WWOOF) offers a way to travel world-wide and get hands-on farming experience by working and staying on organic farms, You can WWOOF anywhere in the world, work for free, eat for free, stay for free, meet fantastic organic farmers, and help them with their operations. Harvesting olives in Italy sounds glamorous – and it is – just remember that hard physical work for 6+ hours a day in the sunshine takes a bit of getting used to, no matter how scenic the views. http:// www.wwoof.org/

Internships & Work-Study **Experiences**

These are similar to apprenticeships, but considered a bit higher level. They are often unpaid or require the participant to pay a fee in exchange for the privilege of

working/learning. Each day should have a very high level of learning, and you might be able to arrange school credit in exchange for the experience.

Specialty Internships

From dairy/cheese making to herbal medicine, bio-dynamics to greenhouse production, and holistic management and intensive grazing--if you look for it, you'll find it. Many times the best way to find out about these opportunities is through growers associations, sustainable agriculture certification bodies, and specialty farming groups. Take a look at the RESOURCES at the end of the book.



Farm Jobs

There are jobs on farms offered at a standard wage. Farm jobs usually require some experience, and do not offer the level of personal mentorship and philosophical discussion of the why's and how-to's of farming.

Mentorships

Finding an individual trusted mentor is an important step for any young farmers. An experienced farmer who lives close by will be able to easily answer climate, equipment, pest and liability questions that arise. The advice of a trusted agricultural friend is incredibly important. Older farmers are usually glad to pass on their wisdom and are mostly quite generous once they establish that you are worthy of their time.

Farm Schools, Farm Incubators, & Certificate Programs

There are programs you can join where you will be taught to farm by experienced teachers. Agricultural education programs offer skills assessments and provide training to support individuals as they develop farming skills and plans. The programs usually involve a set curriculum of standard classes, and requires regular attendance. Agricultural education programs exist in most high schools and state colleges. Programs are also offered through Cooperative Extension, non-profit beginning farmer service providers, Farm Bureau, and community small business incubators.

Several farming programs are also available that offer fully paid or low cost educational opportunities; applicants are selected on a competitive basis. Farm programs may offer business incubators to encourage small farm business development on site. See the appendix for examples of several programs offered in the Northeastern United States.

University-Based Programs

Many universities across the U.S and Canada offer agricultural programs and can be great ways to integrate a love of people, place, science and the environment.



"The dream you now have of a farming career can grow into a successful, familysupporting, communitybuilding, life-sustaining business..." Education is a life-long process. You can move from a farm dreamer to a farm owner, a beginner to an expert, a youth to a wise sage. One of the greatest rewards a farm life offers is the freedom to wake each day and shape the future of your little plot of land. With your careful stewardship and guidance, the dream you now have of a farming career can grow into a successful, family-supporting, community-building, life-sustaining business for a succession of future farmers to enjoy. The agriculture community welcomes you into our life long process of learning together to feed the world.



2.4 Learning in the Field

The first step is figuring out what you want to do. What do you want to farm? Are you an animal person, a vegetable person, a flower or herb person? Do you like interacting with the people who buy the food? Are you interested inner-city nutrition or high cuisine? Do you like food-processing/valueadded products? Do you have the desire for dairy? The strength for fieldwork? The patience for the bureaucracies of commercial kitchens? The personality for farmers markets? There is also the option of starting other agricultural businesses.

One big key to being an on-farm learner is to understand the task at hand. Try not to ask too many questions of the farmer all at once, but observe carefully and thoughtfully. You'll be surprised what you can discern when you open your eyes wide and pay attention to what is happening. Learn the details of the system as you work—as you do daily chores, make a silent inventory what you would do to make work flow smoother, or imagine reasons why the farmer you work for came up with this particular system. Check with the farmer to get their feedback and think about how you would apply what you've learned to your own operation.

The experienced farmer will value an observant person and reward a good question with insight into his/her farm operation. Watch what your teacher is doing, how they are moving, where they are spending time, and what they are pausing to observe. Work smart, keep a journal, and read every book you can find on your chosen field. Don't be quick to judge, sometimes the oddest steps turn out to be the most profitable aspects of a farm's success, and the oldest, most traditional techniques the most tested.

In finding a fulfilling apprenticeship, be sure to:

- Consider the type of agriculture you wish to **experience**. Big or small-scale? conventional, organic, biodynamic, permaculture, semi-urban? Solely fruit, vegetables, grain, or animals, or a combo?
- Visit a potential host farm. Talk to the farmers, workers, past interns, and look at the fields and the infrastructure. Get a feel for the dynamics and the routine if one exists.
- Look at amount and type of labor required and other expectations. How long are typical work days? What peak times will

you be expected to contribute more? Clarify start and end dates, weekend responsibilities, and what would happen in case of illness/ injury that would prevent normal work tasks.

- Look for a well-rounded position. Get exposure to a range of management skills.
- Be clear on compensation. You and the farmer should understand all terms of the agreement before any employment. Is there a fee or a stipend? Housing or food included? How many hours of work are expected each week?

There are tons of resources and organizations online and in your state that can help match you up with the right apprenticeship. Spend some time looking through the RESOURCES at the end of the Field Journal.





Notes

3 STARTING YOUR FARM





31 Stories from the Field

Mary Ellen and Austin Chadd started a farm called Green Spark Farm in 2009 in South Portland, Maine. There they grow vegetables for sale both at the local Farmer's Market and online.

How did you get started?

Austin and I both studied Agriculture at Evergreen in Washington. Before College Austin had worked on his family farm. Right after graduation we both ended up getting jobs at nearby Kirsop Farm and worked there for a summer together. It was in Western Washington in Olympia. And while we were working there, we had a few conversations with the farmer about starting a farm, what he would differently, which were the most valuable crops and why...

We're lucky because we kind of have some west coast ideas, but we landed in my hometown on the East Coast. We didn't start farming at all when we got back. I didn't think I was going to do it for at least ten years. I never thought I would have my own business. I thought I would have a farm, but I didn't see myself going to farmers markets. But we totally have the training for it. I spent a lot of time trying to get into a career in farm education, working with refugee populations and kind of doing extension-type field training work, and Austin was providing health insurance for us by working at Starbucks.

What worked and didn't work when you started out?

We had savings our first year, but we actually did a personal loan through the land- owner in 2009 on the half acre field. He just loaned us like \$4800 to help us with some of the spring start-up costs and at the end of the year we paid him back. We just had a sheet of paper that explained that we had to pay him back. But it was really hard to find land. We kind of sat on our hands for a while expecting somebody else to say, "Hey, call this person, they want to lease to you." Community networking was really the best way to stick out fingers in the community and start to get to know some of the long-time families that had been there, and start asking around that way. In 2009, we found land through help of the community, but it was really in somebody's backyard. They had water, they had a huge, beautiful barn that they stored cars in in the winter. It had been a farm, but it wasn't being used as a farm. They had a separate well, and they had a little, tiny greenhouse that we were able to harden off a bunch of seedlings in.



We started all our seedlings in our living room. All the cold hardy stuff, once it was up and germinated about two weeks old, we'd move it outside into tunnels. And we're in Maine, so in March and April we had everything under two layers of row cover and a layer of plastic. And that worked! We started a farm and we lived in an apartment in the city in Portland, Maine. Insane, but it worked.

What advice do you have for new and young farmers?

Having a commitment to a place is a really big start. I feel like I'm committed to my hometown in South Portland, and people of this and the neighboring towns. And because I have a commitment to this place, it allows me to start working with community members, and it's really provided us with a lot of help. Being able to say that I grew up here... you know all the old timers and the farmers that are around, I feel like they start to take us under their wing because we're from here.

I don't necessarily think you need to go back to your hometown, but I think it is important to have a commitment to a region, and to start to really investigate the social networks there. Like the local diner where the old time farmers are going to hang out, or the tractor store or whatever, and just start to build those relationships. We're really lucky here, we have a local farm alliance, the Cape Elizabeth Farm Alliance. We meet once a month and work on public farm visibility, and awareness of buying locally, as well as education in the school system.



The Guide: What to Know

Have you really ever thought about where your food comes from? What happens to your food in between the field and the grocery store? Who grows this food? Most likely, the food you eat comes from a farm.

You too can grow food and make a good business out of it. Farmers are creative, self-directed people who decide what to produce, when to plant and harvest or breed, raise and slaughter, and where to market these products. Each farmer works within the limits of their land and what local or national markets want them to sell. Sometimes this requires going with the flow, and other times starting a new trend through new crops or new ways of doing business. Here are a few pieces of helpful information and stories as a start.

What is a Farm?



A farm is a piece of land that is used to grow crops and raise animals. Farms can range from very small, containing only a few items grown in pots or a tiny bit of soil under a greenhouse, to immense, with acres of rangeland or gigantic fields of grain. Farms may be modern, such as those using global positioning systems for orienting tractors and hydroponic systems for growing tomatoes in winter, or may use traditional farming methods, such as horse-drawn implements, growing select heritage crops or breeds, or hand harvesting gourmet salad greens for restaurants. There are many types of different farms:

orchards grow fruits; livestock farms raise animals for meat and dairy products; vegetable farms grow produce; grain farms grow commodities that may be made into livestock feed, biofuels, or traded for consumption internationally; and diversified farms produce a mix of farm products.

There are different approaches to farming, the majority of farming in the United states is conventional farming, but organic farming methods are increasing. Currently 10% of the vegetables sold in the US are certified organic, however the majority of the corn, soybeans

and other commodity crops that are grown are intensively produced with synthetic chemicals as a critical element in the production system. There are large scale organic farmers, and small scale conventional farmers, it is a free country.

Some farmers till the soil, some farmers do not till but use herbicides to clear the land between plantings. Some farmers rotate crops to maintain soil health, some farmers crop the same crops year after year with limited or minimal rotation-this can create issues with diseases and is not recommended.

'What is a Farm' Continued...

Conventional farms may use synthetic fertilizers, herbicides, pesticides and other sprays. IPM management means Intergrated Pest managemetn where farmers minimize sprays by managing pests based on lifecycles, biological control (predator insects) and trapping.

Organic farms take as much advantage of the ecology of the farm to control pests and maintain soil fertility and use only naturally occurring products to control pests, they are allowed to use compost and manure, no synthetic fertilizers.

Some farmers consider the farm to be an organism (biodynamic agriculture) or design their farms as an integrated ecosystem (permaculture). There are farms that use hydroponics (plants grown in water and nutrients), and

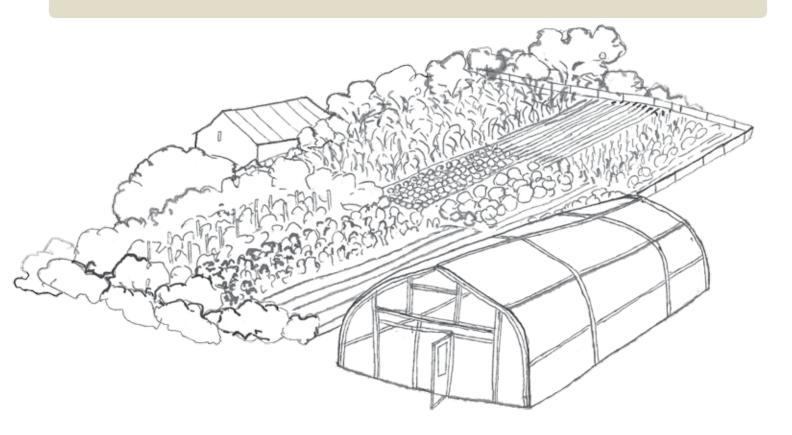
farms that grow marine crops in tanks (aquaculture). The method you choose depends on what you're growing, the scale of your operation and what strategies work best for the space you have.

Key to successful farming is thinking about how farming affects the soil, a farmer's most precious resource. When farmers practice crop rotation, they changes what is planted in a field each year. This helps prevent pests from accumulating and helps keep soil healthy and full of nutrients as each crop has its own nutrient demands and related pests and problems.

To keep plants health and growing strong, farmers manage the soil and crop fertility. Plants need several essential nutrients that they get through both the air and soil. One of the most important is nitrogen,

which is taken up by roots. All plants need nitrogen to grow and develop. This is even true for the grains or grass we feed to animals or vegetables we eat ourselves. To provide plants with essential nutrients, farmers apply different fertilizers to the soil including mined chemical fertilizers, compost, animal manures, manufactured chemical fertilizers, or green plants added to the soil as cover crops (or green manure). The fertilizer approach you choose depends on your land, what is being grown, the scale of the operation, and the philosophical goals and farming approach of the farmer.

You may be getting the idea that farming isn't so simple—in fact, there are a lot of factors and a lot of decisions to be made every day.





Many Kinds of Farms

Farming is one of the oldest careers in the the world. Here are some examples of types of farms:

Commercial Farm: These larger scale farms typically grow one or two specific crops or raise a specific animal to send to market on a large scale. Commercial farm workers assist with management of the farm, planting, weeding, harvesting, and driving the crop to distributors for sale.

Small Vegetable Farm: Small scale vegetable farmers typically grow for a higher-price local retail market, often selling directly to consumers through CSAs or farmers markets, or to restaurants or buyers clubs. Both large and small scaled vegetable farms depend on a lot of extra labor for field management, weeding and hand harvesting, packing and selling vegetables.

Poultry Farm: Poultry farmers raise chickens for meat and eggs. Their tasks include managing facilities, raising chickens or incubating eggs (called a hatchery), making sure the birds are healthy, and then selling the meat and eggs to the market. Some chicken farms raise their animals outside (free range or pastured chickens). Some keep the animals in large open sheds. Pastured or free range chickens command a higher market price, but there is more danger of losing chickens to hawks, coyotes or other predators.

Dairy Farm: Dairy farmers work with cows, sheep or goats and collect their milk for use in a variety of products. Some farmers milk cows and then make cheese; this is called Farmstead cheese. Some farmers bottle their own milk for direct sale to customers or local markets. Most farmers sell their milk in 'bulk' to companies (or cooperatives) that process, bottle and distribute the milk to supermarkets.

Farming 101

What to Grow

Most new farmers tend to raise **annual plants** (these are planted and die each year, like vegetables, herbs or corn), as opposed to **perennial plants** (that grow for several years). Growing perennials like grape vines or apple trees requires a bigger commitment of money, time and secure access to land, since crops like apples take several years to grow before you can start to harvest their fruits.

The first step in planning a farm is developing a crop or farm plan. This is often a map or list that describes each field and what will be grown in it, when it will be planted, and when it is expected to be ready to harvest. The crop plan varies based on location, soil type and climate—each field may have different qualities to take into account in order to have a successful harvest. Alternatively, if animals are to be grown, it would include pasture and housing, feed needs (whether grown on the farm or purchased) and expected dates for slaughter.

Some farmers might be inclined to start out farming what they like to eat and are familiar with growing, but then run into difficulties if they haven't adequately addressed:

- Climate What will grow here?
- **Environment** What animals and insects will bother my crop?
- Market Demand who will buy this crop?
- Competition who else is selling this crop?
- Equipment Required How will I harvest this crop? Does this crop need extra nutrients, water, or shelter? Does harvesting this crop require a special tool? Will I need a truck to take this to market?
- Labor Will I need help harvesting this crop?
- Slaughter Where will I have animals slaughtered and then butchered for market? If I am doing this myself, do I have the training and facilities to do this well?
- **Post-harvest storage** What happens to my crop once it's harvested? Does it need to be refrigerated, processed, or protected from weather?

Farming works best when the farmer works with the land, climate, equipment, and skill set they already have and researches the regional market to find under-represented market areas where they might fit.

What kind of farm will you have?

Cooperative extensive agents will work with you to find out what your strengths and skills are, and what options are available for your land area, soil type, and farm buildings. Cooperative Extension programs exist in every state, and are a useful resource for people considering farming for the first time as well as for seasoned farmers. They may be able to present ideas you've never considered!

Other ways to pick your crops:

- Look at what your neighbors are growing
- Ask your customers/clients what they are interested in eating & purchasing
- Visit markets near you and see what is missing or low quality
- Try new varieties/breeds to see what works on your land
- Stick with what you know—if you're great at herbs, grow herbs!
- Look at prices, see what is selling well in your region
- Rescue a 'lost' breed or variety that was once grown in your area. History can tell you a lot!
- Review the soil survey for your area, look at what crops best suit your soil type





Growing & Harvesting Crops

While most aspiring farmers have a pretty good idea what they want to do, some farmers get land long before they are sure what to do with it. As a young farmer, you are in an exciting position to dream; what do you want to grow on your farm?

Scheduling harvests

Taking your crops to market on time is a skill farmers develop with experience. If you harvest too late, crops are past their peak; if you harvest too early, you miss the best flavor. There are many online resources available and books to assist you as you schedule your harvest. Most have you pick the day you want to harvest, and then 'count back'

to the planting date to decide on a planting date. Different plants have different growing behaviors, and some crops may require starting indoors or in a greenhouse if you want them to be available for early season harvest. Other good rely on time schedules to become products, meat rearing, for example:



sale and consumption. Check with your farm insurance agent and local extension agent for more details on what is allowed in your area.

Storage

Before you begin to harvest, you must analyze your storage needs. Do you have a safe place to put your crops after they

> have been harvested where they are safe from spoilage? Will you bring your crops directly to market? Do you have enough clean containers, the proper washing equipment, and the right transportation arranged to make sure your products get to market in peak condition?

Treating Crop Issues

All crops are influenced by weather, pests, and poor management. Your can learn about the strengths and weaknesses of the crops you want to produce ahead of time by reading, researching online, consulting with experts, asking other farmers, and tasting. Be prepared to deal with weather, pest management, weed management, veterinary care, handling, harvest, storage, packaging, and transport to market.

Scheduling with a butcher can be tricky—many communities have lost their local butchers, and it may be a long drive (and a long wait) to schedule an appointment at a certified facility. If you are considering butchering your own animals, be sure to review local rules and your insurance policy before you begin. Different states have different requirements on what is allowed for household versus public

Buying Seeds

As a farmer, you have a lot of choices in getting your hands on good seeds. Good seed that germinates predictably is a key factor in the success of your farm. Larger growers sometimes use seeds that have been sorted for size or even coated with clay so that they can be more accurate with their planting. Small farmers typically use mechanized planters. You can even use push behind seeders that benefit from coated seed.

An online search or conversation with a local farmer can often help you find a good local source of seeds. Another good online resource is the National Center for Appropriate Technology (NCAT's) Suppliers of Seed for Certified Organic Production Database. Seed exchanges, like Seed Savers Exchange of Iowa, are also great places to obtain different kinds of heirloom/open pollinated seed varieties and organically produced seeds. Key an eye on your local climate, and buy seeds and varieties, as best you can, that match your growing conditions.





Greenhouses



Hoop houses,

greenhouses and other protective structures create a warm, controlled environment for baby plants in cold weather. They are used for getting

plants started (**plant propagation**), winter gardening, or year-round growing. They help keep a controlled environment for plants, protecting, for example, tomatoes, from early spring frosts, summer hail, and some diseases, giving the farmer a head start on the season and an earlier crop... not to mention offering a warm dry place for farmers to harvest.

pН

The pH of the soil is used as a measure of its acidity, which can affect how well plants grow. A good soil pH is important to farmers because pH affects the nutrients available for plant development. Getting your soil tested is key to successful crop management. Your county extension office usually accepts samples for testing; contact them to

learn more about soil testing services in your region. Research your planting options and soil type before selecting what to plant on your farm by looking in gardening books, online, or in seed catalogs.



Pest Management



The farm is an ecosystem, and there are many moving parts to understand, observe, investigate, and manipulate. Farming relies on management decisions that use many different approaches to control pests

(unwanted plants, insects, or animal visitors to your farm) and minimize harm to the environment.

Finding a pest management approach that works for your farm will take good planning, careful observation and study, and having as many options available as possible. It will also take time—learning what works best for you and your farm will be the result of many years of trial and error, testing crops, and experimenting with different farming methods.

Soil

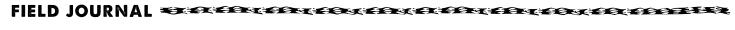
Soil is made of four basic components: minerals, organic matter, water, and air, plus many microscopic living creatures. There are three kinds of soil textures: sand, silt and clay. Silt and clay soils have small particles



that can stop water and air from moving freely. They also have high water holding capacity and hold the plant's nutrients in the soil. Sandy to gravelly soil are lighter and allow water to move freely. Sandy soils contain 70% or more sand by weight and loamy soils possess the desirable qualities of sand and clay without being too loose. To know what types of soil you farm upon, check with the Natural Resource Conservation Service (NRCS) online soils maps (websoilsurvey.nrcs.usda.gov/) or visit your local NRCS office.

"If farming is something you're interested in, you should definitely explore all of your options...It's all about exploring and finding out what you want, and sticking with it even if it gets rough."

Courtney Banach on Greenhorn Radio



Notes



Notes

4 GOING TO MARKET





Have you ever wondered what the tomato you picked up off the grocery shelf has been through, where it's been, who grew it, how it got there? For as long as there have been farmers, there have been ways for farmers and eaters to connect. Much of the food in America goes from producer-to-consumer (in other words, from the farm to your dinner table) by first going through a number of middlemen (wholesale buyers and sellers), before entering the grocery store.



"A significant part of the pleasure of eating is in one's own accurate consciousness of the lives and the world from which food comes."

Wendell Berry, from "The Pleasures of Eating"

The Market

The market refers to the point where farmer-grown food moves into the hands of the user or eater. This switch can occur through sales to a wholesale buyer, sales directly to a restaurant or local grocery cooperative, exchanging goods (like bushels of potatoes) for another farmer's goods, or setting up a vegetable stand or shop on the side of the road. For most farmers, the market is where his/her financial income is made.

Many small-scale farmers are bringing food to market through a combination of ways so that they can maximize the value and/or money they receive in return. Up-to-date weekly average market prices for produce, meat, poultry and dairy products can be found on the USDA's website and published in local newspapers, and these influence which site of distribution is most favorable.

Farmers today are thinking creatively about how to price their goods. They are producing **value-added products** (a new product created from processing, repackaging, or adding special features to existing products often raising the sale price), growing rare and heirloom vegetables, and participating in **barter economies** where produce, land, or labor are exchanged instead of dollars.



Ways to Market

"Marketing" might sound like advertising your product or doing a press stunt, but marketing means selling your product, building a brand and product identity, making relationships with buyers, packaging, delivering, and keeping accounts. The computer selling company Apple does their marketing on TV; you might market your apples through a farmers market or by selling applesauce to a distributor.

Bottom line, the point of growing food is to sell it to feed people and animals, while also making a living doing so. Different strategies for sales and marketing work in different places. Some crops or marketing styles may work well in some places and fail in others. It may take some time and creative thinking to succeed; getting some advice from your elders is a good idea and don't hesitate to try new things. Tune into your community to hear about their preferences and ways of shopping for food. Listed below are some considerations for different types of marketing.

Direct Sale

Selling food directly to the consumer, getting full retail



dollar price for the food and thus maximum return on what you produce. This can mean on the side of the road, at a farmers market or through a CSA. Direct sales are a strong option for start-ups, for good communicators, and farms located on well travelled streets.

- Cutting out the middleman allows a lower price; this is attractive to customers
- Can vend unique varieties, small amounts, and fruits and vegetables that do not transport or keep well
- Seasonal
- Customer service is a must—the best salespeople are well-organized and creative, with a good sense of spatial and temperature management
- Can be time consuming

Farmers Markets

Transporting produce to a designated, centrally located and well-visited market place where other farmers also bring their goods can be effective for farms that have a reliable output and access to transport (a van or truck). Farmers markets are popping up all over the country with music, prepared foods, and a lively scene. This can be a great way to sell, and also to show off your farm products to restaurateurs. Visibility and reliability is a big part of sustained sales.

- Enables communication with other farmers and ability to collaborate on crops, sales, recipes
- Farmers are often charged a fee to participate
- Regulations can be difficult to meet
- Requires additional infrastructure including transportation, coolers, and storage containers
- Can call for additional employees to sell
- Price competition with other farms





Pick Your Own

Pick your own operations grow food for the customers to come pick for themselves. This is very common with berries, blueberries, strawberries, blackberries, also for orchard crops and cut flowers.

- The weather makes a big difference
- It needs to be neat, accessible, well-marked, and advertised on road sign and around town
- Very compatible with summer tourism
- Organic production methods will give you definite advantage in some regions (people will ask!)
- You still have to staff it, but far less than picking all the berries yourself
- This model is usually a good complement to other marketing strategies as a way to invite people to the farm
- Supplementary insurance is often required, especially if people use ladders.

Wholesale

Wholesale is a good option for large farms with large acreage and limited crop varieties, as well as for farmers who are shy, dislike working sales, or do not consider themselves a 'people person'

- Selling wholesale to a distributor or middleman can be more convenient than selling direct
- Farmers receive a lower price for the produce, usually the distributor takes at least 15% up to 60% of the retail dollar
- Requires negotiation
- Grower must be able to consistently provide significant volumes of quality produce "supermarket standard"
- Needs cooling/storage and loading facility
- Must have a relationship with your purchaser
- Can be risky: price fluctuates based on commodities market, less diversity means your risk is higher
- Crop by crop basis, yearly contracts or week by week sales depending on the distributor



Community Supported Agriculture

Customers buy seasonal shares of the farm's production, ensuring a specific and consistent demand; farmers can develop good relations with customers but also are responsible to a pre-calculated output. For new farmers, it can be good strategy for entry because support of community can help farmers through any crop failures or climate

challenges. In this model, the consumer shares the risk, plus the cash is in hand at the beginning of the season to help buy seeds and inputs.



- CSA members can help plant, maintain, and pick produce
- Requires extensive scheduling, good timing, and dedication to fill a subscription
- Consumers are often surprised with the volume of vegetables they receive, and overwhelmed, so sending a recipe is a good idea
- If you don't mix up the variety, you'll get complaints of "too much chard" "too much cabbage" etc.

Farm-to-Institution

For the seasoned farmer, contract-based delivery to a specific venue or set of outlets relieve farmers of having to worry about sales as much. Farm-to-school, farm-to-hospital, farm to food bank, farm to cafeteria and other models of contract farming are popping up all over the country. Institutional partnerships allow partners to develop long-term contracts with farms to deliver fresh produce and goods at a reasonable price on a crop-by-crop basis. These partnerships, like CSAs, help farms invest in their operations and guarantee their harvest won't go to waste.

- Requires good communication/marketing skills
- Need to develop a relationship with purchaser
- Not good for amateurs; contracts require fulfillment and high quality standards
- Can require crop insurance or GAP certification for food safety standards
- May need to pre-wash to their specifications, or pre-chop vegetables in a certified kitchen
- This is a great way to sell a LOT of storage vegetables all at once, and get them off your farm
- Facilities that plan for seasonal pulses of food will process, freeze and store vegetable for their own future use (a great use of those big institutional kitchens and freezers!)





Retail or Restaurant Sale

Sending your produce off to a restaurant or store and having someone else sell them to the customer can be good for farmers who like to maintain control of product quality and for those farmers who specialize in gourmet crops

- Must develop good relationships, trust
- Can be time intensive to maintain
- For top dollar fancy food markets, quality standards must be high
- Ability to negotiate prices; building a relationship with the produce buyer is key
- Lower volume of sales means tighter margins on each case
- Labeling and branding for your farm are important, as is the handling by the retail outlet
- Fancy restaurants are keen to show off their local produce, but sometimes they don't pay their bills (or they go out of business!)





Stories from the Field

Evan and Rachel Gregoire at Boondockers Farm in OR

Evan and Rachel raise heritage breed ducks and grow heirloom vegetables on their farm in Oregon.

"80-90% of our sales is to restaurants. We have some local food co-ops. The chef connection and really working with the chef is very important to us. It's all about relationships. We also grow heirloom squash and tomatoes, stuff that was kind of pre-1950. We collect stuff too, some Tom Wagner's tomatoes, some of the new creations. But we really have an interest in collecting rarities and things that are in need of preservation."

Jacob and Courtney Cowgill at Prairie Heritage Farm in Central MT

Jacob and Courtney own and operate Prairie Heritage Farm, which is a diversified, organic farm that focuses on three main enterprises: organic vegetables, organic heritage pasture-raised turkeys, and organic heritage and ancient grains.

"We sell all three products directly to customers, by individual orders and at the area farmers markets. But, a large part of our farm is devoted to our Community Supported Agriculture programs. CSA customers buy in to the farm, essentially becoming 'shareholders.' In return they share in the bounty — and risk — of the farm. In our vegetable CSA program, shareholders pay up front in the spring and in turn, get a weekly bag of produce for 16-18 weeks. With our Thanksgiving CSA, shareholders pay at the beginning of the season and a few days before Thanksgiving, get their "share" which includes a turkey, onions, potatoes, winter squash, herbs and other fixings for the yearly feast. And with our Grain and Seed CSA, shareholders get nearly 100 pounds of grains and seeds not readily available anywhere else, like specialty lentils, barley, a variety of heritage spring wheat and ancient grains, including Emmer and Khorasan. The past two years we have been trialing amaranth, quinoa, dry beans, and teff to be added to shares one day."

Mary Ellen and Austin Chadd at Green Spark Farm in Cape Elizabeth, ME

Mary Ellen and Austin cultivate rare and heirloom vegetables, cut flowers, garden seedlings and medicinal herbs, serving the community around Portland, ME.

"Right now we grow mixed vegetables, and most of our sales are through the Portland, Maine Farmers' Market. We have also started an online market. We pre-sell

> online, so people order and then they pay for it and pick up their orders every two weeks at a specific pick-up date. The online order has been great for our winter market. And we call it Cape SoPo winter share because it's in Cape Elizabeth and South Portland, which are towns right outside of Portland."

Cara Fraver and Luke Deikis at Quincy Farm in Upstate NY

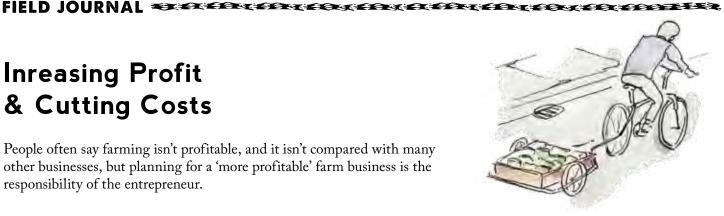
Cara and Luke are just getting started and plan to grow vegetables over 48 acres of farmland.

"We plan to sell CSA shares as the years progress, but in our first year we will market exclusively through farmers markets until we feel confident that we know our land and what

we can produce. In the second year, we hope to sell CSA shares to our neighbors and in the following years branch out to other upstate neighborhoods and eventually New York City's CSA network. We feel that CSA offers a unique opportunity to farmers. Logistically, it provides income in the spring when most of the operating costs are due. It also provides security for the farmers; we will know exactly how much food we need to grow and will be able to predict our income. I think that CSA fills some deeper needs that I have as a farmer, too. Knowing the people for whom I am growing food is part of the draw of farming."

Inreasing Profit & Cutting Costs

People often say farming isn't profitable, and it isn't compared with many other businesses, but planning for a 'more profitable' farm business is the responsibility of the entrepreneur.



Value-added products

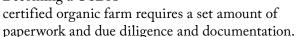
Value-added products take additional steps to transform raw ingredients into finished products that sell for a higher price than their individual ingredients. It takes extra time, materials and equipment but value-added processing can be key to long term farm viability. Value-added products can take advantage of unsold, extra or damaged crops that might otherwise go to waste, and may offer opportunities to employ laborers who are not as physically strong as fieldworkers. Value-added products include: ketchup, pickles, sauerkraut, jam, cheese, wreathes, potpourri, jerky, bread, cornmeal, dried mushrooms, etc.

Some items may require additional licensing, such as

commercial kitchens or pasteurization. Call the board of Agriculture and Markets in your state to learn more about what rules apply to the products you want to produce. There are exemptions available for many home baked goods, bread, high-acid canning (like tomato sauce) and jam--but it's better to CHECK FIRST to avoid fines, fees, and breaking the law.

Going organic

Certified Organic means that your farm is run without synthetic fertilizers, pesticides, GMO organisms or sewage sludge. Certified means that the USDA regulates and verifies that your practices are organic. Becoming a USDA



Once certified, farmers can charge a premium for "certified organic produce" and there is strong market growth for organic produce and value added goods. Even without certification, growing organically (pesticide-free) can help save dollars in the long run by by preserving soil conditions and overall health of crops.



Agritourism

If you are naturally hospitable, you might consider opening up the farm for public events such as tours, workshops, camps and dinners. Special tourist events can be a great way to add to income and educate the larger community on farming. Many people will pay to eat a nice delicious dinner while sitting in a field! There are many Bed and Breakfasts and little Inns (especially near towns with museums, antiques, ski slopes) that are based on a farm, with farm fresh food for breakfast.

Agritourism is a good option for farms that have historic or interesting architecture, an educational goal, location close to a lot people, and a scenic location/landscape or buildings. Farmers should have the ability to watch over visitors and staff, keep a tidy and safe farm, be friendly and open, and enjoy the disruptions that come from visitors. Agritourism generally requires additional farm insurance.

Staying local

Transporting what the farm produces to market is a huge cost for most farmers. Finding a market close to the farm can help cut costs, not to mention environmental impact. Staying local provides a great opportunity for developing a loyal local customer base that depends on your farm, reduce "food miles" and a long lasting support base for your farm. So called "direct sales" of produce may take time away from the



farm, but you get a retail price for your produce. Many beginning farmers build their businesses with high value vegetable sales so that they have the capital to expand production and then move into more wholesale when they have more volume to sell.

Agricultural Education

Some farmers embrace agricultural education as a part of their mission. Farms may teach schoolchildren, tour adults, offer classes and workshops for new farmers, cheesemakers, beekeepers, or more. On farm education classes generally require additional farm insurance.

Farmer Advice: Marketing

Before you get started, make sure you know your market niche (what do I sell, and who do I sell it to?), define your operation's image (what is my mission?), and advertise yourself. Local press and the Internet are great tools to spread word of your new farm. National and regional online farm listings provide a way for potential buyers/eaters/consumers to find you.

Some possible marketing ideas include:

- Advertise your roadside stand in the local paper
- Take out an ad in the church circular
- Sponsor an ad at the local diner
- Put up a roadside sign at your farm
- Sponsor a local t-ball team
- Have a Facebook page
- Keep a Twitter account
- Use a newsletter to connect with your customers
- Put your farm into the farmer's market database, etc...

Here's what some farmers are doing to expand their reach and tell more people about their farms and products:



Pawel Buda and Kelly Firkins of Delabu Farm in South Central MN

"Word of mouth, website, facebook, twitter, localharvest.com, The Land Stewardship's CSA guide and farm list, MN homegrown website/searchable database, craigslist, last year we put up posters but this year we'll distribute some brochures, there was one article in the local paper as well..."

Dana Gentile of Darlin' Doe Farm in NY

"Well, I am just starting to market my meat. I am working on getting a website up, and Facebook is another great way to market a small business online. I also started to donate product to small local auctions to get new customers and to have more people see my products, and small farmers market are also a great place to get started. The possibilities are seemingly endless so we're still figuring out what strategies work best for us. Word of mouth is of course a good old standby so we talk about our product everywhere go, to anyone who will listen!"

Food for All

Think about your neighborhood and where your family shops for food. Do you shop near your home or school? Or is the grocery store faraway? Maybe your neighborhood doesn't have a grocery store at all. If that is true, think about the places where you buy food instead--maybe from a convenience store or a fast food drive-thru window. Have you ever thought about why you purchase food where you do?

Poor food access is an issue that is hurting neighborhoods all over the country. Studies show that people who live in neighborhoods with less access to healthy and affordable foods (such as fresh produce, whole grains, and preservative-free meats) are more likely to develop diseases such as obesity and diabetes.



In some communities, people are demanding their rights to affordable, accessible healthy food choices. They are organizing farmers markets, reclaiming abandoned lots for community farms and gardens, and learning to grow their own food. These neighborhoods need farmer collaborators—farmers who want to bring their goods to market in these neighborhoods and help organize other farmers to do the same.

When looking for market options, beginning farmers should consider communities with restricted access to locally produced, fresh foods. In places with such need-driven demands, farmers may find they are able to carve out a viable market for themselves while growing an urban renewal.



Getting the Word Out

There is no market without consumers. Luckily, new farmers have something on their side to make marketing easier—the internet! Marketing is a whole new skill set for most small business owners, and many farmers are taking advantage of free and low cost social media tools and websites to help owners spread the word about their products. One of the easiest ways to begin marketing your products is to participate in your local community events. Join the local Chamber of Commerce or Grange, volunteer for the 4-H and the county fair. Go to the library, the local diner, coffee shop and general store—and talk to your neighbors. Listen to the stories they have about farming, the land and food. Make friends, develop relationships and barter with those that have resources you'd like to share or use. Share your time helping and getting to know your neighbors, and they will help spread the word about you and your business without you spending a penny.

Once you have your farm up and running - host an open house and invite members of the community to join you on a tour of the farm and community potluck that evening to strengthen relationships. Invite an agriculture class from the local high school to tour your farm, and offer job shadowing opportunities to interested young folk. The strong and lasting relationships you create will help ensure your farm is a success!

New Ideas for Distribution = New Ideas for Collaboration

Farmers work hard to produce food, but they work just as hard to make farming work for them as a living while constantly adapting to changing market demands. This means coming up with new ideas for distributing goods and conserving resources, and collaborating with fellow farmers, neighbors, consumers, and institutions like internet-based farmers markets, and buying clubs. One of the most important things a farmer does is to build a community around their farm, so that resources—as well as losses—can be leveraged and shared.





Notes

5 RESOURCES





A Young Farmer's Story

by Kelly Nichols

Caitlin Arnold and Holly Mills of Sidewalk's End Farm, Oregon

Sidewalk's End Farm is located in the city of Portland, Oregon. We farm five city plots and one large rural one, focusing on northwestern hardy, late season, and storage crops. The farm was started by four people-Holly, Jud, Rachel, and Tom—who lived and gardened together for three years until we decided to make our large gardens pay for themselves by selling CSA shares. Things grew quickly, and now, in our second season, we are growing for a 20-member CSA and two farmers' markets, as well as cultivating barter and work-trade relationships. We borrow backyards and empty lots and trade produce to our generous land-lenders.

What difficulties have you had, or are you overcoming, and how?

In our first season the major challenge was figuring out how to operate as a small business. Even though we all had extensive agricultural experience, the business end of things was a serious seat-of-the-pants endeavor and major learning experience. Our other primary obstacleboth for getting by and being good farmers—is trying to run a small, economically viable farm in the city, where we pay city rent and cannot live on our land, have city water rates, have limited access to land, and are compromised by jobs, transportation, and the logistics of keeping multiple plots with different conditions and crops in mind.

How do you see your work as a farmer fitting into the larger movement for social change from the ground up?

Our food economy alone has a long way to go. As farmers we get our hands dirty every day with these questions, and maybe by continuing to farm we can figure out some answers. Since we're in the city, I think we can play an interesting part in building stronger bridges between urban and rural areas. We are also really excited about the possibilities of extending our farm beyond agricultural and food-related concerns, which is part of our long-term vision.

What advice do you have for other young farmers who are just starting out?

Work for and learn as much as you can from other people. Do apprenticeships and internships for at least a few years to make sure you actually like it. Educate yourself about the realities of farming, national and local farm policy, and what people in your area want and need. Learn where

you live and farm and try to figure out what will make the most sense for where you are. Figure that you might have to start, quit, start over, try something different before you really get your farm going.



"Work for and learn as much as you can from other people."

- Caitlin Arnold



So you are on your way to becoming farmer! Congratulations and welcome to a rewarding career and delicious healthy lifestyle. It is important to understand farming is a business, and the farmer is an **entrepreneur**, especially as you begin to imagine the shape and products of your very own farm.

Getting started

Owning a stable and sustainable farm business isn't just about growing and harvesting great crops, it's also about developing day-to-day business skills. These skills are are easily learned through research, asking the right questions, and using common sense. You can avoid many typical small business start-up issues by using advice and expertise of your neighbors, farmer mentors, extension professionals, beginning farmer educators, libraries, online resources, and classes. In this section we offer basic guidance on accessing land, finding funding, purchasing insurance and developing your own business management style.

Before you begin searching for your dream farm, consider the following:

- 1. Don't assume that you have to buy land to get started farming. You do, however, need to know how to farm before getting in too deep. One useful strategy is to move to the region you want to settle in, and spend some time as a renter on an existing farm or leased land. Short term renting and leasing are both valid options to testing a location's soil, crops and market potential before committing to a business.
- 2. Start small and make sure you have a business plan. Most professional consultants Extension Agents, bankers, lawyers will ask to see your business plan before offering counsel as it proves you have put time, thought and effort into how you will achieve your dream.
- **3.** There is no such thing as free money. If access to funding for start up is a big issue, there are options like gifts, loans, and grants.

Land Access

If you want to farm, you'll probably need land, and good farmland can get expensive. Purchasing the right piece of land takes time, patience, and a team of realtors, bankers, and lawyers to help you complete your sale. Finding the land to rent, lease, or borrow can be intimidating even for those who have the potential to inherit a working farm or plan on joining a family farm business.



Creative Land Access Strategies

Young farmers have managed to get access to land in a lot of different ways.

- Working for a non-profit organization as farm manager/educational coordinator
- Renting/leasing land from a land trust
- Renting/leasing land from wealthy (or not so wealthy) non-farming landowners who get an "agricultural tax assessment"
- Farming land owned by another in return for a share of the profits (sharecropping)
- Renting part of a working farm and sharing equipment
- Farming community land owned by an institution i.e. school, retirement home, retreat center, historic farm museum, land trust
- Collaborative land purchase (siblings, friends, associations)
- Farming for a private developer in a planned development

- Starting on a small homestead (home with a large lot) in town while earning money for a later farm purchase in a more rural area with more land access
- Land inheritance from your family
- Joining an existing family farm and purchasing the farm over time
- Slowly taking over a farm operation from a non-related retiring farmer
- Rooftop or urban farming for a business (i.e. restaurant, hotel, apartment complex)
- Renting or leasing empty urban land parcels from the city
- Borrowing a neighbor's underutilized land in exchange for upkeep or produce
- Farming community land in a business or farm incubator program

Lease Agreements

Lease agreements are the conditions you and the landowner agree upon when you rent or borrow land and buildings.* It's important that you have a good lease agreement with your landlord, especially if your business requires infrastructure, crops or livestock that are difficult to remove or harvest on short notice. Many start-up farms and land lease arrangements are built upon a handshake agreement, but do be aware that conditions can change—leaving you and your business vulnerable.

As a lessee, you'll want to protect yourself and your business from too rapid changes in conditions and make clear whether you are interested in the land for a short or long term. You may want to ask:

- Will this land suit my business needs?
- Is this a temporary condition, or do I intend to stay in this space for many years?
- Does my business require building infrastructure (irrigation wells, barns, roads) that I will have to remove or lose when my lease ends?
- Would I like to have the option of first right of refusal or right of first offer?

- What work am I willing to do in return for a lower lease price?
- Can I legally grow my business on this property/neighborhood?
- What price per acre are other farmers paying for leased land in this area?
- What limitations does the landowner want to impose?
- How quickly can I exit my lease if I decide I don't want to farm/I don't want this land?



Review your lease agreement* with a lawyer before signing to ensure that your business is protected from sudden changes of condition and that you fully understand your responsibilities to the landowner.

* There are model lease agreements for farmers available online from the New England Small Farm Institute and Land For Good

Evaluating Land & Construction Needs

You've got your paperwork all in order, and you're ready to find land to farm. Before you start looking for land, draw up a list of your needs and wants.

- What kind of farming do you want to do?
- How much land you want?
- What types of buildings will you need?
- Do you need electricity, water, paved roads, fencing, houses, ponds?
- Do you need to be close to a particular mentor, farmer's market, or distribution hub?

Ask your farmer mentors, friends, and partners to give you feedback on your requirements list, they may help you identify needs or wants you didn't even realize you had. When shopping for your farm you may want to talk to the following experts:

Extension Agents can help you define what you want to sell, where your potential markets are located, and help you review soil qualities, building and equipment

needs. Extension consultants may also know of lands available for rent, lease, or borrowing, and businesses available for purchase or succession.

Real Estate Agents will help you find available parcels, arrange tours, and work with you to complete the sale. Real estate agents typically work for a percentage commission on the final purchase price of your property.

Banker Your local bank can help you determine how much money you have available to finance your potential farm. A bank representative will help you review your assets and liabilities, and will determine how much financing you are eligible to receive.

Mentor Farmer Walking the land with your former boss, or a local farming mentor can prove invaluable as you plan your farm, layout, improvements etc.

Lawyer - you will need to solicit the services of a lawyer to help you review the legal documents for setting up your farm, purchasing land or equipment, or drawing up succession paperwork (in the case of inheritance, joining or purchasing a family business). Lawyers typically will assist you for an hourly rate. You don't have a lawyer? Ask your relatives, realtor, bank, or friends for recommendations—you want to hire someone who is trustworthy, accurate, and most of all familiar with farming!

Chamber of Commerce is a local/regional business group, and can often help point you in the direction of

farmers who are looking to retire, available business opportunities, open market niches, and valuable networking contacts.

Family Counselor/Dispute

Mediator can assist you in communicating your desire to join or purchase a family business, and can help resolve any issues that arise during your succession. It's better to see them before an issue arises than to wait until your family is in an uproar over the

changes you've made to the old family farm.

Neighbors are always great for telling you the real details the property you're interested in purchasing. They know the details of property improvements, areas of flooding or standing water, overall neighborhood attitude about farmers and farming noise/smells, and whether or not you and your business will fit in with the community.

Last but not least, be open minded. Your dream farm may end up looking very different than you originally planned. It might take a lot of legwork and a few attempts to find the right spot for your business, but your dream farm is out there waiting for you!





5.3 Access to Funding

Starting a farm requires money for equipment, materials, and land. You can manage your need to borrow money to run your new business by limiting what you buy (frugality), developing new opportunities to make money over time (economy),

A Farm Business Plan

Start your search for funding by developing a business plan. A business plan is an outline of your mission (why are you a farmer?), your goals (what do you want to do?) and your plans on how to achieve them. Most plans have a list of expected costs, and a preliminary calculation of how much money you might make from the sale of your goods. Also list skills you have, and any needs you have before you achieve your farm (education, equipment, land, housing, labor, family support). Your farm business plan is the first document you should show to anyone you are asking to give you money—it provides a framework where you can justify your request for funding, explain your skills and assets, and promote your farm business idea.

A farm business plan should be a work in progress; once you're on your way, you will find your ideals, crops, costs, and profits changing from year to year. Your plan should reflect where you are right now, as well as a brief summary of how your farm began, how it has changed/grown over time, and what your goals are for the future.



Funding Your Dreams

There are many ways to begin your new farm. Starting your farm business may be as easy as stepping out into your garden and harvesting extra produce to sell at the end of your driveway. If you have a more complex business planned, finding funding will usually involve work on your part to increase your personal cash flow to a level where you can afford to fund your start-up costs.

Here are a few ideas of how to grow:

- Grow an existing family garden into a small farm by selling to neighbors and friends
- Expand an existing project (FFA, 4H) into a formal small business
- Fundraising through special events, donors, or investors
- Save money for a future farm while working a nonfarm job or working for another farmer
- Work part time on your farm business while maintaining a full time job off-farm
- Start small, grow as you gain profits by reinvesting in your business

Gifts

You may be fortunate enough to have family and friends who will assist you in starting your business if you ask nicely. There are limitations on the total amount of gift money you may receive without taxation from family members, so do your research before submitting your annual taxes.

Loans from Banks

can be acquired by local credit unions, banks and the USDA. Loans have interest rates, which means you will pay more than the original amount taken out over time depending upon your credit score and the amount

of money you are asking to borrow. Banks will look at your business plan, experience level, liabilities and assets in order to determine how much money you are eligible to borrow. Most banks have a commercial lending department to handle business loans, but few banks have an agricultural lending department prepared to work with farm-related business.



Check with your bank to see if they write agricultural loans (most will if you have a Farm Service Agency or Small Business Administration guarantee).

Check out: Farm Credit - www.farmcredit.com, NBT Bank - http://nbtbank.com or Community Bank, NA www.communitybankna.com

The Farm Service Agency (FSA) provides direct and

guaranteed loans to beginning farmers and ranchers who are unable to obtain financing from commercial credit sources. (www.fsa.usda.gov 315-477-6300)

Grants

Grants are typically available for established farms, and usually require participants to engage in research or educational outreach in return for financial aid.

*Agricultural Mediation Service (in New York) and community dispute mediators are great resources to assist you in drawing up the documentation you need, and resolving any disputes in a way which supports your long-term family health.

Loans from Family

You may also be lucky enough to be able borrow money from family or friends, or through start-up "Angel" donors, but you are still required to pay everyone back! Create realistic expectations together and put your agreement in writing! All loans should be documented, even those with family members, to ensure all participants agree on how much money is being given, when it is expected to be returned, and any other conditions that are attached to the loan. Be brutally honest, and make sure to make it clear what happens if either

Other Options

party is not happy with the deal.

Online crowd-source funding options are also an option Kiva.org and Kickstarter.com, and credibles all make loans to startup farm and food businesses. Kickstarter are not loans, they are just investments (a gift) to get your idea off the ground.



"I know that its always great to just search for grants and apply for as many as you can because the more you apply for the more likely you'll get one. And find people within the community that are interested in what you're doing. Hopefully they'll be able to support you- if they can't with money they can support you by helping you plant seedlings and putting up tents for workers so they can get a shade break or installing water thickets or help start planting or tilling the soil. The biggest thing is just to reach out to people for as many resources as you can"

- Catherine Winters at Roots & Wisdom



Alternative Funding

Many young farmers spend the winter searching the Internet for grants and other programs. There is no such thing as free money, but there are foundations, marketing groups, and local government projects with interest in helping you make your farm more humane, useful as habitat, or accessible to children. Grants for research, education, and sustainability will come to you only after your farm is established, and you'll need to develop relationships with scientists and researchers to be eligible for these funds. Don't count on grants as a strategy for developing your farm.

There are also other grant programs offered by private and public groups. A good way to make connections is by going to conferences and doing the research—sometimes \$5,000 of deer fencing is just 30 minutes of paperwork away.

Microenterprise Loan Funds or Revolving Loan Funds for Small Business

Some county governments have micro-enterprise loan funds with great interest rates and repayment options. Check with your county Planning and Economic Development Agency/Dept. to find out if they have micro-enterprise loans funds. The Carrot Project (www. thecarrotproject.org) is piloting programs for small farmers in New England, with plans to expand to serve farmers in NY!

Farm Credit's FarmStart Program

First Pioneer Farm Credit has launched a program called FarmStart, with the mission to provide investments to farm businesses and farmer cooperatives. The program

can make loans to beginning farmers who don't meet credit standards. (https://www.farmcrediteast.com)

Investors

With the concept of "Slow Money" (www.slowmoney. org) gaining popularity, investor circles nationwide are forming to fund local food systems. Depending on your location and farm plans, you may be able to attract investors to fund start-up or expansion of your farm. ManyCSA farmers have used the strategy of fundraising from their membership to secure their land or build new facilities. This usually offers repayment and interest in the form of farm products.

Search online for "slow money," "local investing opportunity networks," and "small farm angel investors" to learn more about the possibilities for your farm.

Resources for Funding

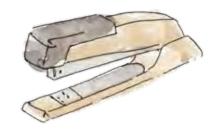
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Business Management



Becoming Official

When will you officially own a farm and be a farmer? You will need to have a business name selected before you fill out any forms. The best names are those that reflect you, your location, or your product in a clear fashion without being too hard to say or spell.

The next step to getting "official" recognition for your farm is as easy as filing a DBA ("Doing Business As") form with your County Clerk's office. The transaction usually costs around \$25, and it serves to protect your farm name within your county. You will then take the copy of the DBA form to your bank and use it to open a business account. Businesses need to declare whether they are are sole proprietorship, partnership, or **limited liability corporation (LLC)**.

Sole proprietorship

Sole proprietorship is a business entity owned and run by one individual and in which there is no legal distinction

between the owner and the business. The owner receives all profits (subject to taxation specific to the business) and has unlimited responsibility for all losses and debts. Every asset of the business is owned by the proprietor and all debts of the business are the proprietor's.

These businesses have the ability to raise capital either publicly or privately, to limit the personal liability of the officers and managers, and to limit risk to investors. They also have the least government rules and regulations affecting it. This means they are also difficult to formalize—other types of business entities have more documentation.

One of the main disadvantages of sole proprietors is that the owner's personal assets can be taken away. Another disadvantage is a lack of continuity—the business may be crippled or terminated if the owner becomes ill.

Partnership

A partnership is an arrangement where parties agree to cooperate to advance their mutual interests.a

partnership is formed between one or more businesses in which partners (owners) co-labor to achieve and share profits and losses.

Partnerships present the involved parties with special challenges that must be navigated unto agreement. Overarching goals, levels of give-and-take, areas of responsibility, lines of authority and succession, how success is evaluated and distributed, and often a variety of other factors must all be negotiated. Once agreement is reached, the partnership is typically enforceable by civil law, especially if well documented. Governmentally recognized partnerships may enjoy special benefits in tax policies. Enforcement of the laws, however, is often widely variable.



Limited Liability Corporation (LLC)

Limited Liability Corporation (LLC) - is a flexible form of enterprise that blends elements of partnership and corporate structures. It is a legal form of company that provides limited liability to its owners in the vast majority of US jurisdictions. LLCs do not need to be organized for profit.

LLCs have are desirable because they have a choice of tax regime. For example, a limited liability company with multiple members that elects to be taxed as partnership

may specially allocate the members' distributive share of income, gain, loss, deduction, or credit via the company operating agreement. There is much less administrative paperwork and record keeping than a corporation. Further, LLCs in most states are treated as entities separate from their members

On the other hand, most states do not dictate detailed governance and protective provisions for the members of a limited liability company. may be more difficult to raise money for an LLC as investors may be more comfortable investing funds in the better-understood corporate form.

Each business type has pros and cons, and you should review your goals and needs before you decide how to categorize your farm. Farms with a specifically charitable or educational purpose need to apply to the IRS for 501(c)3 status.

Your next step is to take a copy of the DBA form to your bank and use it to open a business account. You will need this account for depositing your profits, paying business bills, and saving for your state and local tax payments. All businesses must file their taxes, no matter the age of the owner or whether or not they made a profit. It is easier to put aside your expected tax payment (usually a percentage of total sales) into a dedicated savings account as you sell your products than it is to wing it and run the chance of not having the money to pay the tax man next April. You may need to apply for an employer identification number or EIN (a free and easy process available online) if your business will hire employees, otherwise you will use your social security number to identify your business when filing your taxes.

Once your farm has made \$1000 in sales in a calendar year, the IRS will officially recognize you as a farm. You can now qualify to be exempt from paying sales tax on most farm purchases (you'll need to fill out a special form from the State Dept. of Taxation). At this point you will need to file a Schedule F with your federal taxes (the IRS publishes a Farmers Tax Guide that explains everything you need to know about the Schedule F).

Farm taxes can be intimidating for those just beginning. For assistance please see the resource guide at the end of this book, or consult with an accountant with farm tax filing expertise. It is well worth starting your taxes early the first few years to give yourself the time you need to research any questions.





5.6 Business Skills

For your business to be a long term success, you need to learn basic business management skills. Farmers are small business owners, and should take the effort to learn how to manage their business before getting in too deep.

- All farmers need a place to organize and store bills, legal documents and spreadsheets. This can be a small filing cabinet or a dedicated office space, what is important is that you have a safe location to store the documents you need to support your business.
- Learn how to keep track of your farm's income and expenses using basic. accounting software or ledgers. If you don't have a farm yet, practice tracking your personal finances.
- Read up on labor laws before hiring any employees, and make sure you are up to date on safety practices.
- Brush up on your basic organizing skills by drafting a crop schedule, work calendar, or volunteer day flyer.
- Explore tax documents well before your tax deadline.
- Ask questions! Your fellow farmers, neighbors, local government leaders, and beginning farmer educators are excited to help you succeed, but you need to take the first step.

Where can you improve your business skills? Many communities offer adult education classes in business through a community center, small business development center or SBDC, local college, or Chamber of Commerce. There are also many online resources and courses available to help you develop and improve your business skills for free or low cost (check the resource section at the back of this book to start). Farm business planning assistance is also available through your local Extension or Farm Bureau office.

Insurance

When operating a farm business, you should consider purchasing additional coverage (usually added to your property owner's policy) specific to your business and activities. Most general farm insurance plans cover property damage and personal liability coverage for claims against the farm. This insurance is only available through private insurance brokers and you'll want to shop around as prices vary widely.

Supplemental Comprehensive Coverage and/or Product Liability Insurance

If you have any form of public visitors coming to your farm, you may want to consider increasing your farm's comprehensive personal liability insurance in case someone gets hurt on your property. If you sell products for human consumption, you run the risk of people getting sick from your products. Make sure your general comprehensive insurance policy covers product risks or purchase product liability insurance.

If your business involves processing food in a kitchen, selling dairy products, processing meat, making wine, or selling nursery plants, you may need to apply for a special license.

Insurance questions should be directed at your agent as policy coverages vary by company, and regulations state by state. Most insurance agents are very happy to sit down with you and answer questions, however it is often best to send them your questions beforehand via letter or email so they have the time to research technical details. Farm insurance coverage is often available through the same carrier as your home and auto insurance, however these agents may not be as familiar with farm policy limitations as agencies specializing in farm insurance coverage. If you are unsure about whether or not you are covered in a given situation, it is best to ask first! You do not want to find out your activities were uncovered after suffering an accident or issue.

Licensing, Inspections and Zoning Limitations

Some forms of farming may require special materials handling licenses or inspections. Examples include: commercial kitchens, butchering, pesticide application, food service, dairy farms, hog farms, and industrial animal agriculture.

Before starting your farm, it is a good idea to consult with an Extension Agent and a community small business contact to review any license requirements you may need to fulfill.

Zoning is a term for how your community allows development to proceed. Each community is different, and may impose a variety of 'rules' about where, and what, activities may occur on a given piece of land.

Before purchasing land, you should discuss your intended land use with your real estate agent to make sure it is allowed by law. Zoning restrictions and building codes are

developed to maintain community safety, prevent conflict, and ensure long-term property values. Restrictions applicable for beginning farmers may involve agricultural limitations in city environments, limits on numbers of

> animals, farm structures, or types of farming, and even time limits on when you may use noisy farm equipment on public roads.

> Violating zoning laws and building codes can result in fines, demolition/removal of structures, or even imprisonment. Zoning and code enforcement officers welcome phone calls and consultations - they would prefer to help you identify issues and limitations before you get into trouble, and can be very helpful in assisting you in finding alternatives and options to ensure you are in compliance.







Farmer Education Opportunities

Project Partners

The Northeast Beginning Farmer Project

http://nebeginningfarmers.org/

The Greenhorns

http://www.thegreenhorns.net/

NY Farm Viability institute

http://www.nyfvi.org/

National Institute of Food and Agriculture

http://www.nifa.usda.gov/

NY FarmNet

http://www.nyfarmnet.org/

Organizations

- New Farmer Development Project in NYC http://www.grownyc.org/greenmarket/nfdp
- Hawthorne Valley Farm http://www.hawthornevalleyfarm.org
- **CRAFT Farmers** http://www.craftfarmers.org
- Groundswell Center for Local Food and Farming http://www.groundswellcenter.org
- New Entry Sustainable Farming Project http://www.nesfp.org
- Vermont New Farmer Project http://www.uvm.edu/newfarmer
- Stone Barns Center http://www.stonebarnscenter.org
- Maine Organic Farmers and Gardeners Journeyperson Program

http://www.mofga.org/Programs/Journeypersons/ tabid/228/Default.aspx

■ Just Food

http://www.justfood.org

Farming Apprenticeships

- ATTRA National Sustainable Agriculture Information Service: http://attrainternships.ncat.org
- Organic Volunteers find on the job learning opportunities in sustainable agriculture: http://www.growfood.org
- Backdoor Jobs: http://www.backdoorjobs.com/

- Stewards of Irreplaceable Land-links Canadian farmers willing to take on and train apprentices with folks wanting to work and learn on an organic farm using sustainable practices: http://www.soilapprenticeships.org
- World Wide Opportunities on Organic Farms

(WWOOF) – become a member and access an extensive international list of organic farms that welcome volunteer help (anywhere from a few days to years) in exchange for room and board: http://www.wwoof.org

- Educational and Training Opportunities in **Sustainable Agriculture** – a comprehensive list and description of university programs: http://www.nal.usda. gov/afsic/pubs/edtr/EDTR2008.shtml
- Farming for Credit Directory—lists hands-on and classroom-based sustainable agriculture education opportunities side by side: http://www.rodaleinstitute.org/ffc_directory
- Biodynamic Training and Apprenticeship Opportunities Compiled by the Biodynamic Farming and Gardening Association.

https://www.biodynamics.com/apprenticeship.html

- North American Biodynamic Apprenticeship **Program** - a structured educational and training program in biodynamics. In the course of the 24 months, an apprentice may work on one, two or more farms; at least one year must be spent on a biodynamic farm. http://www.bdtraining.org
- Herb Pharm 9 month apprenticeship at the **Organic Herb Pharm**, where they grow and produce herbal tinctures in Oregon. http://www.herb-pharm.com

Apprenticeships (Cont'd)

- Livestock- Grassfed Interns a community coalition of pasture-based livestock producers in NY provide an opportunity to work on a successful pasture-based farm, deal with every aspect of small-scale livestock production from pasture and livestock management, to meat cutting and sales...and how to cook it. Plus, participate in a series of on-farm workshops, geared toward teaching you everything we might forget to teach you in the field. http://www.sapbush.com/bio.htm
- Farm Internship Handbook is designed to be used by individual farmers during the course of the workweek. Ideally, a farmer will use the In-Field curriculum when he or she is demonstrating a new task to interns. http://www.attra.org/intern_handbook
- Commercial Urban Agriculture Training
 Program: Growing Power is modeled on many
 successful years of urban agriculture production.
 It is designed for individuals who have made the
 decision to farm commercially in the city.
 http://www.growingpower.org/
- World Hunger Relief Farm provides programming and training for individuals and families interested in working with communities in developing sustainable farming techniques while educating those with economic abundance how to share and conserve resources. Located in the Heart of Texas. http://www.worldhungerrelief.org
- Farm to Pharmacy at Goldthread Herbal Apothecary 7-month internships and 5-day intensive-immersions that expose students to the full spectrum of herbal medicine. http://www.goldthreadapothecary.com

Mentorships

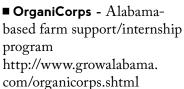
■ Farm Beginnings is a Land Stewardship Project initiative that provides opportunities for beginning and transitioning farmers to learn firsthand about values clarification and goal setting, whole farm planning, business plan development, and low-cost, sustainable farming methods. It is a year-long training & support effort for a broad spectrum of farming enterprises. The course is offered in Minnesota, Illinois, Nebraska, North

Dakota, South Dakota, the Lake-Superior Region, northwest Wisconsin, and the Hudson Valley of New York. http://www.landstewardshipproject.org/

- Farmer-Veteran Coalition finds employment, training, and places to heal on America's farms for returning veterans. http://www.farmvetco.org/
- Maine Organic Farmers and Gardeners Association (MOFGA) Journeyperson Program was created to fill the continuing education gap between apprentice and independent farmer, and to provide the resources and opportunities for prospective new farmers who have completed an apprenticeship to further develop the skills they need to farm independently and successfully.

http://www.mofga.org/ Programs/Journeypersons/





■ Georgia Organics' Farmer Mentoring & Marketing Program http://www.georgiaorganics.org/about_us/programs_projects.php"

■ Montana FoodCorps Grow Montana is now accepting applications for FoodCorps, a team of five full-time AmeriCorps VISTA's helping schools and colleges across Montana to buy more locally-grown foods. http://www.growmontana.ncat.org/





Resources & Tools for Farmers

Fix it!

Learning to invent, repair, and customize your farm to suit your needs is not only fun, but can save you money and time. Here are some fantastic resources for the farmer who likes to tinker!

- The Global Village Construction Set (GVCS) is a modular, DIY, low-cost, high-performance platform that enables fabrication of the 50 different Industrial Machines that it takes to build a small, sustainable civilization with modern comforts. http://opensourceecology.org/
- Make: Projects is a structured wiki for DIY projects. It's a great source for farmers looking to who like to make things and also those who need to learn how to build basic equipment or make modifications. http:// makeprojects.com/
- Sustainable Agriculture Tool Lending Library Ten small farmers (Lil' Farm, and Bluebird Meadows Farm) in North Carolina have cooperated to establish a Sustainable Agriculture Tool Lending Library. They put up money to purchase tools that no single farm needed on a daily or weekly basis, and created a place for people to share them.
- FarmHack TeFarmHack offers farmers new opportunities to work together on tools and innovations that will make our farms more sustainable and efficient. http://farmhack.ent

Seed Suppliers

- Abundant Life Seed Company Cottage Grove, OR 100% certified organic http://www.abundantlifeseeds.com
- Amishland Heirloom Seeds Reamstown, PA Heirloom, heritage, exotic and foreign organically raised seeds http:// www.amishlandseeds.com/index.htm
- Baker Creek Heirloom Seeds Mansfield, MO http://rareseeds.com
- Fedco Seeds Waterville, ME http://www.fedcoseeds.com/

- High Mowing Organic Seeds Wolcott, VT http://www.highmowingseeds.com/
- Johnny's Seeds Winslow, ME An employee-owned company http://www.johnnysseeds.com/
- Kitazawa Seed Co. Oakland, CA The oldest seed company in America specializing in Asian vegetable seeds http://www.kitazawaseed.com
- Peaceful Valley Farm Supply Grass Valley, CA Organic gardening supplies http://www.groworganic.com
- Seed Savers Exchange Heirloom seeds http://www.seedsavers.org/
- Pinetree Garden Seeds New Gloucester, ME https://www.superseeds.com/



- Southern Exposure Seed Exchange http://www. southernexposure.com/
- Territorial Seed Company Cottage Grove, OR ttp://www.territorialseed.com/
- Turtle Tree Seeds Copake, NY Biodynamic Seed Initiative. http:// www.turtletreeseeds.com
- Baker Creek Seeds http://rareseeds.com/

How-To Books

- Hoop-House How To From The Kerr Center for Sustainable Agriculture. Step-by-step photos & illustrations on building a low-cost hoop house. http://www.kerrcenter.com
- Books on Greenhouse Management From the Natural Resource, Agriculture, and Engineering Service (NRAES) http://palspublishing.cals.cornell.edu/
- Hightunnels.org Part of a USDA-sponsored project to test and promote high tunnel systems in the Central Great Plains. Useful articles for growers.
- ATTRA: Greenhouse & Hydroponic Vegetable Production Resources on the Internet http://attra.ncat.org/attra-pub/ghwebRL.html

Livestock and Draft Animals

Getting good quality animals can be difficult at first, but often you can get a few and start your own herd slowly, gently, and carefully. State fairs are good places to meet other small-scale producers, as are auctions, conferences, extension workshops, and slaughterhouses. Your vet/feed merchant will also know of folks nearby. Nearby breeders and breed associations may have an Internet presence.

■ Niche meat marketing guide, buyers guide from **lowa State Ag Extension**: www.extension.iastate.edu/store/ ItemDetail.aspx?ProductID=13056

■ ATTRA

www.attra.ncat.org/livestock.html

- **SARE**: www.sare.org/coreinfo/animals.htm
- Books on Livestock From **Storey Publishing** comprehensive and accessible guidebooks: www.storey.com/
- New England Animal
 Powered Field days http://
 draftanimalpowernetwork.org/
- Small Farm Journal http://smallfarmersjournal.com/
- Breeds of Livestock, Department of Animal Science, Oklahoma State University:

www.ansi.okstate.edu/breeds

■ American Livestock Breeds Conservancy www.albc-usa.org

Equipment

- Kubik, Rick. How to Use Implements on Your Small- Scale Farm. Motorbooks Workshop, 2005.
- Quick, Graeme R. **The Compact Tractor Bible**. Voyageur Press, 2006.

Steel in the Field http://www.sare.org/Learning-Center/Books/Steel-in-the-Field



To learn about the soil types on your property, check out the USDA-NRCS Soil Survey that has soil maps, apps for your phone and descriptions of soil characteristics. You can find a copy of the Soil Survey at county offices of USDA-NRCS, Soil and Water District, or Cornell Cooperative Extension. Maps can also be viewed online at: http://websoilsurvey.nrcs.usda.gov

Regional Assistance in Marketing

Many states (ie. Grown in Detroit, Long Island Grown, Made in Maine) have marketing groups with brochures/

farm maps pointing consumers to your farmstand or product. You can usually find out about them from the state agriculture department.

- AgMap (Pennsylvania) Online listing of Pennsylvania agriculture businesses. http://agmap.psu.edu/
- Appalachian Sustainable Agriculture
 Project Helps create and expand local food
 markets.

http://www.asapconnections.org/

■ Grocers Buy Local (Wisconsin) official website and database of Wisconsin grocers interested in purchasing locally grown fruits, vegetables, meats, cheese and more from local farmers, growers, producers and manufacturers. Developed to help sellers match up with local grocery or corporate buyers to facilitate the sale of products in their

area or across the state of Wisconsin. http://grocersbuylocal.com/

■ Minnesota Grown Directory

http://www3.mda.state.mn.us/mngrown/

- Southeastern Massachusetts Agricultural Partnership, University of Massachusetts - Dartmouth Work to create local demand for locally-grown products. Also provides business & technical assistance. http://www.umassd.edu/semap/
- Community Alliance with Family Farmers (California) http://www.caff.org/
- Center for Integrated Agricultural Systems

(Wisconsin) Online local food guide. http://www.cias.wisc.edu/farm-to-fork/scaling-up-meeting-the-demand-for-local-food/



Farmers Markets

- Some thoughts on selling at farmers' markets by Nina Planck, founder of the **Regional Food Council** http://newfarm.rodaleinstitute.org
- ATTRA Farmers' Markets: Marketing and Business Guide: attra.ncat.org/attra-pub/PDF/farmmarket.pdf
- ATTRA Market Gardening: A Start-up Guide Gives an overview of issues when considering market gardening http://attra.ncat.org/attra-pub/summaries/marketgardening.html
- ATTRA Direct Marketing Emphasizes niche, specialty, and value-added crops http://attra.ncat.org/attra-pub/summaries/directmkt.html
- SARE Farmers Markets http://www.sare.org/publications/marketing/market01.htm
- SARE The New Farmers' Market: Farm-Fresh Ideas for Producers, Managers and Communities http://attra.ncat.org/attra-pub/summaries/valueovr.html
- \blacksquare Farm to Market, North Dakota's Guide to Selling Local Food
- Farmers Market Search Compiled by the AMS, USDA http://apps.ams.usda.gov/FarmersMarkets/
- Market Farming E-mail Discussion Group http://lists.ibiblio.org/mailman/listinfo/market-farming
- North American Farmers' Direct Marketing Association http://www.nafdma.com
- Farmers Market Coalition
 http://www.farmersmarketcoalition.org/

CSA Resources

- Just Food connects local farmers to direct marketing opportunities in New York City through three programs: CSA in NYC, The City Farms Markets, and Fresh Food for All. http://justfood.org
- Teaching Direct Marketing and Small Farm Viability The UC Santa Cruz Center for Agroecology and Sustainable Food Systems designed this publication as a resource for educators http://casfs.ucsc.edu/education/instruction/tdm/index.html
- Resources compiled by the Alternative Farming
 Systems Information Center
 http://www.nal.usda.gov/afsic/pubs/csa/csafarmer.shtml

- Prairieland Community Supported Agriculture E-Mail List Network on Community Supported Agriculture http://www.prairienet.org/pcsa/CSA-L/
- Member Assembler Online CSA sign-up and management tools from Small Farm Central http://smallfarmcentral.com/memberassembler"

CSA Farm Directories

CSAs are becoming more popular as conscious eaters actively seek them out in their area. Get listed in one of these directories specifically for CSA farms.

- Biodynamic Farm and Gardening Association http://www.biodynamics.com/csa1.html
- Future Harvest-CASA , Chesapeake Region http://www.futureharvestcasa.org/who.html
- Madison Area Community Supported Agricultural Coalition, Farm List

http://www.macsac.org/farmlist.html

■ Maine Organic Farm and Gardening Association, CSA Directory

http://www.mofga.org

- Robyn Van En Center at Wilson College http://www.wilson.edu/csasearch/search.asp
- Twin Cities Region, CSA Farm Directory http://www.landstewardshipproject.org/csa.html

Value-Added Products

- ATTRA Adding Value to Farm Products: http://attra.ncat.org/attra-pub/summaries/valueovr.html
- National Center for Home Food Preservation A great starting place for small-scale food preservation techniques, including food safety tips. Make something marketable with the "non-commercial" produce left in your fields. http://www.uga.edu/nchfp/index.html
- Farm Made: A Guide to On-Farm Processing for Organic Producers An Overview and Four Example Enterprises: Sorghum Syrup, Packaged Fresh Salad Greens, James, Jellies, and Spreads, and Table Eggs. By George Kuepper, Holly Born & Anne Fanatico

Retail

■ Cooperative Grocer Find a local food co-op near you http://www.cooperativegrocer.coop

■ Selling Directly to Restaurants & Retailers From UC SAREP. Learn how to effectively market and sell to restaurants and retailers. http://www.sarep.ucdavis.edu/cdpp/selldirect.pdf

Farm-to-Institution

- USDA Food and Nutrition Service Farm to School Lots of resources, policy info, and grant opportunities. http://www.fns.usda.gov/
- Farm to School connects schools (K-12) and local farms with the objectives of serving healthy meals in school cafeterias, improving student nutrition, providing agriculture, health and nutrition education opportunities, and supporting local and regional farmers http://www.farmtoschool.org/
- What Can USDA Do? This document is a ten-point roadmap for national coordination between government at all levels and partners promoting Farm to School and sustainable procurement practices developed by the National Farm to School Network, Community Food Security Coalition, and School Food FOCUS. http://www.farmtoschool.org/files/publications_243.pdf
- Farm to School Minnesota Toolkit for Food Service
 This toolkit is based on materials developed in the
 Willmar, MN School District during a 3-year pilot project
 funded in part by the Regional Sustainable Development
 Partnerships.

http://www.mn-farmtoschool.umn.edu/

- Oklahoma Farm to School This group aims at getting Oklahoma-grown food on the cafeteria trays of school children. Check out their Farm to School Tips, Tools & Guidelines for Food Distribution and Food Safety. It includes a distribution cost template (true cost of delivery) and a produce calculator (cost per serving of produce to work with school nutrition program). http://www.okfarmtoschool.com/"
- Marshfield Clinic Research Foundation: Agritourism Guides http://marshfieldclinic.org
- ATTRA: Entertainment Farming & Agri-tourism Business Management Guide http://attra.ncat.org/attra-pub/entertainment.html

Pricing

■ Organic Price Index From the Rodale Institute. Updated about monthly. http://newfarm.org/opx/

- USDA: Fruit & Vegetable Market News Run custom reports of prices for fruits and vegetables, including ornamentals and organic.
 http://www.marketnews.usda.gov/portal/fv
- USDA: Livestock & Grain Market News Daily and weekly reports for livestock, meat, grain, and even ethanol. http://www.ams.usda.gov

Organizations & Resources

- Farm Service Agency Beginning Farmer Loan

 Program: fsa.usda.gov/FSA/webapp?area=home&subject=f
 mlp&topic=bfl
- The National Council of State Agricultural Finance
 Programs provides an easy-to-navigate directory of state
 loan programs: stateagfinance.org
- Farm Credit Services of America Young and Beginning Program: fcsamerica.com/products/YoungBeginningProgram.aspx
- Whole Foods: wholefoodsmarket.com/values/local-producerloan-program.php
- Community Land Trust: cltnetwork.org
- Rudolf Steiner Finance and other Social Finance Firms: rsfsocialfinance.org
- KIVA Microlending: kiva.org
- Farm Link Program Directory state-run programs which facilitate the transition of land between generations of farmers and ranchers, and can provide a degree of mentorship, business planning and banking advice: farmtransition.org/netwpart.html
- Incubator Farms usually support new farmers by offering access to land, equipment, infrastructure, mentorships, and sometimes paid work until farmers feel confident that they have enough experience to get along on their own two feet and have the means to acquire their own land. Here's a great example: carolinafarmstewards.org/projects.shtml
- Farm On a program helping to preserve family farm businesses by matching beginning farmers who do not own land with retiring farmers who do not have heirs: extension. iastate.edu/ bfc/programs.html
- Farmland Information Center a clearinghouse for information about farmland protection and stewardship. Browseable by state: farmlandinfo.org NCAT Guide how to find and secure land to farm: http://attra.ncat.org/attra-pub/PDF/finding.pd



Resources for Educators

Project Ideas

- Farmer Career Day: Invite farmers, homesteaders, ranchers, grocers, chefs and other involved with the food system to talk about their careers.. Ask participants to prepare mini-activities, bring tools to pass around and make the day an interactive and engaging opportunity for teachers, students and families in the school community. End the day with a potluck meal hosted in the school cafeteria, and allow time for authentic relationships to form over a good meal.
- Homestead Web-TV: Homesteading is the art of making do with basic tools, local resources and ancient know-how to accomplish practical tasks. Homesteading activities range from canning fruits and vegetables to building your own structures and furniture, to growing your own food. To learn more homestead practical skills, launch a web-TV series dedicated to homesteading activities in your classroom. Students can choose something to learn each month, record the process of making and doing, and then edit in the media lab with iMovie or simple video editing applications. For inspiration check out How-to Homestead an organization that makes short films dedicated to 21st century homesteading (http://www.howtohomestead.org/). Some episodes available online include:
 - Starting an Egg Coop
 - Self Watering Container
 - Apartment Vermicomposting
 - Milk Crate Planter Bed
 - Dandelion Tea
 - Canning Jerusalem Artichokes
 - Making Bread
- Greenhorns Radio: Get out there and record the sounds of the farm, ask questions about where food comes from and how to get involved in farming. For teachers, this is a great language arts and communication standards tie-in. Students can research local farms, reach out to someone for an interview, develop their own questions, conduct the interview at the school or farm, and then transcribe into a little zine or visual essay to display in the school. You can also setup your own Radio

Station and upload each recording as a podcast. Free online tools like Shoutcast make it pretty easy: http://www.shoutcast.com/). For inspiration listen to interviews conducted by Greenhorns members and organizers on the Heritage Radio Network: http://www.heritageradionetwork.com/programs/7-Greenhorn-Radio



■ Intern & Service Learning:

Internships and service learning opportunities are great ways to work with students who learn best through experience. You can easily get involved with a local farm by doing some research on programs in your area, and just talking to local farmers. Work with your principal or career counselor to make the internship opportunities sustainable each year, and offer credit to students in subject areas like science and social studies. A list of opportunities has been compiled by folks at the USDA: http://www.nal.usda.gov/afsic/pubs/edtr/EDTR2009. shtml

- Partner Up: Partnering with a local business, organization or non-profit can launch an amazing collaborative project that involves students, teachers and the local neighborhood. In the Bay Area of California, High School students have been working with a farm on the San Mateo Coastline called Pie Ranch. The program brings students to the farm to help grow and harvest ingredients that are used to make pies at a local shop in San Francisco's Mission District. Students get a direct connection to the land through farming and then get to eat the fruits of their labor, literally, at a local pie shop. What a dream!
- Community Supported Agriculture (CSA- CSA's are a popular system of bringing local farm goods to communities around the country. Making your local school a drop-off point can provide a necessary way for farmers to connect with students and their families, and maybe get some of the CSA share leftovers into the school lunch!

- Film Festival Host a film festival at your school that features films related to food, young farmers and the environment. The film festival could be a great opportunity for students to make a mini-documentary of their own based on local farms and issues in your community. Some film suggestions include:
 - The Greenhorns
 - Garlic is as Good as Ten Mothers (1980)
 - King Corn (2007)
 - The Power of Community: How Cuba Survived Peak Oil (2006)
 - Our Daily Bread (2006)
 - Super Size Me (2004)
 - Food, Inc. (2009)
 - Rural Thrift
 - Small Farm Rising
 - Farm to Trailer
 - Brookford Almanac
- Seed Library Start a seed library at your school! Invite students and their families to share seeds from their own backyards, from local farmers and gardens. You can use

test tubes or vials from the science lab, and create your own custom packaging. Host a seed swap to get local farmers to meet up with communities around the school and learn together about what's going on in the region. (http://seedlibrary.org/)

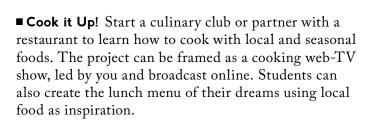
- Join the **Food Corps** and build that resume while helping to bring local food to communities that need it: http://foodcorps.org/
- Teacher in Residence Just like artists in residence, teachers in residence take time to develop their learning and teaching methods in collaboration with others. A great example is Slide Ranch. Founded in 1970, this non-profit teaching farm is located at a historic coastal dairy perched above the ocean in the Marin Headlands within the Golden Gate National Recreation Area. Organic gardens, goats, sheep, chickens and ducks, along with numerous coastal trails, tidepools and pocket beaches,

provide an ideal outdoor venue for teaching about healthy foods, healthy living and environmental awareness. http://www.slideranch.org/

■ Grow a Garden - Make your schoolyard edible by starting a small garden with plans to expand into something that could provide food for the cafeteria once a week or once a month. To get started, make the creation of the garden a school-wide initiative. Get support from teachers, community members, families and students. Make a list of what you'd lik to grow and a map of where, test the soil, get the right materials and ask volunteers to help setup the necessary arrangement.

Develop a plan to deal with summer time, and ask teachers to helpd integrate the garden's operation into math, science and language arts requirements.

■ Farm to School - The National Farm to School Network started in the early 1990's now provides resources that connect K-12 schools with local farms, helps setup local procurement contracts and educational programs in schools. http://www.farmtoschool.org





Art & Design Projects

■ Edible Estates Edible
Estates is an ongoing
initiative to create gardens
that replace front lawns
with places for families to
grow their own food. The
eight gardens planted thus
far, have been established
in cities across the United
States and England. http://



www.fritzhaeg.com/garden/initiatives/edibleestates/about. html

- FRUIT Network The FRUIT network was an art project led by a group called Future Farmers, that helped connect people to where their food comes from. People could use mobile devices to tag the location of a fruit, and add these locations to an interactive map. http://www.futurefarmers.com/projects/fruit
- Victory Gardens The Victory Garden project draws from the historical model of the 1940's American Victory Garden program, encouraging San Francisco residents to reclaim their backyards as places to grow food for thier communities.

http://www.futurefarmers.com/victorygardens/

■ Not a Cornfield The Not A Cornfield project, was the transformation of a 32-acre industrial brownfield in the historic center of Los Angeles into a cornfield for one agricultural cycle. The temporary project was located just North of Chinatown and South of Lincoln Heights on a large stretch of land well known as "The Cornfield." After the project ended, participants and founders of the project created, Farm Lab as a think tank, art production studio, and cultural performance space, exploring what lessons raised and learned from the project with local communities.

http://www.farmlab.org/

■ Fallen Fruit Fallen Fruit is an art collaboration that began with creating maps of public fruit: the fruit trees growing on or over public property in Los Angeles. Over time their interests have expanded from mapping public

fruit to include Public Fruit Jams in which citizens bring homegrown or public fruit and join in communal jammaking.

http://www.fallenfruit.org/



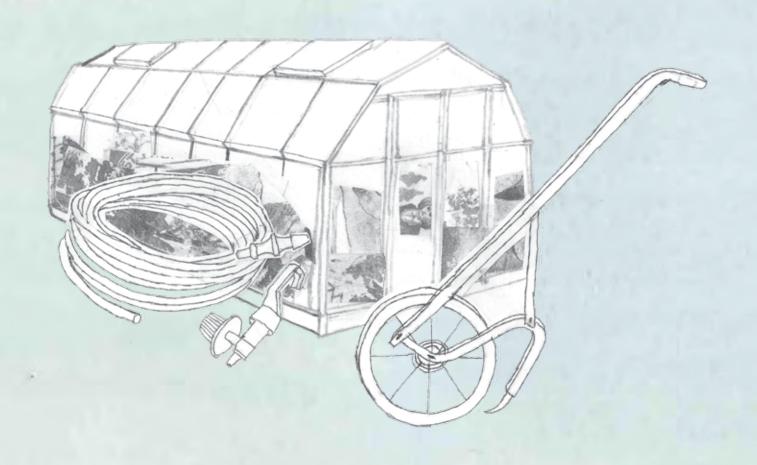
Curriculum

- Farm Internship Handbook: http://www.attra.org/intern_handbook/
- UC Santa Cruz Ecological Horticulture Class Curriculum: http://casfs.ucsc.edu/education/instruction/esa/index.html
- Beginning Farming 101– an online course: http://nebeginningfarmers.org
- Organic Transition Course (Rodale Institute) free and online: http://www.tritrainingcenter.org/course/
- Pittenger, Dennis R., ed. California Master Gardeners Handbook. University of California Agriculture & Natural Resources, 2002 a great, straightforward textbook
- Teaching Organic Farming & Gardening UC Santa Cruz Center for Agroecology and Sustainable Food Systems has a free, downloadable curriculum that it uses to teach its Ecological Horticulture Class. Why not print it off and go through the work pages.
- What's On Your Plate? http://www.whatsonyourplateproject.org/



Notes

GLOSSARY



Glossary

4-H - is a national youth organization that prepares young people to step up to the challenges in their workplace, community, and the world. Administered by the National Institute of Food and Agriculture the United States Department of Agriculture with the mission of engaging youth to reach their fullest potential. The name includes four personal development areas of focus: head, heart, hands, and health. The goal of 4-H is to develop citizenship, leadership, responsibility and life skills of youth through experiential learning programs. http://www.4-h.org/

American Farm Bureau Federation

- AFBF is the unified national voice of agriculture, working through our grassroots organizations to enhance and strengthen the lives of rural Americans and to build strong, prosperous agricultural communities.www.fb.org

Aquaculture - the farming of aquatic organisms such as fish, crustaceans, molluscs and aquatic plants.

Annual- is a plant that germinates, flowers, and dies in a year or season. In gardening, annual often refers to a plant grown outdoors in the spring and summer and surviving just for one growing season. Many food plants are, or are grown as, annuals, including almost all domesticated grains. Corn, wheat, rice, lettuce, peas, watermelon, beans, zinnia, and marigold are common examples.

'Angel' Donor - a wealthy individual who gives or gifts money towards an idea in return for a piece of the ownership.

Biennial – a plant that germinates one year, and sets seed and dies the second year.

Biodynamic- is an organic farming method that emphasizes the holistic development and interrelationships of the soil, plants and animals as a self-sustaining

system. It has much in common with other organic approaches: the use of manure and compost, and excluding the use of artificial chemicals on soil and plants.

Brownfield- sites are abandoned or underused industrial and commercial facilities available for re-use. The soils on brownfield sites are often contaminated with industrial, commercial, or residential waste. EPA grants are available to remediate these sites.

Business Plan - a document which outlines the mission, vision, goals, skills, assets, and liabilities of a business.

Business Succession - the process of inheriting, buying out, or purchasing an existing business in an orderly manner.

Calories- units of food energy measurement.

Cash Crop – an agricultural crop or product grown for direct sale, usually wholesale, and for profit.

Citizen Farmer- Thomas Jefferson's concept of an ideal American citizen was an educated farmer. Considered to be the basis of a strong nation, the citizen farmer is a strong and healthy individual that makes a living through the practical agricultural arts and embracing environmental stewardship.

Chamber of Commerce- a non-profit community business network organized to further the interests of businesses within a region http://www.uschamber.com/

Commercial- refers to a system of voluntary exchange or trade of goods, products, services, information or money to the market.

Commodity- a generic term for any marketable item produced to satisfy wants

or needs.

Comprehensive Policy - combination of several coverages to protect the insured.

Commodities Market – the national or global marketplace for the sales of large commercial cash crops, commodities are tracked on the stock exchange i.e. corn, soybeans, rice.

Conventional Agriculture – used to describe a wide array of agricultural practices and philosophies, but generally emphasizing uniform high crop yields, profitability, labor efficiency, and new technologies.

CSA- a community of individuals who pledge support to a farm operation so that the growers and consumers provide mutual support and share the risks and benefits of food production. Typically, members or "share-holders" cover, in advance, the anticipated costs of the farm operation and farmer's salary. In return, they receive percentage shares in the farm crops.

DBA - doing business as, this is the simplest way to set up a business and checking account for your farm, it requires only a visit to the county seat to ensure there are no other farms or businesses with that name and is prerequiste to getting farm insurance or selling at some farmers markets.

Extension- is a nationwide, non-credit educational network run by land grant institutions. Agents provide practical research-based education and consultation in; agricultural systems, animals, biotechnology & genomics, economics & community development, education, environment & natural resources, families, youth & community, food, nutrition & health, international, pest management, plants, technology & engineering. http://www.csrees.usda.gov/Extension/

Extension Agent - an employee of the national Cooperative Extension Service and an employee of a land grant university. They are typically assigned to an extension area of expertise and a territory (state, region, or county).

Ecosystem- is a community of living organisms (plants, animals and microbes) cycling nutrients and energy flow with non-living components of the environment (things like air, water and mineral soil).

Entrepreneur- an individual who develops financial and business expertise in order to create new economies, businesses, or goods for market.

Employer Identification Number - a tax number assigned by the federal government to each business that hires employees

Fallow- land purposely left out of active agricultural production and rotation for a time period

Farm to School - a program that connects schools (K-12) and local farms with the objectives of serving healthy meals in school cafeterias, improving student nutrition, providing agriculture, health and nutrition education opportunities, and supporting local and regional farmers. www.farmtoschool.org

Ferment- a biologic and metabolic process where sugars are converted to cellular energy.

Farm Incubator Program - an educational program that offers aspiring or beginning farmers land, equipment, and support as they develop their new businesses.

Financing - the process of borrowing money for a set purpose.

FFA- The National FFA Organization (also known as Future Farmers of America) envisions a future in which all agricultural education students will

discover their passion in life and build on that insight to chart the course for their educations, career and personal future. www.ffa.org

Food Desert- an area where healthy, affordable food is difficult to attain. The term includes both rural and urban areas, and is associated with a variety of health and dietary problems, lack of access to grocery stores, and high food costs.

Food System- includes all processes and infrastructure involved in feeding a population: growing, harvesting, processing, packaging, transporting, marketing, consumption, and disposal of food and food-related items. It also includes the inputs needed and outputs generated at each of these steps like labor and electricity.

Germination- is the process by which plants, fungus and bacteria emerge from seeds and spores, and begin growth.

Grange- Also known as the Order of Patrons of Husbandry, the Grange is the oldest American agricultural society. Major objectives of the National Grange support stewardship of America's natural resources; promotion of world-wide free trade; a combination of local and federal support for rural education, medical, communications, and road systems; nonpartisan political participation; assurance of safe and properly labeled food products; organization of cooperatives and other economic services to support rural Americans; and the elimination of direct government farm programs so as to assure a competitive and efficient farm system. http://www.nationalgrange.org

Heirloom- Heirloom plants are named after family heirlooms, they are usually varieties adapted for flavor, shape or regional climate adaptation -- many are horticultural varieties best suited for gardens, not large scale operations. They have been chosen, bred and passed down for generations, usually because of their amazing taste or canning qualities, not for shipping or industrial processing. " old time apples" can be bred for cider, cold storage etc.

Hoop House- a greenhouse with a plastic roof wrapped over flexible piping. Used to extend the farming season by providing a sheltered growing area. **Interest Rate**- is the rate at which interest (a fee paid to borrow money) is measured by a borrower for the use of money that they borrow from a lender.

Limited Liability Corporation (LLC)

- a form of company that provides limited liability (legal responsibility) to individual members to help protect their personal property in case of business failure or lawsuits

Leasing - the process of paying for the use of an item, piece of land, or building for a set period of time.

Market Niche- defines the specific product features to satisfy a specific market needs and price range

Middleman- a company or individual that purchases goods or services with the intention of reselling them rather than consuming or using them.

Organic- includes foods that are produced using methods that do not involve modern synthetic inputs such as synthetic pesticides and chemical fertilizers

Organic Agriculture – "Organic agriculture is a production system that sustains the health of soils, ecosystems and people. It relies on ecological processes, biodiversity and cycles adapted to local conditions, rather than the use of inputs with adverse effects. Organic agriculture combines tradition, innovation and science to benefit the shared environment and promote fair relationships and a good quality of life for all involved..."—International Federation of Organic Agriculture Movements

Permaculture- ecological design and engineering principles which develops a long-term and self- maintained agricultural system modeled on natural systems. The central ideas are around caring for the earth and the people who use and need it, as well as setting limits on population and consumption.

Perennial- a herbaceous plant that lives for more than two years.

Personal Liability- personal insurance purchased for protection.

Plant Propagation- the process of growing new plants from a variety of sources: seeds, cuttings, bulbs and other plant parts. It can also refer to natural or artificial dispersal of plants.

Partnership - a business owned and operated by multiple individuals or families

Retail – a form of marketing and purchasing where the seller provides a single or very few products to an individual customer at a higher rate or cost due to the small purchased number.

Slow-Money - a financial and political movement which aims to organize investors and donors in order to support small businesses, individual projects, and community initiatives

Small Business Development
Center (SBDC) - a government
sponsored educational outreach center
that offers mentorship, business plan
assistance, and networking

Schedule F - an agricultural tax form

Sole Proprietorship - a business owned and operated by one individual or family

Stewardship - the conducting, supervising, and careful, responsible management of something entrusted to one's care.

Sustainable - of, relating to, or being a method of harvesting or using a resource so that the resource is not depleted or permanently damaged.

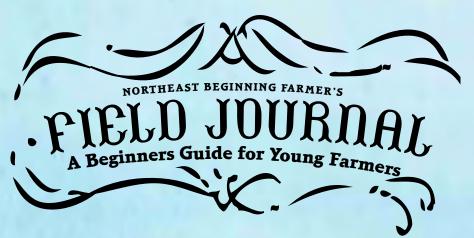
Value-Added- the process of modifying a basic product in order to increase the value of that product i.e. turning fruit into jams, turning milk into cheese, turning wood into furniture.

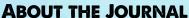
USDA - United States Department of Agriculture

Wholesale – a form of marketing and purchasing where the seller provides many products to an individual customer at a lower bulk rate of cost.

Notes







There's currently a movement underfoot! A recent groundswell of young farmers are fostering an agricultural movement with farmers who have worked the land for generations. With this underway, our government is recognizing the need for more young farmers and implementing programs to encourage them, while organizations are offering support networks, training opportunities, and resources to help them get started. The Greenhorns and the Northeast Beginning Farmers Project are two examples of such organizations and have joined together to create the Field Journal. This project was supported by the Beginning Farmer and Rancher Development Program of the National Institute of Food and Agriculture, USDA, Grant # 2009-49400-05878.















