

Developing a resource guide for beginning farmers.



NIFTI Field School – October 7th

Alice Topaloff

1. Context: Iowa, ISU and beginning farmers.
2. Building the guide.

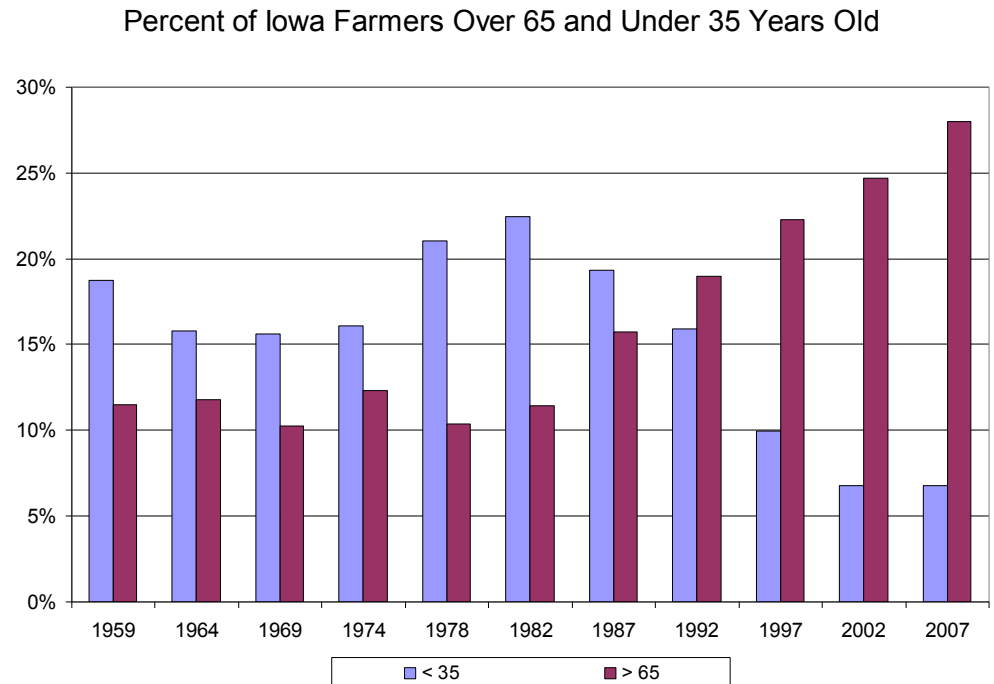


Beginning Farmer Center



ISU's growing interest in 'alternative' agriculture

- Increasing local foods markets
- Falling commodity prices
- Aging farmer demographics
- Job creation



Leopold Center for Sustainable Agriculture

- Strong supporter of alternative, sustainable agriculture systems.
- One of the Center's priorities is to support beginning farmers.



LEOPOLD CENTER



IOWA STATE UNIVERSITY

Extension and Outreach

Healthy People. Environments. Economies.

Beginning farmers in Iowa

- Increasing number of people from a non-farming background wanting to get into farming.
- Beginning farmer programs in Iowa
 - Beginning Farmer Center (ISU)
 - Labor 4 Learning, Saving Incentive Program (SIP)
 - Harvest our Potential (WFAN)
 - **Global Greens (LSI)**
 - Apprenticeship program? Other incubator farms?

Iowa State University's role?

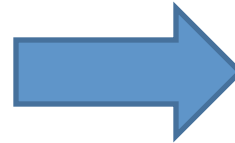


- Research and educational institution.
- ISU = great resources that are very well hidden.

Step 1: Building the curriculum structure.

- Existing curricula from:

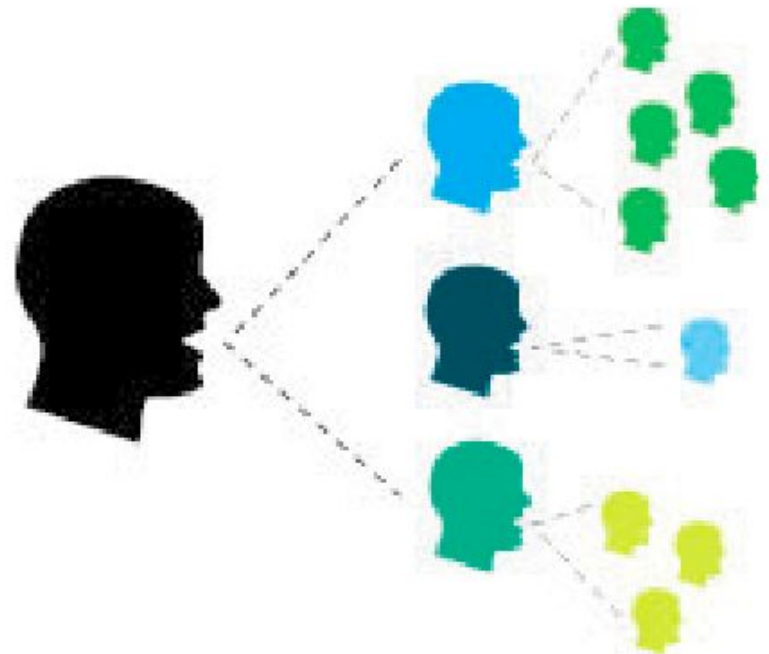
- Farm Incubator Toolkit
- Cornell Extension
- University of Illinois
- Community CROPS
- OSU Growing Farms
- VSAT Program (veterans)
- Angelic Organics Learning Center
- Elma C Lomax
- ...



- ✓ Topics
- ✓ Structure
- ✓ Format

Step 2: Finding resources.

“Snowball sampling”



Step 3: Proofing.

- ISU Extension community of practice
- Groups supporting beginning farmers
- Beginning and aspiring farmers

Result: a Beginning Farmer Resource Guide

- Extension: from 'experts' to supporters.
→ Resource Guide
- A product adaptable to local realities.

Three parts, 21 modules

A. Production

1. Soil
2. Composting
3. Plant biology
4. Irrigation systems
5. Field preparation and planting
6. Insect control
7. Weed management
8. Plant pathology
9. Season extension
10. Cover cropping
11. Equipment
12. Whole farm management

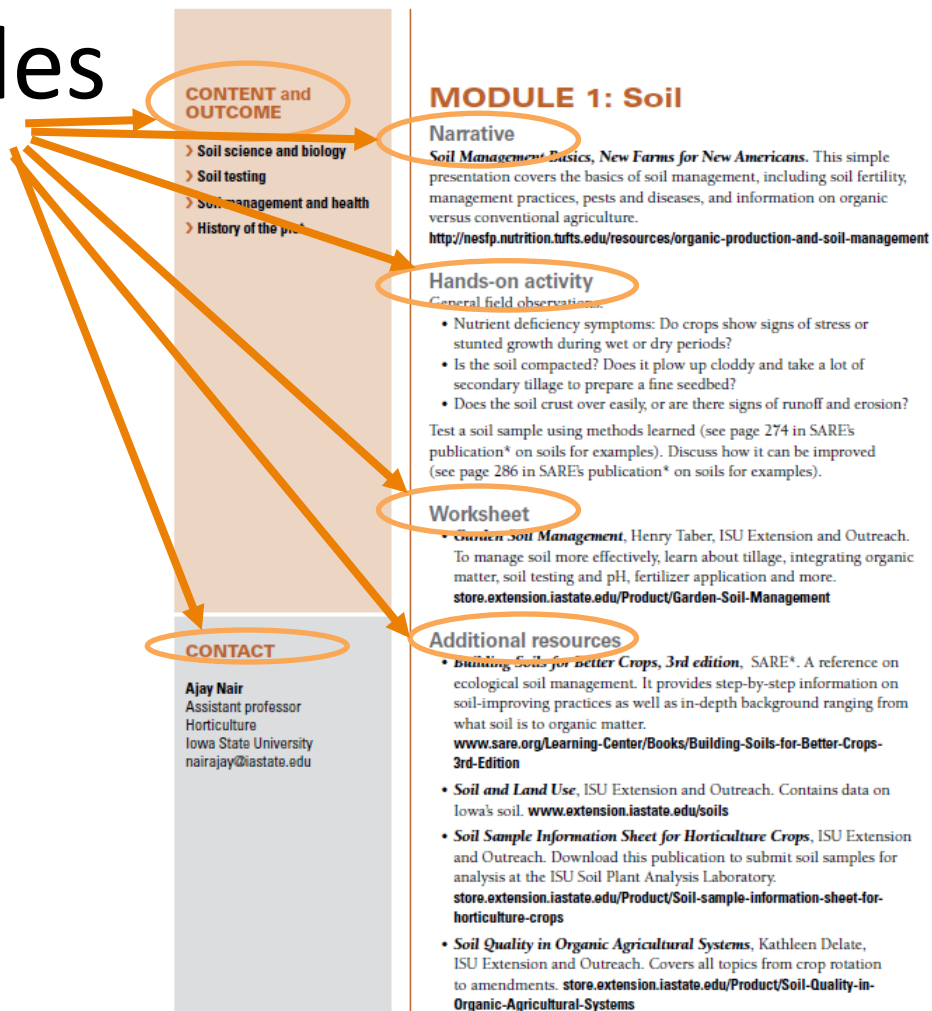
B. Post-harvest handling and food safety

1. Harvesting and storing
2. Food safety
3. Seed saving

C. Business planning and financing

1. Starting out with financial management
2. Writing a business plan:
 - What you have
 - Where you want to go
 - What routes will take you there
3. Farm data collection and organization
4. Organizing basic financial information
5. Financing from loan providers and federal agencies

Modules



10 A Reference Guide for Beginning Farmers

And!

- List of contacts by topics
- Organizations and programs that support beginning farmers:
 - Formal training
 - Online courses
 - Practical experiences
 - Incubators
 - Business plan courses
 - Access to capital
 - Access to land



The Farming Institute



Application target.

- Resource guide for growers looking for information, contacts, and programs available.
- Base to build a curriculum on.

Current application.

- Guide for resources available in Iowa.
- Prison garden training.
- Apprenticeship program (?)



Vegetable garden at ICIW
(photo by Alison Weidemann)

Thank you!

- Publication available at:
[http://
store.extension.iastate.edu/
Product/A-Resource-Guide-
for-Beginning-Farmers](http://store.extension.iastate.edu/Product/A-Resource-Guide-for-Beginning-Farmers)

Contact –

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LOWCOUNTRY LOCAL FIRST

Curriculum for New and
Beginning Farmers



@lowcountrylocal



@wings_of_tin

Developing Curriculum

- **Background**
- **Farmer needs**
 - Understanding training needs and identifying your role
- **Self evaluation**
 - SWOT and resources in the community
- **Knowing your audience**
 - Demographics, education and demand
- **Existing models**
 - Content, format and availability
- **Exploring the reality of adapting a curriculum**



LOWCOUNTRY LOCAL FIRST

Lowcountry Local First, founded in 2007, advocates the benefits of a local living economy by strengthening community support of our local independent businesses & farmers. Buy Local and Eat Local initiatives provide training, networking, education and outreach.



Over 500 Business Members



Launched Local Works Co-working



Hosts annual GOODBusiness Summit



Provides monthly networking events and ongoing advocacy



Advocated for municipal local preference option



Over 180 farmers served



Launched first farming apprenticeship & incubator farm (Dirt Works) in SC



Graduated over 107 farming apprentices since 2010



Provides monthly farmer training, field trips, and networking



Consumer Education and Outreach

EAT *LOCAL*



Growing New Farmers

- Sustainable Ag Certificate & Apprenticeship
- Dirt Works Incubator Farm
- Land Match



Farm Services

- Growers Groups, Workshops, Listserv



Consumer Education and Outreach

- Eat Local Month, Farm Fresh Food Guides, Ripe Charts

Growing New Farmers



- The Growing New Farmers Project (GNFP) Sustainable Agriculture Certificate and Apprenticeship provides aspiring farmers with low-cost opportunities to train, network, and mentor.
- 5-month curriculum based program with coursework and field days (M/W) covering core concepts in sustainable agriculture and farm business.

Growing New Farmers

- \$2,000 for program with scholarships available.
- Indoor and outdoor experiential learning
- Participate in Lowcountry Growers' Group
- Farm tours and field trips throughout the area





Dirt Works Incubator Farm provides a host site for apprentice trainings, farm mentors, and a potential site for future operations.



Dirt Works Incubator Farm

The farm was launched 2012 building off the growth & demand created by the apprentice program & includes a one-acre teaching farm.

🐓 \$2,000 a year

🐓 Each farmer is provided access to 1.5 acres of arable land with mainline irrigation

🐓 Access to packing facilities, walk-in cooler, tractor, attachments, hand-tools, storage, restrooms, walk-in cooler.

🐓 Dirt Works Farm Alliance

🐓 Full-time Farm Manager

🐓 One-on-one business stewardship





GOODFarming Workshops:


Modeled after the C.R.A.F.T. concept of farmer to farmer training and tours of local farms but facilitated by the organization and includes coordinated trainings by topic. Allows us to cover advanced topics.



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What do farmers need to know?

- The reality of what it means to be a farmer.
 - Production
 - Equipment
 - Recordkeeping
 - Market
 - Business planning
 - Legal
 - Financial
 - Management
- 
- A cartoon illustration of a yellow van labeled "JACK OF ALL TRADES" and "Happy Hal PROPRIETOR". The van is overflowing with various tools and equipment, including a lawnmower, a chainsaw, a shovel, a broom, and a wheelbarrow. A small dog is sitting on the roof of the van, and a small animal is running alongside it.



<https://allresourceupdates.files.wordpress.com/2013/05/jack-of-all-trades-jpeg.jpg>

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Self-evaluation

Organizational Capacity

- What are your organizational strengths?
- Expertise of staff?
- Existing experts in your area?
- Potential partner organizations?
- Serving your mission while meeting the needs of the community?

SWOT ANALYSIS



Self-evaluation

- Don't try to be everything to everyone.
- Work with other organizations to meet the needs (example SCORE).
- Shape a program to fit the needs of your community and your organizational capacity
 - Know the limits caused by funding, staff expertise, etc.
 - Be prepared to grow slowly and adapt often.
 - Be careful not to overpromise (to participants OR funders).

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Knowing your audience

- **20% of farms** are owned by farmers with 10 years or less experience
- More likely to be **women**
- More likely to have a **college degree** and have a major occupation other than farming
- Only **17% of beginning farmers grossed** over **\$25,000** compared to 34% of established farms.
- More likely to have **livestock** as a major component of their business.

Knowing your audience

- Urban versus rural or both?
- Scale (small, mid or large)?
- Livestock, vegetables or both?
- Market opportunities?
- Targeted to immigrants, veterans, other?
- Production styles (small scale intensive, permaculture, cooperative etc.)



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New Farmer Training Models

Program Type	Example
Four Year Collegiate	<i>NC State and Clemson (SC)</i>
Technical Colleges and Certificates	<i>CCCC (NC) and UC Santa Cruz (CA)</i>
For-profit Farm Training	<i>Polyface (VA), Pie Ranch (CA), Growing Growers (KS)</i>
Incubator Farm	<i>Intervale (VT) and Viva Farms (WA)</i>
Combined Programs	<i>LLF Growing New Farmers (SC), The Seed Farm (PA), CEFS (NC), Rogue Farm Corps (OR)</i>
Online or Open Sourced	<i>Cornell, Georgia Organics, Iowa State</i>

Existing Curriculum

- There are a number of organizations that have published curriculums- both free and available for purchase.
- Core components but content often varies by focus and target audience .
- Limiting factors are your own capacity, time, knowledge and budget.



A Resource Guide for BEGINNING FARMERS

**An informational resource manual for
beginning and aspiring Iowa farmers.**

The curriculum in this manual is divided into three parts: production practices, post-harvest handling, and business planning/basic finances. Each module is organized by learning objectives and includes narrative, hands-on activities, and links to worksheets and additional resources.

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Existing Curriculums

- <https://georgiaorganics.org/for-farmers/fundamentals-of-organic-farming-and-gardening-an-instructors-guide-revised-for-2009/>
- <https://www.leopold.iastate.edu/pubs-and-papers/2015-07-resource-guide-beginning-farmers>
- https://attra.ncat.org/intern_handbook/

Existing Curriculum

- We created a spreadsheet to evaluate the structure of programs across the US that we thought were most similar to ours.
- Rogue Farm Corps program was selected due to its combined classroom and mentor model similar to ours and their open sourced curriculum.





Thirty-five modules represent outlines and notes for farmers to discuss various sustainable agriculture topics with their interns.

Curriculum:

 [Download the entire curriculum as a 571K PDF](#)

- Biodynamics
- Composting
- Cover Crops
- Crop Rotation
- Community Supported Agriculture (CSA)
- Direct Seeding
- Entomology
- Farm Records
- Farming on the Wild Side (Conservation)
- Financial Records
- GMOs (Genetically Modified Organisms)
- Goat Husbandry/Milking
- Grazing Systems

- Greenhouse 101
- Hedgerows
- The History of Food & Agriculture
- Irrigation
- Organizing 101: Farm & Food Advocacy
- Plant Pathogens
- Poultry
- Seeds
- Soil Science
- Transplanting
- Water Harvest Through Keyline Design
- Weed Management
- Winter Farming

Field study modules include:

- Direct Seeding
- Harvest/Post-harvest Handling and Food Safety
- Milking
- Starting Plants in a Greenhouse

- Tractor 101
- Transplanting (Field Study)
- Tree Planting
- Weed Management (Field Study)

Developing Curriculum

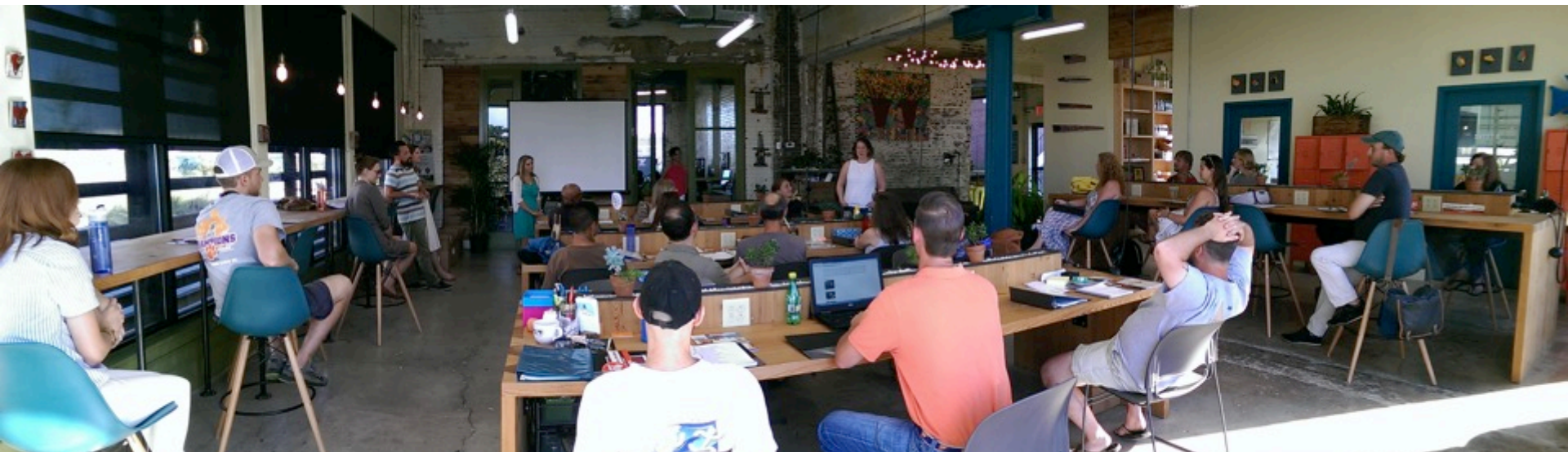
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Adapting Curriculum

- Growing new farmers program started as 80% mentorship with 20% class-time.
- Continued demand for more structured information, more subject coverage and an consistent experience for all regardless of mentor.
- Limited staff and budget but access to acreage at Dirt Works and willing partners.

Adapting Curriculum

- **Outline**
 - Learning objectives, key terms, topic overview, mentor questions
- **Presentation**
 - Created presentations to follow format of outline.
- **Resources Page**
 - Online, videos and books
- **Videos and working documents**



Growing New Farmers



- Growing New Farmers (GNF) Sustainable Agriculture Certificate & Apprenticeship provides aspiring farmers with low-cost opportunities to train, network and mentor.
- 5-month curriculum based program with coursework and field days (M/W) covering core concepts in sustainable agriculture and farm business.

Certificate in Sustainable Ag

Participants will receive a minimum of 350 training hours (up to 550 with apprenticeship), 30 Continuing education credits and receive a Certificate of Sustainable Agriculture from the College of Charleston through the JobBridge program.



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Certificate in Sustainable Ag

- **Core concepts covered at an intro level:** soil health, greenhouses and seeding, cover cropping, pest & disease management, irrigation, crop planning and rotation, food safety and good agricultural practices (GAP) certification, budgeting and record keeping, growing for a Community Supported Agriculture (CSA), wholesale, direct, and farmers markets, cultivation/weed management, season extension options, business planning, financial planning, post-harvest handling and production certifications.

Certificate in Sustainable Ag



- Minimum weekly time commitment required is 8 hours: one (3-hour) evening class with instruction and discussion + one (4-hour) morning on the farm working with guided supervision or a field trip) and 1 hour min. required reading per week.

Week at a glance

- **Mondays:**
 - Classroom based training focused on curriculum for introductory level information.
- **Wednesdays:**
 - On-farm field based trainings and field trips to follow-up on classroom training with application on farm.
- **Apprenticeship (days flexible):**
 - Interested participants will be matched with potential mentors to provide hands-on experience on a working farm. Targeted to meet market and production specific interest of each candidate. Limited based on availability.

Growing New Farmers



2015 Role Call:

24 participants

Age: 23 to 65

Careers: Teachers, Food & Beverage, Non-profit employees, Students, Small Business Owners

Interests: Vegetables, chickens, goats, bees, fruit trees, and educational farming.

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Evaluation

- To ensure the curriculum is truly teaching the core concepts to participants there are a series of evaluation tools, surveys and interviews conducted.

	2013 Season		
1. Fertility and Soil Management	No exposure	Some exposure	Some exposure and some competency
Core Competencies			
Planning soil building crops	1	2	3
Planting and managing soil building crops	1	2	3
Understanding the basics of soil health	1	2	3
Crop incorporation	1	2	3
Organic matter management	1	2	3
Understanding soil testing	1	2	3
Managing off-farm inputs (compost, fertilizers, minerals)	1	2	3
Additional Competencies			
Fundamentals of composting	1	2	3
Hand-built compost	1	2	3
Manure windrows	1	2	3
Living mulch systems	1	2	3

Lessons Learned

- Be honest with yourself!
- Staff can be the greatest limiting factor.
- Be flexible and adapt to meet the needs of participants.
- Leave room for content selected by participants.
- Don't re-invent the wheel.
- Use videos and documentaries when possible.
- Communicate your program clearly with prospective participants.



GROWING NEW FARMERS

Are you a future farmer? Find out about how we are growing the next generation of farmers and food system leaders.

Lowcountry Local First is a nonprofit advocate for local, independent businesses and a resource for the community members they serve.

We're working to create jobs and grow the Lowcountry economy by empowering local makers, growers and service providers.

www.lowcountrylocalfirst.org

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