Contemporary New Farmer Programming in Wisconsin

Rachel Schindler

Public Practice Report Agroecology MS - 2020 University of Wisconsin-Madison

Academic Committee

Julie Dawson, Department of Horticulture, UW-Madison
Alfonso Morales, Department of Planning and Landscape Architecture, UW-Madison
Diane Mayerfeld, Wisconsin SARE

TABLE OF CONTENTS

SECTION I: PROJECT OVERVIEW	3
Project Context	3
Introduction	
Terminology	
Today's New Farmers	
Contemporary New Farmer Programming	
Project Selection	8
Background	
Goals	
Partners	
Challenges	
SECTION II: PROJECT DETAILS	13
Timeline	13
Beginning Farmer Program Matrix	14
Anderson Farm County Park – Land Access Project	24
SECTION III: PROJECT REFLECTIONS	29
REFERENCES	35
APPENDIX A – Beginning Farmer Program Matrix	38
APPENDIX B – Anderson Farm County Park	45
APPENDIX C – Wisconsin BFRDP Awards	52

I - PROJECT OVERVIEW

PROJECT CONTEXT

Introduction

I grew up on a family dairy farm in North Central Wisconsin, as did my father and my grandparents. My brother and cousin continue to farm there and will be the third generation to manage the farm business. This is how our society tends to believe that farming happens. How farmers happen. Generation after generation of knowledge, land, and resources passed down through family members. And it does still happen like this sometimes, but this method of knowledge and resource transfer to the next generation of farmers has become a lot less common. The United States has seen a steady decrease in the number of beginning farmers in recent decades as fewer individuals seek out farming as a career and economic and market forces have increased the challenges that prevent farmers from starting out or being successful when they do desire to farm. In 1982, 38% of principal farm operators were beginning farmers, but as of 2017 just 27% were (USDA NASS, 2019).

Encouragingly, while the number of beginning farmers has been decreasing for decades, between 2012 and 2017 numbers actually increased: new and beginning principle producers went from 522,058 in 2012 to 674,940 in 2017. While still significantly lower in numbers than in earlier decades, the trend reversal points to a hopeful shift. One driver of this shift is the increasing numbers of farmers under the age of 35 in recent years as young people are being drawn back to farming. New and beginning farmer numbers are also increasing as individuals over the age of 35 enter farming – many as a second career, or as a result of some increased access for groups like immigrants, refugees, and BIPOC farmers (although these groups do continue to face significantly greater barriers and challenges to entering farming). There are new farmers today and many individuals who desire to be farmers. However, these new farmers, the farming they aspire to take part in, and the training and support they need in order to enter the field and be successful look very different than in previous generations.

Notes on Terminology

There are many different terms when referring to individuals who are beginning to farm in the United States. And while different terminology is often used interchangeably, there are distinct differences between terminology that is worth noting. Table 1 identifies the most common terminology and definitions used to describe these farmers. Different terminology can be helpful for referring to specific subsets of farmers, but when used interchangeably and without a common understanding of the differences in the definitions, it can blur things and make it hard to discern who exactly is being included.

Throughout this report, "new farmer" is used because of the way it encompasses both individuals who are interested in beginning to farm as well as individuals who are actively in the first 10 years of operating a farm business. Additionally, it is worth noting that the definition of "farmer" itself has a history of only including individuals who are farm owners or principle operators, not those who work on farms in other capacities. However, most new farmer programming is not limited to farm owner/operators and, thus, this paper understands "farmer" to include not just farm owners, but individuals who are engaged in farming at multiple levels.

Table 1. Terminology for new & beginning farmers (Ahearn & Newton, 2009; Sheils & Descartes, 2004)

Term	Definition			
Beginning Farmer	Defined by the United States Department of Agriculture (USDA) as			
	an individual who has been operating a farm for ten years or less			
Aspiring/Prospective	An individual who is interested in and/or planning on starting to farm			
Farmer				
New Farmer	An individual who has been operating a farm for ten years or less OR			
	is interested in/planning on starting to farm			
New-American Farmer	An individual who has experience farming in another country but is			
	new to farming in the United States. Often refers to immigrants			
	and/or refugees who are farming in the US for the first time.			
Next Generation Farmer	A young person who will be part of the next generation of farmers.			
	Sometimes referring to next generation taking over a family farm.			
Young Farmer	A farmer under the age of 35			

Today's New Farmers

The various ways to define a new farmer can make it difficult to get a complete picture of who makes up this group, but data from a variety of sources point toward some distinctive characteristics. The largest data source on farmers in the country is the Census of Agriculture conducted every five years by the National Agriculture Statistics Service (NASS). "New and beginning farmers" is a classification included in the survey, which allows us to get a picture of these individuals. According to the 2017 Census, beginning farmers have smaller farms, farm fewer acres, have lower gross sales, are more likely to work off-farm, and are younger than established farmers (Key & Lyons, 2019). Beginning farmers nationwide are also more likely to be women, have a college degree, and come from a diversity of backgrounds when compared to experienced farmers (Ahearn, 2011). In Wisconsin specifically, a survey in 2014 found that beginning farmers are diverse, are often entering farming as a second career, have prior connections to

farming that inspired them, and often have to work-off farm for supplemental income (Paine & Sullivan, 2015).

It is important to note that the Census of Agriculture as well as the Wisconsin survey only capture beginning farmers that fit the USDA definition of having operated a farm business for fewer than 10 years. As a result, the data does not capture the many new farmers who are aren't operating their own farm business. It also doesn't tell us anything about the individuals who are interested in farming but haven't yet started. In an attempt to capture some of that information, National Young Farmers Coalition (NYFC) conducted a survey of young farmers including aspiring, beginning, and experienced farmers under the age of 35. While not a perfect representation of all new farmers, the survey provides helpful information on young farmers, who are much more likely to be beginning farmers. Their research found that young farmers are less likely to have grown up on a farm and are more likely to have advanced degrees, be women and/or farmers of color, and engage in diversified and sustainable practices (Ackoff et al., 2017).

Today's new farmers face a number of significant challenges to entering and succeeding in farming. Access to land is frequently cited as the most significant barrier for new and young farmers along with access to capital (Ackoff et al., 2017; Ahearn, 2011; Freedgood & Dempsey, 2014). Land access is particularly challenging for new farmers due to increasing levels of farmland loss to development, high land costs, race and gender discrimination, and lack of autonomy and secure land tenure (Figueroa, M. & Penniman, L., 2020). Among beginning farmers in Wisconsin, lack of income, access to land, and access to capital were identified as the most significant barriers to getting started in farming (Paine & Sullivan, 2015). Qualitative research done with farmers in Oregon confirms these challenges while also drawing attention to the fact that these are also common challenges among experienced farmers, but that beginning farmers experience them at greater rates than experienced farmers do (Pool, 2014).

A major driver of the barriers facing new farmers today is the ongoing industrialization and concentration occurring in agriculture as a result of economic and political forces that favor these systems (Carlisle et al., 2019). These forces make entering farming especially challenging for individuals from discriminated against communities as well as those who are seeking to engage in sustainable and ecological farming methods. Given that many of today's new farmers are more diverse than in the past and are seeking out sustainable and agroecological farming systems, programs for new farmers today have also needed to become more diverse and go beyond providing education to address these significant barriers and challenges that new farmers are facing.

Contemporary New Farmer Programming

While formalized education and training programs for farmers date back to 1862 with the passage of the

Morrill Land Grant Act, programs focused specifically on *new farmers* weren't widespread until the mid-20th century. These initial programs served a narrow group of new farmers, however. The majority were offered through academic institutions, which have a history of not meeting the needs of diverse farmers and farming systems, especially around sustainable practices (Hassanein, 1999). The need for programs that serve the diversity of new farmers was identified, and over the past few decades education and training opportunities have emerged that serve a wider range of new farmers.

Niewolny & Lillard (2010) point out that new farmer training and programming is significantly underresearched and not well understood. In response, their research took a close look at the contemporary programs that have emerged across the United States since 1990 and point out the following features of today's programs:

- Focus more on *new* farm businesses, instead of educating farmers who are taking over an established farm
- Often incorporate education around sustainable agricultural practices
- Serve a more diverse range of "beginning farmers" including groups with various levels of experience (aspiring through experienced) and from more diverse backgrounds
- Go beyond technical skills by incorporating topics like business development, land access, and financial management
- Provide social-networking opportunities
- Focus on hands-on learning with a more place-based knowledge focus
- Vary in organizational structure from academic institutions, to nonprofits, to farmer networks

Additionally, many organizations have been responding to the barrier of land access by pairing education programs with land access projects. A common approach that has emerged in recent years is farm incubators, which the National Incubator Farm Training Initiative (NIFTI) broadly defines as "land-based multi-grower projects that provide training and technical assistance to aspiring and beginning farmers." As the name suggests, the goal of these programs is to "incubate" new farm businesses by providing resources and support needed for aspiring farmers to establish an independent farm business. Resources may include everything from the land itself to tools, machinery, greenhouses, and cooler space. Training can take the form of comprehensive education courses, workshops, or one-on-one technical assistance.

Land access projects like farm incubators are uniquely suited to provide support for new farmers because of the way that they break down the major barriers that new farmers face. Access to affordable land, infrastructure, equipment, markets, and capital are all common barriers and land-based projects offer direct access to many, and sometimes all, of these things (Ewert, 2012). These projects are also better able to serve farmers from underserved communities like immigrants and farmers of color whose numbers

have been increasing, but who face compounded structural barriers to farming as a result of their identity groups (Minkoff-Zern, 2019). Additionally, farm incubators are unique in how they embed farmers within a community of other beginning growers. As a result, these sites provide farmers with a valuable social network where they find support and with whom they share and learn knowledge and skills as they are beginning to farm (Smith et al., 2019).

Contemporary new farmer programming in Wisconsin aligns with these broader trends. The first formalized program for new farmers in the state began in 1886 with UW-Madison's Farm and Industry Short Course (FISC). In recent decades, academic institutions and UW-Extension have continued to offer and expand their programs for new farmers, but non-profit organizations have been playing an even bigger role and their programs incorporate many of the elements identified by Niewolny & Lillard including land access projects that have been emerging across the region.

These contemporary new farmer programs have been increasing rapidly in the past two decades in large part due to increased funding at the national level through the Beginning Farmer and Rancher Development Program (BFRDP), a federal program established in the 2002 Farm Bill and funded for the first time in the 2008 Farm Bill that aims to support the success of the next generation of farmers. The program provides grants to organizations that are supporting education, training, and resource access for beginning farmers across the country. Since 2009, BFRDP has funded more than 300 projects that are meeting the needs of the next generation of farmers. This is a huge amount of change in a relatively recent, and short, period of time. As a result, we are still figuring out things like what programs actually best meet the needs of new farmers, the sustainability of programs, and how to not just provide education but actively work toward reducing barriers.

As a final note, formal new farmer programs are not the only way in which individuals gain the knowledge and skills needed to enter farming. Internships, employment or volunteer work on farms, online learning, and other informal methods of knowledge transfer are often important methods of education, training, and even resource access for new farmers. These approaches should not be discounted or left out of the conversation around new farmer training, however, the extent of this project report focuses on formal new farmer programs in the region. Further work and research should be done to look closer at the role that informal programs play for new farmers.

PROJECT SELECTION

Background

When BFRDP was initially established in 2002 I was eleven years old and just starting to do daily chores on my family's farm, which would continue to be a regular part of my life for years. When the first program received funding in 2009, I was graduating high school and leaving the family farm for college, as so many young people from farm families now do. From that point on, my work and academic trajectory has been largely defined and only possible because of BFRDP and the renewed interest in and support for new farmers. From working with a youth agriculture project in Vermont shortly after graduating college, to volunteering with a Latinx cooperative farm in Oregon, to settling in and finding myself at home working for a farm incubator program in Washington state. Throughout this period, I would return for visits to the farm in Wisconsin and see family members and old classmates entering farming through much more traditional routes. I attended my brother's graduation from UW-Madison's Farm and Industry Short Course before he moved back to continue farming at home, which he had been learning how to do since he was four years old. I've watched as my family's farm transitions to a third generation while also witnessing the disappearance of so many other family farms in the area.

Because of these experiences, I've gained insight into the world of programming for new farmers today. I've come to understand that traditional routes still exist and are helping young farmers find success, but I also know that these routes serve a very select group of individuals – those who have access to inherited land, resources, and knowledge. To serve a greater diversity of new farmers, contemporary programs have emerged and are finding exciting ways to serve individuals who did not grow up on a family farm; or immigrants and refugees with years of farming experience either in their home countries or as farm workers in the US who need support to transition to operating their own farm businesses; or even individuals who don't seek to operate a traditional farm business but who desire to create cooperative models, small-scale urban systems, education-oriented ventures, or any number of exciting models that are emerging across the country.

Goals

As a result of my experiences and knowledge of today's new farmer programming, I came to my public practice work with particular interest in how contemporary programming can go beyond just providing education to take into consideration the broader socio-environmental landscape and address the barriers that new farmers face. As such, the broad initial goal for my work was to engage with the landscape of contemporary new farmer programming available to new farmers in Wisconsin and contribute to advancing programs' ability to reduce barriers. To narrow down the scope of my project work, I engaged in conversations with individuals working on new farmer programming to identify current programs and needs that exist. Prior to beginning the Agroecology program and during my initial semester, I had

conversations with the following programs and individuals, which informed my understanding of the current landscape of programming in Wisconsin:

- Organic Vegetable Farm Manager Apprenticeship (Julie Dawson, Claire Strader)
- Farley Center Farm Program (Seth Riley)
- Community Groundworks (Annali Smucker-Bryan; Garrett Peterson)
- Organic Grain Resource & Information Network (OGRAIN) (Erin Silva)
- UW-Madison Farm & Industry Short Course (Jennifer Blazek)
- Madison Area Technical College, Institute for Sustainable Agriculture (Randy Zogbaum)

These conversations, paired with reading of current research on contemporary needs of new farmers and programs available to them led to the identification of two goals for my public practice project:

- 1. Enhance coordination among new farmer programs in the region
- 2. Contribute to a program that goes beyond education and is actively addressing the major barrier that new farmers face regarding land access

Partners - After identifying goals, I continued conversations with program staff around possible project work. It became clear that while the two goals were related and informed each other, they also called for distinct, separate project work with different partners.

Goal 1: Enhance coordination among new farmer programs in the region

The need for enhanced coordination among programs was identified by multiple program staff and was the motivating concern that brought together staff from across the region at a January 2019 meeting organized by and held at Madison Area Technical College (MATC). The primary reason for the meeting was to gather program staff and educators who work with new farmers and discuss the possibility of collaborating on a BFRDP grant application, led by MATC, the main goal of which would be to enhance coordination among the region's programs. Multiple ideas for grant goals and deliverables were generated during the meeting, one of which was the need for a matrix of the program offerings that are currently available for Wisconsin farmers. A few points brought up during the discussion included:

- Individuals' ability to get connected to appropriate new farmer programming is largely random and dependent on who they are able to get connected to.
- A standardized recruitment document for beginning farmers could be used for outreach and as a tool for pointing aspiring farmers in the right direction.
- Agencies often get inquiries from aspiring farmers looking for program opportunities, but there
 are limited resources including staff time to help point them in the right direction.

These concerns pointed to the need for a resource that would serve as an inventory of existing programs, broken down by farmer experience level that could serve as an outreach tool for new farmers as well as a coordination tool for programs that work with beginning farmers. In March 2019, MATC made the decision to cut programming within the Institute for Sustainable Agriculture, including suspending the potential BFRDP application and related project activities. However, the need for developing a program matrix remained. While there were no formal organizational partners for this work, the development of the matrix was informed and supported by the Organic Vegetable Farm Manager Apprenticeship, Center for Integrated Agricultural Systems (CIAS), and UW-Extension.

Goal 2: Contribute to a program that goes beyond education and is actively addressing the major barrier that new farmers face regarding land access

Identifying a project partner for this goal was one of the most challenging aspects of the project. Initially, I engaged with staff at the Farley Center Farm Program around the potential to engage in project work with their land-based farm program/incubator farm in Verona, WI. A couple of potential projects were identified by program staff around educational resources that could be developed for the farm program. However, after attending a farmer meeting and seeking farmer input, it was clear that farmers were expressing a need and desire for more hands-on education opportunities and peer-to-peer learning. Due to limited staff capacity, this type of programming faced many challenges to implementation and sustainability. Limitations around staffing also presented challenges regarding communication, which ultimately led to the decision not to pursue more intentional project work with this partner.

I also engaged in multiple conversations with Randy Zogbaum, former Director of the Institute for Sustainable Agriculture at MATC, around the possibility of working on development of an agricultural education and incubator space at Priske Farm, farmland that MATC leases for programmatic purposes. The farm was already being used as a site for small-scale vegetable production for educational programming in the college's culinary program as well as an incubator space for one beginning livestock farmer who was subleasing a portion of the land for grazing. Longer term visioning of the site included a more robust incubator program for beginning farmers — both for livestock grazing and small-scale specialty crop production. After two months of conversations around project possibilities, MATC made the decision to cut programming within the Institute for Sustainable Agriculture due to limited enrollment and resources. As a result, the plan to develop an incubator program at Priske Farm was no longer viable.

Around the same time, I was connected with Garrett Peterson, Director of Food Systems Development at Community Groundworks. Initially I collaborated with Community Groundworks on an evaluation project component of a course I was enrolled in. After completing the evaluation project, conversations developed around an agricultural land access project that Community Groundworks was engaged in at

Anderson Farm County Park. The project, a collaboration with Dane County Parks, aims to develop community gardens and market garden plots for farmers at Anderson Farm County Park. After a number of discussions about the project and its goals, it was clear that it was a good fit for the focus of my project.

Challenges - Project selection for my public practice work was a continual process that lasted for more than a full year and engaged a number of organizations and programs. As a result, it feels important to point out the major challenges that I faced throughout the project selection process.

<u>Funding - The most significant challenge for project selection was related to limited funding. This challenge manifested across multiple levels including organizational, programmatic, and personal.</u>

Organizational - The majority of contemporary new farmer program offerings are administered by non-profit organizations, which are heavily dependent on grants and donations for funding. Landgrant university Extension programs are another major host of new farmer programming and have also faced significant budget cuts in recent years. Lack of funding at the organizational level often results in limited staff capacity and program instability, which presents challenges for partnering with these organization for public practice work. One example of this was my interactions with the non-profit organization Farley Center and the challenges engaging with them more meaningful in project work partially as a result of limited staff capacity that the organization was able to support at the time.

Programmatic - Similar to but also distinct from organizational-level funding challenges, the new farmer programs within organizations face significant funding challenges of their own, and these impacted the project selection process. As a result of this, it was challenging to engage with new farmer programs since there was often no funding available for additional project work and/or limited staff capacity to engage with and serve as a partner for the public practice project. This manifested itself most in my engagement with MATC's Institute of Sustainable Agriculture, which faced program cuts by the organization that prevented further engagement on potential project work.

Personal - Similar to the partners I was seeking to engage with whose funding challenges resulted in limited staff and program capacity, personal funding challenges I experienced within the Agroecology program limited my own capacity and served as a barrier to project selection. There are limited funding opportunities for graduate students pursuing the Public Practice track in Agroecology. As a result, funding while I was enrolled in the program was secured through Teaching Assistantships. This meant that an average of 20 hours per week throughout each semester was dedicated to engagement with work that was unrelated to my graduate project. This time commitment, in addition to coursework, left very little time to dedicate to my public practice project. As a result, the project selection process took much longer than it may have otherwise.

Guidelines & Expectations - The other major challenge to project selection came from the minimal guidelines and expectations set by the Agroecology program for what a public practice project should look like. This lack of formal structure provides a tremendous amount of flexibility for the project, which I continue to believe is a positive attribute. However, I also found that it hindered my ability to navigate the project selection process largely because I struggled to communicate to potential partners what the scope of the public practice project could be when I was unsure of it myself. Additionally, there were no guidelines or support around engaging with project partners to determine project goals, expectations, scope, funding, time commitment, communication, etc. I was left to navigate all of these project elements largely independently.

Not only was this challenging on a personal level and had implications for the timeline of my project work, but it also calls into question issues of equity and accessibility regarding project partners. Which community-based organizations have access to engaging in work with graduate students? Who benefits from the resources and project assistance that the Agroecology program and its students can offer? In my case, all of the primary project partners were organizations and/or programs that are either affiliated with the University, have prior experience engaging with university-based graduate student projects, and/or have staff members familiar with graduate-level academic project work and how to engage with it. They were not necessarily the partners that could have most benefited from the public practice work or those that were best aligned with my project goals, especially in regard to issues of equity in new farmer programming.

II – PROJECT DETAILS

Timeline

Spring, Summer 2018	Initial conversations with potential project partners				
Fall 2018	 Conversations with potential project partners Background research on existing programs in Wisconsin, contemporary new farmer programming best practices, and available resources 				
Winter 2019	 Identify goals, focus areas of public practice project Engage with potential project partners: MATC, Farley Center, Community Groundworks 				
Spring 2019	 Apply for CIAS mini-grant to fund development of Beginning Farmer Program Matrix work Community Groundworks identified as partner: Anderson Farm County Park agricultural land access project 				
Summer 2019	 Beginning Farmer Program Matrix: background research, organization interviews, development Anderson Farm County Park: identify project scope, my role 				
Fall 2019	 Beginning Farmer Program Matrix: Development, feedback, revisions, outreach plan Anderson Farm County Park: Needs Assessment, Implementation Plan 				
Winter-Summer 2020	Beginning Farmer Program Matrix: Revisions, outreach				

Beginning Farmer Program Matrix

Background

Research has found that new farmers tend to seek out and receive information and resources from multiple sources (Bailey, 2013; Paine & Sullivan, 2015). As a result, it is important for these different sources to communicate and coordinate with each other in order to facilitate information sharing and referrals among programs and ensure that new farmers are able to get connected to all programs they could benefit from. There is a desire among program staff for increased coordination and collaboration, but staff capacity and limited resources make advancing this goal challenging. A program matrix that provides an overview of all programs available in a region can serve as a tool that is a starting point for coordination among organizations and programs that work with new farmers.

Funding through a Center for Integrated Agricultural Systems (CIAS) mini-grant allowed me to inventory existing programs, interview program staff, and develop the Beginning Farmer Program Matrix. While a number of existing program inventories already existed, the need for a matrix that organizes programs by the farmer experience level they serve and that is specific to Wisconsin's new farmers was identified. A number of organizations in neighboring states have programs that extend into Wisconsin or serve Wisconsin-based farmers. These organizations, while not based in Wisconsin, were included in the matrix because they serve new farmers in Wisconsin. Although a range of online programs exist for new farmers and are offered by organizations across the country, these programs were outside of the scope of this inventory, unless they were hosted by Wisconsin-based organizations.

Development

Initial Research - Development of the matrix began with an initial online search of (1) existing inventories of programs for new farmers, (2) new farmer programs in/near Wisconsin, and (3) existing matrixes that could serve as examples for construction of the Wisconsin matrix.

• An online search of inventories and lists of programs for new farmers identified a number of existing lists (Appendix A.1). However, many were either geared toward a specific farming audience or were out of date. Additionally, they did not organize programs by farmer experience level, with the exception of Angelic Organics Learning Center's Routes to Farm tool. However, this tool is based in Illinois, so does not cover the full range of options for Wisconsin farmers.

- Using the existing lists as a starting point, an online search was conducted to construct a more comprehensive list of new farmer programs available in the region. The Google Map:
 - Organization Serving Beginning
 Farmers in Wisconsin, identifies
 organizations within the scope of the
 project (Figure 1).

The map indicates locations of the organizations themselves, which is not always the same as the location of the program offerings.

Figure 1. Map of location of organizations with programs serving new farmers in Wisconsin



- Finally, an online search identified existing matrixes and inventories that could serve as models
 for the construction of the Wisconsin program matrix. The search looked for examples from
 across the United States. Resources that were influential to the development of the Wisconsin
 matrix include:
 - Wisconsin Organic Vegetable Farm Manager Apprenticeship: Beginning Farmer
 Education Resources (Beginner Farmer Education Resources, n.d.)
 - **Beginning Farmer Resource Network of Maine** ("Learning How to Farm Beginning Farmer Resource Network of Maine University of Maine Cooperative Extension," n.d.)
 - University of Maryland: Explore Matrix (Explore Matrix | University of Maryland Extension, n.d.)
 - Cornell: Organizations Serving Refugee Farmers in NY (Organizations-Serving-Refugee-Farmers-Directory-1-1huldvs.Pdf, n.d.)
 - Oregon Community Food System Network: Beginning Farmers and Ranchers (Beginning Farmers and Ranchers, n.d.)

Interviews - Following the online background research, interviews were held with staff at organizations serving new farmers in the region (Appendix A.2). Interviews were held either in-person or over the phone from June-September 2019 and averaged 60 minutes each. Interviews were largely open-ended, but were guided by the following questions:

- How does your organization serve new/beginning farmers? What program(s) do you offer for beginning farmers?
- What new farmer groups does your program(s) serve?
 - o Experience Level(s)?
 - What experience level is required for your program?
 - What level(s) of beginning farmer does best in your program(s)?
 - o Farmer goals?
 - o Current farm stage?
 - o Language?
 - o Demographics?
- What common beginning farmer barriers does your programming address?
- In your experience, what needs of beginning farmers are not adequately addressed by current program offerings?
- How do you see your programs fitting into the larger landscape of new farmer training?

Interviewing program staff about available programming allowed for gathering of greater detail than was available on an organization's website. For example, when speaking with Angelic Organic Learning Center (AOLC), I learned of a program that is offered but not listed on the website, a program on the website that is no longer offered, and two programs listed on the website that will be changing focus in the coming year. All of these details were crucial to an accurate construction of the program matrix and would not have been discovered without the interview. Additionally, by interviewing program staff I was able to learn of other programs and individuals that I should reach out to, which ensured that the list of programs included in the matrix was as comprehensive as possible.

Matrix Construction & Outreach - After interviewing program staff, the program matrix was constructed. The first draft of the matrix organized programs by experience level and also separated programs by their focus area (production skills or business development skills). Individual programs were organized into a single experience level category. The first draft was then sent out for feedback from program staff via the Wisconsin Beginning Farmer Educator listsery, which includes a variety of individuals that work with new farmers in Wisconsin. Much of the feedback received focused on the fact that many programs serve

multiple levels of new farmers. The need to re-structure the matrix in order to accurately represent this resulted in the updated second version of the matrix, which was re-oriented to allow programs to be identified as serving a range of farmer experience levels, as applicable. Sub-categories were created to distinguish three main areas of programming: education programs, hands-on training, and mentorship programs. Additional tables were created to identify additional learning resources for farmers as well as programs that focus on land access and access to capital for new farmers.

The completed program matrix was distributed to program staff and farmer educators in the region via email listservs. Additionally, the primary online location of the program matrix will be through the UW Division of Extension website. Under guidance of Extension staff an article (Appendix A.4) was written to accompany the program matrix document. Posting the resource as an article will not only aid in higher search results via online web searches but will also serve to timestamp the matrix. Since the matrix is likely to become outdated without regular updates, posting it as an article will alert readers to the date of publication, so they are aware of how recent (or not) the information is.

Challenges

Categorization

An initial challenge was determining what new farmer terminology to use when constructing the matrix. Existing lists and conversations with various program staff revealed that there is variation in the language used for beginning farmer experience levels (Table 2). After comparing different categorizations, a few themes began to emerge. First, most organizations include a category of individuals who are interested in farming but have little to no experience and are not operating their own farm yet. Terms for this group include novice, exploring, aspiring, exploreres, and planners.

Next, organizations move toward a focus on individuals who are actively farming (whether as employees, managers, or farm owners) and break them down based on experience. Some terminology focuses specifically on beginning farmers as those who are operating their own farm business, defining their experience level based on number of years they have operated their farm. Others focus not on number of years operating a farm but on the skills that individuals have gained. This is evidenced most by Land Stewardship Project's categorization (Farm Beginnings Collaborative, n.d.), which is informed by the Dreyfus Model of Adult Skill Acquisition (Dreyfus, 2004). This approach focuses on skill levels, defined by components of learning that the individual is able to perceive, the perspective they are able to take, decision making capability, and level of commitment. This method of categorization acknowledges that individuals can be at different skills levels regardless of how long they have been operating their own farm, or regardless of if they operate their own farm at all.

Table 2. Comparison of beginning farmer experience level categorization across programs

Land Stewardship Project (Farm Beginnings Collaborative, n.d.)	Angelic Organics Learning Center - Routes to Farm Tool	Organic Vegetable Farm Manager Apprenticeship	Practical Farmers of Iowa & MOSES (Padget & Nelson, 2020)	Growing New Farmers (Sheils & Descartes, 2004)
				Prospective Farmer – Recruit
Novice	Exploring	Novice	Aspiring	Explorers
				Planners
Beginner	In-Training Start-Up (0-1 farming)	Beginner	Start-up • 1-3 years • 3-4 years	Beginning Farmer Start-Up (1-3 Years)
Advanced Beginner	Years 2-10	Advanced	Intermediate: 4-6 years	Re-strategizers (Years 4-6)
Competent		Proficient	Intermediate: 5-10 years	Establishers (Years 8-10)
	Experienced (10+ years farming)			Established Farmers (10+ Years)

Because of the way that terminology informed by the Dreyfus model allows categories to include individuals who are engaged in farming in various ways, this terminology was chosen to be used for the construction of the Wisconsin Beginning Farmer Program Matrix. However, it is important to point out that this is not necessarily the best or only way that we can and should characterize new farmers. Farmer experience level is highly variable and pathways to farming are not always as linear as any approach to categorization makes it appear.

Organization

A number of other challenges arose while constructing the matrix especially around a need to include additional qualifiers that break the categories down further or would prompt the organization of the matrix in alternative ways. Examples of this include:

- <u>Type of Training It is possible for farmers to exist in multiple categories depending on the specific skill set.</u> For example, farmers may be advanced regarding production skills, but a novice when it comes to business development skills.
- <u>Location of Prior Experience</u> Farming in Wisconsin is not the same as farming everywhere. For individuals with prior experience in a different location, they may be advanced in many skills, but require specific training in order to farm successfully in Wisconsin. This is especially true for

- underserved populations including immigrants, refugees, and farm workers who may have many years of farming experience that would place them in a higher category but are in need of education specific to the different climate, markets, regulations, etc. that exist in Wisconsin.
- Specific to New Farmers or a Wider Audience Knowing the specific audience for a program is important to determining its fit for farmers. Many programs exist that are geared specifically toward new farmers and their needs. Other programs provide education and training for all farmers, including experienced farmers. These programs can provide valuable learning opportunities for beginners but are not geared specifically toward them. In response to this challenge, the Beginner Farmer Program Matrix includes only those programs that are specifically designed for new farmers. Programs with a broader audience are included in the associated Learning Resources for Farmers table.

Maintenance

Another major challenge to the construction of the matrix was due to the frequency of shifts and changes of programs and organizations. The final construction of the matrix was completed in November 2019. However, in just the four months after completion a number of revisions had to be made due to programs undergoing significant changes including discontinuation, program name changes, new program offerings, an organization undergoing a merger, and staffing changes that resulted in program shifts. The reality of frequent program changes indicates that it is highly likely that the program matrix will become quickly outdated unless updated on a regular basis.

Reflections

Landscape of New Farmer Training in Wisconsin - The Program Matrix was developed from a need expressed by organizational staff who work with new farmers to have a tool to facilitate appropriate referrals to programs. This is likely to be the biggest benefit of the Program Matrix. With increased understanding of the landscape of new farmer programming, staff will be better informed of the programs that exist, able to respond appropriately to new farmer inquiries, and able to reflect on the current landscape and make informed decisions about programs. Noticeable observations on the landscape of contemporary new farmer training in the region include:

- There are many program offerings for Novice/Exploring and Beginner level new farmers while there are fewer options for Advanced Beginner and Competent level new farmers.
- Program offerings exist for a wide diversity of enterprise types. While there are more program
 offerings for vegetables and dairy/livestock grazing, there are also offerings focusing on
 agroforestry, cut flowers, organic grain, and urban agriculture.
- Hands-on training offerings are largely limited to dairy grazing & diversified vegetables. The
 addition of the Agroforestry apprenticeship that began in 2019 has expanded this slightly.

- However, there is still a lack of formal hands-on training opportunities for enterprises including livestock, cut flowers/nursery, fruits, grain, and others.
- The majority of program offerings focus on sustainable agriculture and/or organic production practices. This is in line with the larger trend of contemporary new farmer programming focusing on sustainable practices (Niewolny & Lillard, 2010). Even long-standing programs like UW-Madison's Farm & Industry Short course have been shifting in recent years and now include courses on organic grain and urban agriculture indicating a shift among traditional program offerings toward a greater focus on sustainable, ecological practices.
- Business planning/farm financial programs exist, but this was still a topic area that most program staff expressed as a gap, which is perhaps driven by some of the following considerations:
 - The main offering in the region, Farm Beginnings, is offered by two organizations outside of Wisconsin: Land Stewardship Project (LSP) in Minnesota & Angelic Organics Learning Center (AOLC) in Illinois. While LSP sometimes offers classes in western Wisconsin and AOLC's offerings are accessed by farmers from Southeast and Southcentral Wisconsin, the in-person nature of the program makes it hard for Wisconsin farmers not within easy driving distance of the classes to participate.
 - Opportunities for one-on-one business planning education are extremely limited.
 - Program offerings are largely geared toward Advanced Beginning level new farmers who
 have been actively farming for a few years. There is a gap for Novice and Beginner level
 new farmers in this area.
 - Some offerings in Wisconsin, especially Technical College-based programs may be lesser known about like a Sustainable Food & Ag Business course offered through Northeast Wisconsin Technical College, which is open for individuals to take even if they aren't enrolled in a program. This is a course that I only found out about after receiving feedback on the initial Matrix draft from the program instructor. This indicates that business planning offerings, in particular, could benefit from increased cross program coordination, especially across organization type for example the technical colleges increasing communication and perhaps collaboration with nonprofits who offer programs.
- There are few formal mentorship programs available in the region, despite this being identified as a major source of information and support for beginning farmers (Paine & Sullivan, 2015)
- Many program offerings available for new farmers in Wisconsin are administered by organizations that are based in the neighboring states of Minnesota, Illinois, and Iowa.
- There are extremely limited programs offerings geared toward immigrant, refugees, non-English speakers, and/or farmers of color.

The majority of new farmer programming in the region is administered by non-profit organizations. Academic institutions including the University of Wisconsin-Madison, UW-Division of Extension, and Wisconsin Technical College System administer a number of programs as well. All new farmer programs available in the region were found to have dedicated staff, but not all programs are staffed in the same way. Some organizations have a full-time staff person dedicated specifically to new farmer programming, some have staff with split positions who spend part of their time working on new farmer programming, and others have part-time or seasonal staff (many who are farmers themselves) who work part-time on new farmer programming. Full-time staff dedicated to new farmer programming are currently mostly based at organizations outside of Wisconsin (ex: Practical Farmers of Iowa, Angelic Organics Learning Center, Land Stewardship Project). For organizations based in Wisconsin, most new farmer programs are led by staff with split-positions or part-time/seasonal staff. As a result, working on new farmer programming is not their only role or a specific, dedicated focus. This has implications not only for programming itself, but for coordination and collaboration with other programs and organizations.

Cross-Program Coordination -

Throughout my project work it was clear that many staff members of new farmer programs are already in communication with each other, which can aid in program coordination and collaboration. However, communication and coordination regarding programming specifically seemed to not be formally organized. When it was formally organized, it was inconsistent, not fully inclusive of all organizations/programs, and short-lived. A number of attempts were made to facilitate region-wide coordination of programs, only to result in an initial meeting that had limited follow-up. The program matrix serves as a tool for increasing awareness of available programming across program staff and providing common language around the level of new farmers that each program best serves, however, more work is needed to create a culture of strong cross-program coordination.

Opportunities & Recommendations

Many of the observations identified above inform and impact each other in a variety of ways. For example, limited funding availability for programs based at non-profit organizations leads to decreased program staff which influences the ability for programs to engage in coordination with other organizations. With all of this in mind, there are opportunities for enhancing coordination among programs and advancing new farmer training programming in the region.

Enhancing Cross-Program Coordination -

Opportunities exist to increase communication, shared resources, and collaboration among new farmer programs and the staff administering them. Research of beginning farmer programs in Michigan found that all organizations serving beginning farmers were interested in collaborating across programs (Comer,

- 2019). Similarly, staff in Wisconsin have expressed a desire to collaborate with other programs. Any opportunities to do so in Wisconsin must take a cross-state approach because of the important role that programs in neighboring states have when it comes to program opportunities for Wisconsin's new farmers. A few areas of possibility for continuing to advance this goal include:
 - Develop a network that allows staff of new farmer programming to easily communicate and share
 resource This could include online and in-person components. Recently, such networks have
 begun to form in the region through the establishment of a WI Beginner Farmer Educator listserv as
 well as a regional community of practice for farmer educators, initially organized at the MOSES
 Organic Farming Conference in February 2020.
 - 2. Develop an organized system for communicating program information Because new farmers receive information and resources from a wide variety of locations, an organized system for communicating comprehensive information on resources available for new farmers in Wisconsin would be beneficial. One approach would be developing a centralized online location for communication of information. While many individual programs in the region host their own resource webpages, it could be beneficial to designate a central location for sharing information. Models for such a repository include University of Maine Extension's Beginning Farmer Resource Network website and Practical Farmers of Iowa's Beginning Farmers webpage.

Alternatively, Carlisle et al. (2019) advocate for a "polycentric governance network approach" instead of a centralized clearinghouse of resources. Such an approach would support a network of organizations and their outreach to and programming for new farmers. This model is more dynamic and responsive to farmers needs while also supporting multiple pathways for new farmers to access. Governance of such a network (and having staff dedicated to managing governance) would be key to facilitating such a network and ensuring comprehensive outreach and resource access for farmers. A combination of both of these approaches is evidenced by University of Maine Extension's Beginning Farmer Resource Network which facilitates a centralized online resource page as well as governance of a multi-party network of staff working with new farmers.

3. A Beginning Farmer Specialist in Wisconsin – This recommendation could take many different forms, but comes from the observation that Wisconsin-based programs for new farmers are almost all staffed by individuals with split-positions or part-time appointments, resulting in a gap of staff in Wisconsin who have a full-time position focused on new farmer programming. Investing in increased staff capacity, especially full-time positions, focused on new farmer programming would enhance capacity for coordination across programs.

The benefit of designating such a specialist was identified at the national level in the most recent Farm Bill. The bill established a "National Beginning Farmer and Rancher Coordinator" as well as state-level coordinators (*Agriculture Improvement Act of 2018*, 2019). Sarah Campbell was appointed as the first National Coordinator on March 16, 2020 and state-level coordinators are being appointed and will be trained to fulfill the following responsibilities:

- Coordinate technical assistance for beginning farmers
- Develop and implement a State plan to improve coordination, delivery, and efficacy of programs of their Department for beginning farmers
- Conduct outreach and coordinate partnerships for serving beginning farmers

While these new positions aim to increase services for new farmers, their relegation to government agencies means that a large amount of new farmer programming will be left out of the coordination and outreach efforts, unless state-level coordinators make a concentrated effort to include these programs – which they should do. Additionally, non-profit organizations and academic institutions should reach out to and communicate with the state-level coordinator to explore possibilities for increasing coordination of programs that operate across various organizing bodies.

Advancing Program Offerings

When comparing the current landscape of programming in the region to the needs and challenges new farmers face, a few opportunities emerge:

- Develop additional programming for Advanced Beginner and Competent level farmers that addresses the unique needs that new farmers face at this level.
- Expand hands-on training opportunities to additional enterprises.
- Expand business planning and farm finance programming. While a number of these programs exist, there is a need to expand their geographical reach, provide more one-on-one support, expand programming in this area for novice and beginner level new farmers, and increase coordination across existing programs.
- Advance equity in new farmer programming by expanding programs for underserved groups including immigrant, refugee, BIPOC, and non-English speaking farmers.
- Identify plans for ongoing financial sustainability of programs.
- Expand programming that goes beyond education to address barriers new farmers face.

Anderson Farm County Park: Land Access Project

With Community Groundworks (now: Rooted)

Note: Rooted is a nonprofit organization formed in December 2019 after the merger of two long standing organizations: Community Groundworks and Center for Resilient Cities. The extent of my engagement with the organization took place prior to the merger. As a result, this project report refers to Community Groundworks as the partner organization.

Project Partner

Community Groundworks was a non-profit organization in Madison, WI organized in 2001 with the mission: "To work toward an equitable food system by ensuring access to garden space and healthy food, and by educating beginning farmers and gardeners of all ages" (*Our Vision, Mission and Values* | *Community GroundWorks*, n.d.). Program offerings ranged from on-farm education, community garden organizing, school gardens, and an internship program for beginning farmers, among others. Programs were primarily based in Madison, WI, with some project working operating at the county and state level.

The organization had been involved in work around land access for new and "socially disadvantaged" farmers for years. Much of their work also sought to center equity issues. This includes community garden access for many underserved communities in Dane County and management of farmland access for Hmong farmers at Westport Farm in partnership with Groundswell Conservancy. The Anderson Farm County Park project aligns with these land access and equity initiatives of the organization. Primary project contacts during the time of my engagement with the project were Garrett Peterson, Director of Food Systems Development and Maeraj Sheikh, Director of Equity and Community Engagement.

Project Background

Anderson Farm County Park was established in 2014 in Oregon, WI and named after Lyman Anderson who established a farm on the land in 1886. Agricultural fields make up the majority of the park along with areas of woodland and prairie. Maintaining agricultural production on the land is central to the park's mission and also aligns with the broader mission of Dane County Parks as outlined in the Agriculture, Gardening, and Foraging Initiative of the Parks and Open Space Plan for 2018-2023. One specific goal of this initiative is to "establish an agricultural incubation and demonstration farm in Dane County" (Dane County Parks, 2018). Responding to this, the master plan for Anderson Farm County Park states: "the strong agricultural history, context within a largely rural setting and the wishes of the Anderson Family make this property an excellent starting point for the county's Agriculture, Gardening and Foraging initiative" (SAA Design Group, Inc, 2013)

In August 2018 an Agricultural Mission for Anderson Farm County Park was developed as an addition the park's Master Plan with the primary goals of providing opportunities for agricultural production especially for smaller scale, local growers as well as providing agricultural education and activities for the broader community. The plan also states an explicit need for projects to focus on sustainable agriculture, with an organic emphasis. The Agricultural Mission presents a five-year plan for implementation, with the first phase being the establishment of market garden plots on a 12-acre section of the park for long-term leasing to small-scale growers (Anderson Park Friends, 2018).

With their years of experience working on issues of land-access, organic agriculture, and equity Community Groundworks was a good fit for working with Dane County and Anderson Farm County Park to develop the first phase of the project, which they were elected to do in February 2019. The Scope of Services stated:

"The initiative will improve land access and create economic opportunity for underserved populations lacking prospects for stable land tenure and integration in the local food system...This will be the first step and considered a pilot project for implementing the agricultural vision for the park as outlined in the Anderson Farm County Park Master Plan (2013) and Anderson County Farm: Agricultural Mission (2018)."

My Role

I became engaged with the project during the Summer of 2019. My role was to provide coordination support for project activities, conduct research regarding best practices, and contribute to development of the project Implementation Plan. The majority of my work on the project took place from August-December 2019 and was focused on:

- Attending weekly or bi-weekly project meetings with staff to develop project activities and advise on best practices
- Conducting research on and compiling resources regarding land access project development, equity
 in land access, land leases, and developing farmer needs assessments
- Developing and writing sections of the project Implementation Plan, including taking the lead on the following sections: Collaborative Farm Overview; Operations Plan; Grower Education & Training; Project Evaluation.

Project Development

Research on Best Practices and Available Resources – Project work began with collecting resources relevant to land access project development. Initial research was conducted through online searches of available programs and resource inventories. New Entry Sustainable Farming Project's National Incubator Farm Training Initiative (NIFTI) provided incredibly helpful to this process. NIFTI hosts an

online map of all incubator farms in North America along with a resource center that hosts a collection of resources used by incubator farms. They have also developed and published a Farm Incubator Toolkit that informed much of the Anderson Farm County Park Implementation Plan.

Selection of a Collaborative Farm Model – A critique of the farm incubator model is that the timeline of program access (most programs identify 5-7 years as the amount of time farmers will have access to lease land at the incubator) is at odds with the needs and desires of many new farmers. For example, many farmers who lease land at incubators may find the structure to be well suited to their long-term farm goals. Instead of the vision that farmers will "incubate" on the site and then go on to scale up and purchase or lease an independent land base, many individuals may find the incubator to be their desired scale or may not want to leave the community-oriented site to farm on an independent site. Additionally, for incubator farmers who do desire to eventually move off of the incubator, many programs are realizing that 5-7 years is not an adequate timeline for farmers to do so. This is especially true for farmers from underserved and systematically discriminated against communities who face compounded barriers to accessing land and other resources needed to farm independently. In response, a number of programs are shifting the incubator model to address these concerns. An emerging model in Wisconsin is the "Collaborative Farm," which is similar to a farm incubator in many ways but instead provides longer-term, secure land tenure on the site with no time limits. These sites are also less likely to have more formal education components associated with them. (See Appendix B for more details).

During the early development stages of the Anderson Farm project a traditional farm incubator model was rejected because of the need to provide more secure land tenure for growers at the site due to the assumption that many growers who would access the space would be best served without a limit to the time that they could lease land there. The Collaborative Farm model was chosen as more appropriate and was used as the dominant framework throughout the development of the project plan.

Implementation Plan – Following initial research on best practices and available resources, project work focused on the writing of the project Implementation Plan. An outline of the plan was developed, informed by the project scope of services and the NIFTI Farm Incubator Toolkit. Sections were then split among individuals working on the project based on their role and experience with the subject matter. Sections that I was the primary author on included: Collaborative Farm Overview; Operations Plan; Grower Education & Training; and Project Evaluation (Appendix B). Development of these sections was informed by the resources identified while conducting background research as well as work done on the Wisconsin Beginning Farmer Program Matrix – illuminating a key overlap in the two goals of my public practice project work. The Implementation Plan was completed in mid-December 2019 and submitted to the Executive Director of Community Groundworks for submission to Dane County.

Challenges

A number of significant challenges emerged during my engagement with this project. First, we encountered tension between moving forward with development of the Implementation Plan while also wanting to engage with and center the voices of farmers who would be accessing the land. The project was operating from an equity framework with the goal of providing land access for underserved communities including BIPOC and non-English speaking farmers. While this goal was centered throughout project development, challenges were revealed around conducting adequate outreach to farmers from these communities and finding ways to ensure that their voices and needs truly were centered in the design of the project.

Another challenge that emerged was around available resources for the development of the project. A longer-term vision for the land-access project requires more than just the availability of the land. In order for farmers to be successful, the space will also require access to water, infrastructure development, and ongoing staff support. These needs are at odds with the amount of resources immediately available for the project and navigating this was challenging. While many farm incubators and similar land-access projects operate with limited infrastructure, equipment, water access, and staffing they should not have to. And setting projects up in such a way only perpetuates the barriers that underserved farmers face. However, the alternative proved to be postponing the project until adequate resources were available, which also perpetuates the barriers that new farmers are facing by preventing their access to the land.

Finally, the most significant challenge experienced during my time engaged in this project was the fact that Community Groundworks was in the process of going through a merger with another organization, Center for Resilient Cities. The merger was finalized in December 2019 and the two organizations became *Rooted*. The merger coincided with and resulted in a number of staff members shifting positions or leaving the organization, including the project leads for the Anderson Farm County Park project who left the organization at the end of 2019. As a result, my engagement with the project was marked by challenges navigating the shifting nature of the organization and project details as well as challenges around project communication and clarity of project roles.

Reflections

Land access projects, including farm incubators and collaborative farms, have tremendous
potential to increase access to farming for underserved groups because of the way that they
address many of the barriers new farmers face including access to land, infrastructure, equipment,
training, and community.

- Collaborative Farms are a specific approach to land-access programming that is distinct from the more well-known model of farm incubators. Additional work and research should seek to better understand the differences between these approaches including the impacts for new farmers.
- Public land provides significant opportunities for expanding land access to new and underserved farmers. There is potential for collaboration between organizations and county agencies to make this land available while providing support for farmers.
 - When developing land access programs, organizations should look to others who are
 engaged in similar work. In Wisconsin this includes Fondy Food Project outside of
 Milwaukee and Silverwood County Park, also in Dane County. Other examples from across
 the country could help provide valuable insight on developing these projects.
 - Research on these projects is needed. I was not able to find any research on new farmer land access projects on *public* land, despite it being an emerging approach occurring across the state and country.
- There is a significant need to build capacity around engaging with underserved communities and centering their needs and challenges when designing programs. This will often require additional funds, resources, and time which should be accounted for and prioritized.

III - PROJECT REFLECTIONS

In addition to the reflections and recommendations identified for the different components of the public practice project, there are a few overarching reflections and areas of opportunity when it comes to the landscape of contemporary new farmer programming in Wisconsin. The following are key observations that presented themselves to me throughout the course of my work. They are all areas that prompted further searching through the literature, deeper questioning, and more thoughts and idea generation. They are also all areas that I did not come to find clear or easy answers. As such, I present them here as prompts for further thought, research and program development.

Understanding New Farmers

An ongoing challenge throughout this project, and I think across new farmer programming in general, was finding the right way to talk about new farmers and understand their needs and challenges. This is due in large part to the tremendous amount of diversity that exists among this group, which makes it impossible to come up with a singular term and definition. An immigrant farmer accessing land through a farm incubator with the goal of farming being their main occupation has wildly different challenges and needs than an individual who is taking over their family farm or someone who has recently bought a house on agricultural land and is hoping to explore some type of production but does not aspire to make it a full-time occupation. And yet, the words we have to describe all of these individuals are the same: new or beginning farmer. The programming we have available for them is largely the same as well. While it can be useful to have comprehensive information and programs that are relevant to all new farmers, we shouldn't ignore the very real differences that exist.

In order to address this challenge common terminology that gets at the distinctions between new farmers is needed. There are some terms that are becoming more commonly used, as noted in the Introduction of this paper, but use and definitions are not common across all organizations or acknowledged by federal and state agencies that administer and allocate funding for new farmer programs. Additionally, there is some terminology that seems to be missing, which obscures particular dimensions of new farmers. For example, an individual who has many years of experience in agriculture but who is shifting enterprises (say from conventional dairy production to organic grazing or perhaps hemp production) shares a lot of qualities with new farmers around education and training needs. And they may technically be considered a "beginning farmer" if the new production venture is formalized as a new business or if they are transitioning the business as a successor who is new as the "principle producer" of the farm. But they also have distinct differences due to the fact that they have agricultural experience and access to land and resources, unlike many other new farmers who don't have a farming background.

Another category that seems not to have common terminology ascribed to it is that of individuals who may be a generation removed from agriculture, but who still have land and other resources in the family to inherit. These individuals may desire to return to farming on land that their grandparents farmed on, but which their parents left. They may face many of the same challenges as other new farmers without a family background in agriculture, but they also are more likely to have access to land, resources, social connections, and knowledge than a first-generation farmer. Terminology is needed that facilitates common understanding of the significant differences that exist among new farmers and that acknowledges the difference in experience level, generational agricultural history, and systems of oppression that result in different challenges and needs across new farmers.

Related to the issue of categorizing new farmers is the nature of the data that is used to inform the development and funding of programs for them. Most of the data on new and beginning farmers comes from the USDA's Census of Agriculture. However, the Census only counts farmers who are actively operating an independent farm business. It leaves out individuals who are new to farming but not operating their own businesses. Additionally, many questions exist around which farmers do or do not complete the census and why. In *The New American Farmer* (Minkoff-Zern, 2019), this issue is examined by considering data on Latino/a farmers, which are likely significantly undercounted in the census data. This is due to a number of challenges including:

- Who the census survey is sent to The Census of Agriculture survey is often sent out to
 individuals based on landownership, formal rental agreements, or prior relationships with the
 USDA. Immigrant farmers, as well as other underserved groups (including beginning farmers),
 are less likely to own land or have received support through USDA. As a result, many of these
 farmers likely never receive the census form to complete and end up not getting counted.
- Language barriers and lack of bilingual USDA agency staff prevents many "socially-disadvantaged" farmers from being counted.
- Resistance to completing personal information to federal agencies an issue that is especially
 prevalent for immigrant farmers
- The structure of the census form can make it challenging for farmers with non-traditional farm structures (like farmers accessing land through informal arrangements) to complete the form.

In addition to the points noted by Minkoff-Zern, my own experiences have alerted me to data collection issues when it comes to beginning farmers and/or "socially-disadvantaged" groups of farmers and the Census of Agriculture. As one example, I was working for a farm incubator program during the data collection for the 2017 Census of Agriculture. The organization managing the incubator program was the recipient of the census form, as outreach is most often linked to land records and the organization was the

official renter of the land. None of the incubator farmers themselves received a census form, despite the fact that many of them had independent farm businesses formally established through the state.

There were around 20 independent farm businesses operating on the incubator in 2017, but the census form was not set up to accommodate the non-traditional arrangement. As a result, the form was completed by the organization for the land base as a whole and represented in the census as a single farm. Data was aggregated across farmers to report all of the production that was happening on the land base. The full-time staff Farm Manager was listed as the "Farmer" for the site, as there was not space to list all 20 of the farmers. All other data points such as production type, years in production, sales numbers, etc. were filled in using numbers compiled across all farmers. The completion of the census form in this way was done largely as a result of the form being sent to the organization who was required to complete it, the structure of the form, and lack of support available for completing forms for non-traditional farm arrangements. As a result, the number of beginning farmers for the farm incubator site was significantly underreported. It also meant that the "farm" was designated as 40 acres instead of the reality, which is that it was 20 farm businesses, each ½-2 acres in size.

This is all incredibly important because the Census of Agriculture is used to allocate resources and fund programs for farmers across the country. Underreporting of beginning farmers, "socially-disadvantaged" farmers, and/or BIPOC farmers in this important data source results in lack of allocation of needed resources to these groups.

Funding & Program Stability

As stated earlier, new farmer programs across the country have proliferated in recent years largely as a result of increased funding support at the national level through the Beginning Farmer & Rancher Development Program (BFRDP). Nonprofit organizations have been the top recipient of BFRDP awards followed by University Extension/Land Grant universities (Budzinski et al., 2017). Organizations and programs in Wisconsin have received 17 BFRDP grants since funding began in 2009 (Appendix C).

Many of the organizations and programs included in the Beginning Farmer Program Matrix are past or current recipients of a BFRDP grant and while this has led to the creation of important programming, there is a concern that programs are becoming too reliant on this funding source (Comer, 2019). This is especially true for non-profit organizations that administer the majority of new farmer programs but are highly reliant on grants to fund them. Comer's research of beginning farmer programs in Michigan found that 81% of non-profits administering new farmer programs identified grants and donations as the top income generator for their programs. Funding through BFRDP is limited to just three years, however, and opportunities for additional funding through the program is limited. In addition to non-profits, BFRDP

has also served as an important source of funding for Extension-based programs, which may be extending the challenge of funding sustainability to Extension-based programs as well.

Academic institution-based programs are less grant dependent (although many do also rely on grants, at least partially) as tuition costs make these programs less dependent on outside grants (Comer, 2019). However, few of today's contemporary programs are offered through academic institutions, which makes the programs more accessible and affordable for new farmers but also results in programs that are less financially stable. A relatively recent trend that I observed in Wisconsin is an increase in collaboration between non-profit organizations and academic institutions on new farmer programming. However, it has yet to be determined is if this approach makes new farmer programs more stable over the long-term or not.

Lack of funding stability leads to lack of program stability. There are many new farmer programs that were offered for a number of years while they were grant funded, only to be scaled back or discontinued altogether when grant funds were no longer available. The impacts of this lack of program stability on new farmers themselves is currently unclear. Future research should examine how a lack of program stability impacts a program's ability to serve new farmers and investigate the possibility that it results in programs that fail to address or even perpetuate existing barriers and inequalities that new farmers face.

Addressing Structural Barriers & Equity

Research has clearly documented the significant challenges and barriers that new farmers face – access to land and capital overwhelmingly being the top two. The most prevalent barriers are also ones that often cannot be overcome with programs that merely provide new farmers with information. Calo (2018) refers to these programs as "knowledge-deficit interventions" and defines them as based on a model that "assumes that presence or absence of official expertise—the 'knowledge, skills, and tools needed to make informed decisions'—makes the difference between a farmer that succeeds and one that fails." While the influx of new farmer programming that has occurred as a result of funding through BFRDP has resulted in the creation of an enormous amount of resources and education programs, Calo's research finds that the vast majority of program offerings take a "knowledge-deficit" approach.

In fact, he argues that this is largely a result of the BFRDP program itself, which frames beginning farmer issues through a knowledge-deficit model – whether it's knowledge of production skills, business planning, finances, or acquiring land. The programs provide new farmers with education and training while failing to address the roots of the structural barriers that create these challenges for farmers in the first place. These structural barriers are compounded and most extreme for farmers of color, immigrants, refugee, and non-English speaking farmers (Minkoff-Zern, 2019). This results in a system where the

farmers who face the most barriers and challenges to entering farming are also the ones least served by the knowledge-deficit approach that the majority of new farmer programs take.

Program offerings across Wisconsin and its neighboring states are no exception. The vast majority operate with a knowledge-deficit approach. However, throughout the course of my project I identified individuals who are beginning to understand that we likely do not need more education programs. What is more urgently needed is support for programming that addresses the various structural barriers facing new farmers that prevent them from succeeding even if they have all the knowledge and skills necessary.

Measuring New Farmer Success

While evaluation of programming that exists for new farmers in Wisconsin was beyond the scope of my project work, questions around this inevitably emerged throughout the course of the project and accompanying literature review and is something that is critically important to consider when designing programming for new farmers. There is overwhelming evidence that farmers find most value in peer-to-peer learning approaches (Laforge & McLachlan, 2018; Paine & Sullivan, 2015) and that this is especially true for farmers who have historically been underserved by traditional programming such as organic and sustainable farmers (Hassanein, 1999). Additionally, there is evidence that a significant value of new farmer programs is in the development of social capital and networks (Bailey, 2013; Hightower, L. et al., 2013; Smith et al., 2019). Through land-access programs like farm incubators, one way social networks play a role is by facilitating valuable peer-to-peer learning among farmers (Smith et al., 2019).

This was made evident to me through my interactions with farmers at the Farley Center Farm Program who voiced a desire for more peer-to-peer learning opportunities on the farm. I have also observed the significant value of social networks that are created at these programs during my time working for a farm incubator. Unfortunately for many involved, the farm incubator program I was working for was forced to close mainly because of budgetary issues. As a result, the end of my time there was marked by closing the program and assisting farmers in finding new sites for their farm businesses. Many farmers found new homes on land as a result of relationships they had formed with other farmers at the incubator. I also watched as farmers would share tools, lend another farmer a truck to move supplies, and share with each other information and resources that they were finding useful during the transition. Through the incubator, the farmers had built significant social capital and formed their farm community, which continued to help them navigate challenges beyond their time in the program.

Growing up on my family's farm I saw over and over how connections to community and neighbors are critically important to the farm business. Sharing of equipment, knowledge, and labor are common occurrences I witnessed in our community. Whether it is neighbors bringing their equipment and helping

finish up our fieldwork before a rainstorm or sharing referrals for equipment or supplies. The social capital that has been built over years of living and farming in community plays a significant role in the success of the farm business. For many new farmers, this social capital must be built from scratch.

Many program staff that I talked with during my project work also acknowledge the importance of building community and connections among new farmers and recognize this as a real benefit of programming. However, we too often disregard relationship building as an outcome that should be measured, or something to put intentional resources toward facilitating. Grants put more emphasis on "number of new farmers trained" or "increased knowledge and skills" and rarely on the social connections that are built while farmers participate in a program. Yet, the social connections are what will contribute to ongoing learning and resource access long after the program ends and far beyond the topics that were covered.

Recently there has been movement toward acknowledging this reality and pushing for alternative ways to measure and track success among new farmers and new farmer programming. One example of this is the Gaining Results through Evaluation Work (GREW) project led by the Center for Agroecology & Sustainable Food Systems (CASFS) at UC Santa Cruz, which is creating and providing evaluation tools, training, and profession development for staff working with new farmers, much of which focuses on tracking outcomes that relate to all four levels of farmer success: Financial, Operational, Quality of Life, and Social (Pool, 2014). Acknowledging the importance of all of these aspects and measuring them among new farmers is the first step toward a deeper, more holistic understanding of how new farmer programs contribute to farmer success.

REFERENCES

- Ackoff, S., Bahrenburg, A., & Shute, L. (2017). *National Young Farmers Coalition* | *Building a Future with Farmers II*. National Young Farmers Coalition.
 - https://www.young farmers.org/resource/building-a-future-with-farmers-ii/
- Agriculture Improvement Act of 2018, 115th Congress, 2nd (2019). https://www.congress.gov/115/bills/hr2/BILLS-115hr2enr.pdf
- Ahearn, M. C. (2011). Potential Challenges for Beginning Farmers and Ranchers. *Choices*, 26(2), 6. https://www.choicesmagazine.org/choices-magazine/theme-articles/innovations-to-support-beginning-farmers-and-ranchers/potential-challenges-for-beginning-farmers-and-ranchers
- Ahearn, M. C., & Newton, D. J. (2009). Beginning Farmers and Ranchers. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.1408234
- Anderson Park Friends. (2018). Anderson County Farm: Agricultural Mission.
- Bailey, N. E. (2013). Educating the future of agriculture: A focus group analysis of the programming needs and preferences of Montana young and beginning farmers and ranchers (pp. 1–187) [Thesis, Montana State University Bozeman, College of Agriculture]. https://scholarworks.montana.edu/xmlui/handle/1/2635
- Beginner Farmer Education Resources. (n.d.). Organic Vegetable Farm Manager Apprenticeship.

 Retrieved April 9, 2020, from https://organicvegetableapprenticeship.org/education-resources/
- Beginning Farmers and Ranchers. (n.d.). Oregon Community Food Systems Network. Retrieved March 30, 2020, from http://ocfsn.net/priority-issue-areas/beginning-farmers-ranchers/
- Budzinski, J., Perez, J., & Williams, A. (2017). *Cultivating the Next Generation*. National Sustainable Agriculture Coalition. http://sustainableagriculture.net/wp-content/uploads/2017/10/Cultivating-the-Next-Generation-Oct-2017.pdf
- Calo, A. (2018). How knowledge deficit interventions fail to resolve beginning farmer challenges. Agriculture and Human Values; Dordrecht, 35(2), 367–381. http://dx.doi.org.ezproxy.library.wisc.edu/10.1007/s10460-017-9832-6
- Carlisle, L., Wit, M. M. de, DeLonge, M. S., Calo, A., Getz, C., Ory, J., Munden-Dixon, K., Galt, R., Melone, B., Knox, R., Iles, A., & Press, D. (2019). Securing the future of US agriculture: The case for investing in new entry sustainable farmers. *Elem Sci Anth*, 7(1), 17. https://doi.org/10.1525/elementa.356
- Comer, D. M. (2019). A Descriptive Analysis of Beginning Specialty Crop Farmer Training Programs in Michigan [M.S., Michigan State University]. https://search.proquest.com/docview/2328920061/abstract/B3EC77491BB14199PQ/1

- Dane County Parks. (2018). *Parks and Open Space Plan 2018-2023*. https://bloximages.chicago2.vip.townnews.com/madison.com/content/tncms/assets/v3/editorial/6/cb/6cbf466b-d046-5adb-b1db-106b1eb0cbd8/5aac49ef7d132.pdf.pdf
- Dreyfus, S. E. (2004). The Five-Stage Model of Adult Skill Acquisition. *Bulletin of Science, Technology & Society*, 24(3), 177–181. https://doi.org/10.1177/0270467604264992
- Ewert, B. (2012). Understanding Incubator Farms: Innovative Programs in New Farmer Development.

 Graduate Student Theses, Dissertations, & Professional Papers.

 https://scholarworks.umt.edu/etd/1146
- Explore Matrix | University of Maryland Extension. (n.d.). Retrieved March 30, 2020, from https://extension.umd.edu/newfarmer/explore/explore-matrix
- Farm Beginnings Collaborative. (n.d.). *Growing the Next Generation of Farmers*. https://smallfarms.cornell.edu/wp-content/uploads/2017/05/LSP-Roadmap-for-Farmer-Training-1qby11y-14hg6yh.pdf
- Figueroa, M., & Penniman, L. (2020, March). *Memo: Land Access for Beginning and Disadvantaged Farmers*. Data For Progress. https://www.dataforprogress.org/memos/land-access-for-beginning-disadvantaged-farmers
- Freedgood, J., & Dempsey, J. (2014). *Cultivating the Next Generation: Resources and Policies to Help Beginning Farmers Succeed in Agriculture*. https://s30428.pcdn.co/wp-content/uploads/sites/2/2019/09/AFT_BF_08-27-2014lo_0.pdf
- Hassanein, N. (1999). Changing the way America farms: Knowledge and community in the sustainable agriculture movement. University of Nebraska Press.
- Hightower, L., Niewolny, K., & Brennan, M. (2013). *Immigrant farmer programs and social capital:*Evaluating community and economic outcomes through social capital theory: Community

 Development: Vol 44, No 5.

 https://www.tandfonline.com/doi/abs/10.1080/15575330.2013.838975
- Key, N., & Lyons, G. (2019). *An Overview of Beginning Farms and Farmers*. http://www.ers.usda.gov/publications/pub-details/?pubid=95009
- Laforge, J. M. L., & McLachlan, S. M. (2018). Learning communities and new farmer knowledge in Canada. *Geoforum*, 96, 256–267. https://doi.org/10.1016/j.geoforum.2018.07.022
- Learning How to Farm—Beginning Farmer Resource Network of Maine—University of Maine
 Cooperative Extension. (n.d.). *Beginning Farmer Resource Network of Maine*. Retrieved March 30, 2020, from https://extension.umaine.edu/beginning-farmer-resource-network/find-resources-and-assistance/learning-how-to-farm/
- Minkoff-Zern, L. (2019). The New American Farmer. The MIT Press.
- Niewolny, K. L., & Lillard, P. T. (2010). Expanding the Boundaries of Beginning Farmer Training and Program Development: A Review of Contemporary Initiatives To Cultivate a New Generation of

- American Farmers. *Journal of Agriculture, Food Systems, and Community Development, 1*(1). https://doi.org/10.5304/jafscd.2010.011.010
- Organizations-Serving-Refugee-Farmers-Directory-1-1hu1dvs.pdf. (n.d.). Retrieved March 30, 2020, from https://smallfarms.cornell.edu/wp-content/uploads/2012/04/Organizations-Serving-Refugee-Farmers-Directory-1-1hu1dvs.pdf
- Our Vision, Mission and Values | Community GroundWorks. (n.d.). Retrieved March 31, 2020, from https://communitygroundworks.org/who-we-are/mission-vision-values
- Padget, G., & Nelson, J. (2020). "Intermediate" Farmer Challenges [Breakout Session]. MOSES Organic Farming Conference. La Crosse, WI.
- Paine, L., & Sullivan, A. (2015). Beginning Farmers in Wisconsin: 2014 Survey Summary.
- Pool, K. E. (2014). Farmer perspectives on success and challenges: A study of small farms in Oregon's Willamette Valley. Oregon State University.
- SAA Design Group, Inc. (2013). *Master Plan for Anderson Farm County Park*. https://www.danecountyparks.com/documents/pdf-Planning/Anderson_Final_MP_opt.pdf
- Sheils, C., & Descartes, M. (2004). *Working with New Farmers: Topics in Professional Development*. 56. http://www.smallfarm.org/uploads/uploads/Files/WORKING WITH NEW FARMERS.pdf
- Smith, K. S., Ostrom, M., McMoran, D., & Carpenter-Boggs, L. (2019). Connecting New Farmers to Place, Agroecology, and Community through a Bilingual Organic Farm Incubator. *Journal of Agriculture, Food Systems, and Community Development*, 9(A), 111–124. https://doi.org/10.5304/jafscd.2019.091.030
- USDA NASS. (2019). 2017 Census of Agriculture Highlights: Farm Producers. https://www.nass.usda.gov/Publications/Highlights/2019/2017Census Farm Producers.pdf

APPENDICES

APPENDIX A - Wisconsin Beginning Farmer Program Matrix

A.1 - Existing Program Lists

List Name	Host Organization	Description & Notes	
Beginning Farmer	UW Division of	Beginning farmer training in/near Wisconsin;	
Programs	Extension – Small Farm	Page is not actively managed and has not been	
	Resources	updated recently; A number of programs listed are	
		no longer offered; Organized by frequency of	
		offerings ("regular basis" or "occasional"); Online	
		Courses and Conferences headers are included,	
		but no programs listed under these categories.	
Link: https://fyi.e	extension.wisc.edu/smallfari	ms/resources/beginning-farmer-programs/	
Formal Beginning	MOSES – New Organic	Alphabetical listing of training programs with	
Farmer Training	Stewards	descriptions and links to websites; Covers entire	
Programs		upper Midwest and beyond; Fairly comprehensive	
		list and links are mostly up to date	
Link: https://mosesorganic.org/projects/new-organic-stewards/resources/#training			
	T		
Beginner Farmer	Organic Vegetable Farm	Table of program offerings for beginning	
Education Resources	Manager Apprenticeship	diversified vegetable farmers; Organized by level	
		of instruction; Last updated November 2018	
Link: https://orga	nicvegetableapprenticeship	.org/education-resources/	
	T		
Routes to Farm	Angelic Organics	Searchable database of program offerings; Filters	
	Learning Center	by experience level, category, and location; Only	
		includes offerings by 11 partner organizations –	
		not comprehensive of offerings for new farmers in	
		Wisconsin	
Link: https://rout	es2farm.org/?s=		

A.2 – Interviews

Organization Name	Interview	Programs
Program specific interviews		
Madison Area Technical College	Randy Zogbaum	Institute for Sustainable Agriculture;
		Priske Farm
Farley Center	Seth Riley	Incubator/Collaborative Farm
Sinsinawa Collaborative Farm	Christin Tomy	Collaborative Farm
Community Groundworks	Garrett Peterson	Troy Farm Field School
Land Stewardship Project	Annelie Livingston –	Farm Dreams; Farm Beginnings;
	Anderson	JourneyPerson Program
MOSES	Chuck Anderas	Mentorship
Angelic Organics Learning Center	Shelbie Blank	Take Root; Farm Beginnings; Farm
		Financing; Farm Dreams; Farm
		Finance Bootcamp; Routes to Farm;
		CRAFT; Open books; Farm Assets
CIAS Beginning Growers Schools	John Hendrickson	Market Growers; Cut Flower
		Growers; Apple Growers;
Wisconsin School for Beginning	Nadia Alber	FISC; Online; In-Person offerings
Dairy & Livestock Farmers		
Fondy Food Center	Stephen Pietro	Fondy Farm; Market access
Non-program specific interviews		
UW Extension – Small Farm	Diane Mayerfeld	
Resources		
Farm Beginnings Collaborative	Amy Bacigalupo	

A.3 – Beginning Farmer Program Matrix

Beginning Farmer Program Matrix				
	Novice/Exploring	Beginner	Advanced Beginner	Competent
Education Programs (Programs ra hands-on components)	nge from production to bu	siness development	topics as well as classro	oom, online &
UW Madison - Center for Integrated Agricultural	School for Beginning Market Growers			
Systems (CIAS)	Cut Flower Growers Scho	ool		
	School for Beginning App	ole Growers		
	School for Urban Agricul	ture		
	Wisconsin School for Beg	ginning Dairy & Liv	restock Farmers	
Angelic Organics Learning Center (AOLC)	Farm Dreams			
		Stateline Farm B	eginnings	
			Farm Finance Bootc	amp
Land Stewardship Project (LSP)		Farm Dreams		
			Farm Beginnings	
				JourneyPerson Course
Managed Grazing Innovation Center		Managed Grazing (Online)	g Dairy Certificate	
Midwest Organic & Sustainable Education Service (MOSES)		Fearless Farm Finances (Online)		
UW-Extension	Farm Pulse Continuum		ım	
Wisconsin Academic Institutions	UW Madison Farm & Industry Short Course (FISC)			
	WI Technical College System			

	Agriculture, Food & Natural Resources Programs			
	Northeast WI Technical College (NWTC) Sustainable Food & Agricultural Systems Associate Degree Sustainable Food & Ag Business Course			
	Bachelor Degree Programs UW-Madison: College of Agriculture & Life Sciences UW-River Falls: College of Agriculture, Food & Environmental Sciences UW-Platteville: School of Agriculture			
Hands-On Training				
	Rooted - Field School			
	Farming After Incarceration	on Release (FAIR)		
	Wellspring, Inc Farmers-In-Training Program			
	Practical Farmers of Iowa - Labor 4 Learning			
	Angelic Organics Learning Center - Take Root Beginning Farmer Program			
	Organic Vegetable Farm Ma Apprenticeship		Farm Manager	
	Savanna Institute Agroforestry Apprenticeship		Agroforestry	
	Dairy Grazing Apprenticeship			
Mentorship				
	MOSES Farmer-to-Fa		armer Mentorship	
	OGRAIN Mentor		OGRAIN Mentorship	Program
	SCORE Business Mentoring Practical Farmers of Iowa - Beginning Farmer Retreat		Mentoring	

Resource Access Programs for New Farmers

LAND ACCESS	ACCESS TO CAPITAL	
FARM INCUBATORS & COLLABORATIVE FARMS Farley Center Farm Sinsinawa Mound Collaborative Farm Fondy Food Center Farm Prairie Crossing Farm Business Development Center Hmong American Farming Association (HAFA)	 Farm Service Agency (FSA) Beginning Farmer Loans Compeer Financial Young & Beginning Farmer Loans NRCS Environmental Quality Incentives (EQIP) Program – 5% funds targeted to Beginning Farmers National Young Farmers Coalition Young Farmer Seed Grants 	
LAND-LINK PROGRAMS • Farmland Access Hub (Renewing the Countryside) • Seeking Farmers-Seeking Land Clearinghouse (Land Stewardship Project)	More information on funds for farmers can be found on the following resource lists: • MOSES Funds for Farmers • Practical Farmers of Iowa: Beginning Farmer Resource Guide to Financing	

The **Learning Resources for Farmers** table lists many of the available programs for farmers in the region. This is not a complete list but gives examples of the various programming available as a starting point for farmers to explore.

Learning Resources for Farmers				
FIELD DAYS/WORKSHOPS & WEBINARS	NETWORKS & LISTSERVS	CONFERENCES		
FIELD DAYS Upper Midwest CRAFT MOSES Organic Field Days In Her Boots Michael Fields Agricultural Institute Fair Share CSA Coalition Savanna Institute Field Days Practical Farmers of Iowa Great Lakes Intertribal Ag Council Workshops Land Stewardship Project OGRAIN UW Extension Heart of the Farm: Women in Agriculture Annie's Project (with Compeer Financial) WEBINARS PFI Farminars Savanna Institute Nutshells Farm Commons	 National Young Farmer Coalition Women in Sustainable Ag Women Caring for the Land OGRAIN Land Stewardship Project Farmer Network Hemp Information Exchange Network Driftless Young Farmers Coalition Grazing Networks Upper Midwest CRAFT MOSES Fairshare CSA Coalition Angelic Organics Learning Center-Farm Viability Learning Circles 	January-March MOSES (WI) Organic Vegetable Growers (WI) GRAIN (WI) Emerging Farmers Conference (MN) Small Grains Conference (IA) Grassworks Grazing Conference (WI) Cover Crops Conference (WI) April-September Great Lakes Intertribal Food Summit October-December Perennial Farm Gathering (WI) Resilient Farms Conference (WI)		

A.4 – UW Extension Web Article

Training and Education Opportunities for Beginning Farmers

"Beginning farmer" is a broad term that often refers to an individual who has been operating a farm for less than 10 years or someone who has not yet begun to operate a farm but is actively working toward doing so. Today's beginning farmers tend to be more diverse than previous generations – in demographics, education and experience.

- Nationwide, beginning farmers are more likely to be women, have a college degree, and come from a diversity of backgrounds, when compared to experienced farmers (Ahearn, 2011)
- Beginning farmers in Wisconsin come from a variety of backgrounds, are often entering farming
 as a second career, and many of them have prior connections to farming that inspired them (Paine
 & Sullivan, 2015).
- Young farmers (which includes aspiring, beginning, and experienced farmers under the age of 35) are more likely to have not grown up on a farm, have advanced degrees, be women and/or farmers of color, and engage in diversified and sustainable practices (Ackoff et al., 2017)

In response, the way in which individuals enter farming has become more diverse as well. Programs and trainings that served previous generations of farmers are being expanded and re-defined to meet the needs of new farmers today. Previous programs tended to serve a narrow group of farmers - primarily young, mostly white men who grew up on farms and were looking for additional education. Traditional academic institutions also have a history of not meeting the needs of diverse farmers and farming systems, especially around sustainable practices (Hassanein, 1999).

However, since 2000 education and training opportunities have emerged that serve a wider range of new farmers (Niewolny & Lillard, 2010) and look different from traditional farmer training in several ways:

- Focus more on new farm businesses, instead of educating farmers who are taking over an established farm
- Often center on sustainable agricultural practices
- Serve a more diverse range of "beginning farmers"- including groups with various levels of experience (aspiring through experienced) and from more diverse backgrounds
- Go beyond production skills by incorporating topics like business development, land access, and financial management
- Provide social-networking opportunities
- Focus on hands-on learning with a more place-based knowledge focus
- Vary in organizational structure from academic institutions to nonprofits and farmer networks

Academic institutions and Extension continue to offer and expand educational programs for beginning farmers. For example, University of Wisconsin-Madison's Farm and Industry Short Course (FISC) continues to offer foundational classes for traditional beginning farmers through its first year Foundations of Farm & Agribusiness Management Certificate and second year certificate tracks, but now also offers classes that focus on livestock grazing, organic grain production, and urban agriculture. Technical colleges offer associates degrees, technical diplomas, and certificates for individuals interested in a wide variety of careers in agriculture. In addition, non-profit organizations have been playing an even bigger role in recent years when it comes to beginning farmer education.

Diversity in programming can be seen across Wisconsin and neighboring states. Programs are designed to provide education and training for new farmers in a wide variety of ways, but they can be generally sorted into three categories: Education Programs; Hands-On Training; and Mentorship.

Education Programs

Education programs across the region include both online and in-person classes and range in length from short-term workshops like the Wisconsin School for Beginning Market Growers to longer-term offerings like the yearlong Farm Beginnings Program. They also span a range of topics – including farm finance, business planning, and production skills - as well as a diversity of farm enterprises including vegetables, livestock, dairy, fruit crops.

Hands-on Training

Beginning farmers today are less likely to have grown up on a farm, which means there is an increased need for hands-on training opportunities. Organizations in and around Wisconsin have responded to this, creating everything from the first registered agricultural apprenticeships in the country (Dairy Grazing Apprenticeship and the Organic Vegetable Farm Manager Apprenticeship); to a range of other on-farm training programs that provide opportunities for individuals new to farming, or a specific type of farming, to get hands-on experience in the field.

Mentorship

Mentorship programs bring beginning farmers together with experienced persons in the field for knowledge sharing and education. Opportunities range in length from weekend-long offerings like the Beginning Farmer Retreat hosted by Practical Farmers of Iowa to longer-term one-on-one relationships like the mentorship program hosted by Midwest Organic and Sustainable Education Service (MOSES).

Many of these programs serve beginning farmers with a range of prior knowledge and experience, but certain programs may be best suited for farmers at a certain level. The Beginning Farmer Program Matrix gives an overview of available programs organized by category and the beginning farmer level(s) they serve.

Additional Opportunities

In addition to taking part in the education and training programs that are specifically for beginning farmers, new farmers may find valuable learning opportunities through program offerings geared toward all levels of farmers. The Learning Resources for Farmers table on page 3 of the Program Matrix lists many available programs for farmers in the region. This is not a complete list but includes many examples of the programming available for farmers to explore.

The Organizations Serving Beginning Farmers in Wisconsin map identifies organizations in the region that host programs that provide education, training, and other resources specifically geared toward beginning farmers. While not all organizations are based in the state, they all offer programs and resources that are available to farmers in Wisconsin.

APPENDIX B - Anderson Farm County Park Implementation Plan Excerpts

Collaborative Farm - Overview

➤ Defining Collaborative Farms

We provide the following definition for the term Collaborative Farm in this context:

<u>Collaborative Farm</u> - a secure land tenure arrangement in which growers have access to shared resources such as infrastructure (i.e. storage shed, greenhouse, cooler, etc.) and equipment (i.e. tools, tractor, etc.), but manage their own individual plot(s) of land.

By this definition, Collaborative Farms hold many similarities to Farm Incubator programs, but differ in a couple key ways: the experience level of farmers who have access to the land and the length of land tenure (Table 1). While "Farm Incubator" is a more established term, there has been a rise of programs recognizing the limitations of the traditional definition of "incubators" that have moved away from the term.

Table 1. Comparison of the definition of Collaborative Farm and Farm Incubator

Collaborative Farm	Farm Incubator
A <u>secure land tenure</u> arrangement in which growers have access to shared resources such as infrastructure (i.e. storage shed, greenhouse, cooler, etc.) and equipment (i.e. tools, tractor, etc.), but manage their own individual plot(s) of land	A farm property that provides beginning farmers with temporary, affordable access to small parcels of land and infrastructure, and often training, for the purpose of building skills and launching farm businesses. ¹

Farm Incubators have been founded under the defining principle of providing land access for beginning farmers who will eventually (usually between 5-7 years after starting on the incubator) move off the incubator to independent farmland. However, many farmers continue to face barriers to land access beyond the typical 5-7 year limit of a farm incubator.

Programs have adapted to this in a few ways. Some programs have sought to expand their land base so they can continue to provide land access for new farmers while not needing experienced farmers to move off, thus extending the time limit of incubator land access. Other programs avoid the title of farm incubator altogether, instead going by a program name unique to their organization. A third approach that has emerged in Wisconsin is a move toward the term "Collaborative Farm" to distinguish these programs from traditional Farm Incubators. Examples include the Farley Center Farm Program in Verona, WI (shifting toward referring to the program as a Collaborative Farm instead of a Farm Incubator) and Sinsinawa Mound Collaborative Farm in Sinsinawa, WI.

By engaging the term "Collaborative Farm" we seek to align this project with others engaged in efforts to provide secure land access for farmers through the use of this common terminology. However, because Collaborative Farm is a new term there is little in the way of resources and

¹Ackoff, S., Bahrenburg, A., and Shute, L. L. (2017). Building a Future with Farmers: Results and Recommendations from the National Young Farmer Survey. Retrieved from https://www.youngfarmers.org/wp-content/uploads/2018/02/NYFC-Report-2017.pdf

published literature on them. Due to the many characteristics they share with Farm Incubators, much of this implementation plan draws from the vast resources and information that exist on incubator programs.

> Why are Collaborative Farms important?

Land access is reported as the biggest barrier to farming for beginning farmers.² In the past 20 years, farm incubators and collaborative farms have been developed to reduce this barrier by providing affordable land access for farmers. These programs are uniquely well suited to providing support for farmers because of the way that they break down so many of the major barriers by providing not only affordable land access, but also access to shared infrastructure and equipment, a social support network, and oftentimes access to support around education and markets.³

Collaborative Farms and Farm Incubators are spaces where farmers can establish and/or operate a farm business with lower investment, resources, and risk. They also embed the farmer within a community of growers who they can learn and receive support from, thus building their social network and capital. This is particularly powerful for young and beginning farmers who are just getting their start as well as farmers of color or members of underserved groups for who the barriers to farming are compounded by socio-political realities that result in discrimination against them.

As opposed to Farm Incubators, Collaborative Farms provide *secure* land tenure for growers. Longer-term land access provides security for growers, which is meaningful for a number of reasons for both farmers and the land (Table 2).

Table 2. Benefits of collaborative farm structure for both farmers and land

Benefits for Farmers	Benefits for the Land
 Provide secure land tenure for growers who face barriers to land access beyond 5-7 years Access to shared infrastructure and equipment Foster alternative models for successful farmers/farm businesses Cultivate meaningful education, mentorship, and social networks. Ability to produce perennial crops 	 Encourage ecological stewardship of the land Incentivize long-term investments in ecosystem health (soil, water, biodiversity) Greater land stewardship through increased sense of place Planting of perennial systems

Collaborative Farms and Equity

² Ahearn, M. C. (2013.) Beginning farmers and ranchers at a glance. U.S. Department of Agriculture, Economic Research Service, EB-22. Retrieved from https://www.ers.usda.gov/publications/pub-details/?pubid=42876.

³ Ewert, B. (2012). Understanding incubator farms: Innovative programs in new farmer development. Graduate Student Theses, Dissertations, & Professional Papers. 1146. Retrieved from: https://scholarworks.umt.edu/etd/1146

As we explore in greater depth in the following section of this report, barriers to land access are even greater for socially disadvantaged and minority farmers who face a multitude of socio-cultural barriers to land access in addition to standard barriers of affordability. Because land access is so connected to policies and social dynamics, minority groups have historically been discriminated against when it comes to accessing land.⁴ These histories and continued realities continue to impact individuals today. Expanding opportunities to access secure land tenure for historically discriminated against groups is a crucial step to advancing equity within our food systems.

Collaborative Farms can be a step toward addressing this inequity by providing secure land tenure for minority farmers and building a system of support and community. A number of programs across the country are engaged in this work by facilitating programs that address land access through an equity framework by specifically serving minority communities (Table 3). While not all of these programs define themselves as a Collaborative Farm (with some referring to their programs as farm incubators), they all share the qualities of a Collaborative Farm by providing secure (long-term) land access for farmers on a shared site while also providing access to shared infrastructure and support systems.

Table 3. Secure land-tenure programs operating with an equity framework

Program Name Organization, Location	Communities Served	Description
Fondy Farm Project Mequon, WI https://fondymarket.org/fondy- farm/	Immigrants, socially- disadvantaged farmers	"The Fondy Farms offers affordable, long term leases on quality land plus the amenities needed to succeed, such as irrigation, greenhouses, tractors, as well as technical and business assistance"
Global Growers Atlanta, GA https://www.globalgrowers.org/	Refugee & Immigrant growers; Growers of Color	"The mission of Global Growers is to increase the number of food producers who create access to healthy, sustainably-grown food and also to prepare farmers to be competitive in their local marketplace."
Hmong American Farmers Association (HAFA) Farm St. Paul, MN https://www.hmongfarmers.com/hafa-farm/	Hmong farmers	"The HAFA Farm is a 155 acre research and incubator farm located in Vermillion Township, just 15 minutes south of Saint Paul, Minnesota. HAFA sub-leases the land to our members who are experienced farming families. HAFA also maintains multiple research and demonstration plots to provide continuing education in sustainable agricultural practices to our member-farmers."

⁴ Calo, A., & De Master, K. T. (2016). After the incubator: Factors impeding land access along the path from farmworker to proprietor. Journal of Agriculture, Food Systems, and Community Development, 6(2), 111–127.

_

MN Food Association & Big River Farms St Croix, MN http://mnfoodassociation.org/far mer-education-program	Immigrant, minority farmers	"The Big River Farms Training Program provides primarily immigrant and minority farmers with instruction and certification for organic vegetable production, access to resources and markets for growing, distributing and selling those vegetables, and a forum in which they can develop and practice business skills. Farmer Participants have access to demonstration/production plots for growing vegetables and receive valuable training in farm business goals and practices."
Viva Farms Mt. Vernon, WA https://vivafarms.org/	Beginning farmers; Bilingual: serves Spanish speaking immigrant and farm worker populations	"The incubator farm model provides aspiring farmers the necessary resources and support to build successful farm businesses. Our Farm Business Incubator is a bilingual program based on offering support to both beginning farmers and experienced farm workers in five essential areas: access to land, infrastructure and equipment; markets, capital and training."

Operation Plan

> Farm Plot Layout

Phase I of Anderson County Park Farm aims to place growers on 12-acres of land currently in conversion. To accommodate growers of different operational scales, the 12-acres earmarked for initial placement will be divided into 22 x ½ acre plots with 12' drive roads separating sections (see attached map). ¼ acre plots will be a standardized 100'W x approximately 200'L, allowing for consistent bed lengths promoting the sharing of resources (irrigation lines, row cover, landscape fabric, etc.) amongst growers. Growers will have the opportunity to acquire a single ½ plot or multiple contiguous plots.

➤ Terms of Lease / Contract

The lease will be the primary document detailing terms for farmers operating on the site. Terms of a lease will be developed in 2020. The lease will draw from existing county agricultural leases, examples of other collaborative farm and farm incubator lease structures, and grower input (across 3 listening sessions). A process for amending terms with growers will also be included.

The terms of lease for the collaborative farm will include:

- Plot/Acreage (See Appendix B)
- Services
- Expectations
- Farmer responsibilities
- Site Manager responsibilities
- o Costs (Including: land, infrastructure, equipment, water, other services)

➤ Grower Handbook

A grower handbook will complement the formal lease and serve as a resource for farmers for orientation and operation on the site as well as additional resources. The handbook will draw from handbooks developed by other collaborative farms and farm incubators. It will also be added to based on input from growers. The handbook will include information on the following areas:

- Land history & Overview including information on ecosystem/landscape characteristics, soil type, watershed, etc.
- Expectations & Protocols including specific details for the following categories
 - Shared infrastructure
 - Equipment usage
 - Water
 - Safety
 - Communal spaces
- o Contact Information Staff, farmers, other resources
- Additional Farmer Resources

➤ House & Other Existing Infrastructure

 The house and other infrastructure will be assessed based on grower feedback as to best use. This plan will be developed in 2020, once the initial growers are identified for placement.

Grower Education & Training

> Assessing the Need

The Farmland Access Survey includes questions related to growers' prior experience and education as well as desire/need for additional education or training opportunities. This initial assessment will inform the project on education and training needs of growers and provide direction for implementing education and training support systems and/or opportunities for farmers.

➤ Existing Programs & Gaps

In recent decades, a variety of contemporary approaches to farmer training have emerged especially within the sustainable agriculture movement.⁵ In and around Wisconsin, there are a number of existing education and training programs and opportunities for farmers. Offerings range from curriculum-based programs, hands-on training, short-term workshops, conferences, field days, grower networks, mentorship, and others. The diversity of the agricultural landscape in Wisconsin has led to the availability of education and training opportunities for a wide variety of enterprises including: vegetable production, dairy and livestock, agroforestry & perennial systems, organic grain, cut flowers, and more.

⁵ Niewolny, K. L. & Lillard, P. T. (2010). Expanding the boundaries of beginning farmer training and program development: A review of contemporary initiatives to cultivate a new generation of American farmers. Journal of Agriculture, Food Systems, and Community Development, 1(1), 65-88

However, gaps continue to exist in training and education offerings for beginning farmers of underserved communities. Specifically, there is a lack of program offerings in languages other than English. Additionally barriers to participation in programming may include: cost; travel; time; lack of cultural relevance, understanding, or representation; and education background. Currently, the few programs in the region with dedicated offerings for underrepresented communities include other collaborative farms and a few hands-on training and business development opportunities (Table 4).

Collaboration with existing programs will be the initial primary strategy to providing access to education and training for growers on the Collaborative Farm. Collaboration will range from referring farmers to appropriate programs, hosting program offerings at the collaborative farm, or working with partners to restructure/adjust curriculum and program offerings to be more relevant and accessible to a diversity of farmers. As the specific needs of farmers are identified, education and training work will shift to respond in ways that are most beneficial for farmers.

Table 4. Education and training offerings for underserved beginning farmers in/near Wisconsin

Program Name Organization, Location	Description	Communities Served
Farming After Incarceration Release (FAIR) Madison, WI	Land access; market access; paid production & business training	Formerly incarcerated individuals
Farley Center Verona, WI	Land access; technical assistance; occasional trainings/workshops	Immigrants, Farmers of Color, Non-English speakers
Fondy Food Center Farm Milwaukee, WI	Land access & market support	Primarily low-income, immigrant Hmong farmers
Hmong American Farming Association (HAFA) Minnesota	Land access; on-farming bilingual workshops/trainings; bilingual resources	Hmong farmers
Latino Economic Development Center Minnesota	Business development classes & support (loans, technical assistance)	Primarily Latinx; Spanish- speakers

Program Evaluation

Program evaluation will be conducted annually when the collaborative farm is in operation. A transformative framework will be used to develop, implement, and analyze the program evaluation. Transformative evaluation is a framework based in participatory, mixed-methods approaches that centers the voices of marginalized groups and seeks to advance social justice. It is an iterative process that involves all stakeholders of a program in the evaluation process from design to dissemination of results. Steps for planning the program evaluation are:

- Identify **key stakeholders**, their stake in the evaluation, and how they will be involved in the evaluation
- Through a participatory process with key stakeholders, **identify purpose and use** of the evaluation (ie. what does the evaluation seek to learn and how will that information be used)
- Identify main evaluation questions and the methods (tools) that will be used to answer them
- Create plan for conducting, analyzing, and disseminating the results of the evaluation

The following resources will be referred to in the development of the program evaluation:

- National Farm Incubator Training Initiative (NIFTI) Guide to Metrics and Evaluation for Farm Incubators: https://nesfp.org/resources/nifti-guide-metrics-and-evaluation-farm-incubators
- NIFTI Beginning Farmer Program Evaluation Resource Library: https://nesfp.org/program-evaluation/library
- Gaining Results through Evaluation Work (GREW): Evaluation Support for Beginning Farmer and Rancher Programs: https://casfs.ucsc.edu/education/bfrdp/index.html
- Evaluation Practice for Collaborative Growth (Bakken, L. L., 2018)
- Transformative Research and Evaluation (Mertens, D. M., 2009)

Appendix C - Wisconsin Beginning Farmer Rancher Development Program (BFRDP) Awards

Award Date	Grant Title	Grantee Name
2009-09-25	Developing Farm Financial Knowledge of Beginning Organic and Sustainable Farmers	MID WEST ORGANIC AND SUSTAINABLE EDUCATION SER
2010-09-28	Gaining Ground: A Farm Incubator with Training and Technical Assistance for Beginning Socially Disadvantaged Farmers in Wisconsin	COMMUNITY GROUNDWORKS, INC.
2010-09-28	GrassWorks Formal Apprenticeship Program: A Pilot Project for Training Beginning Farmers	GRASSWORKS, INC.
2011-08-31	Gaining Ground: A Farm Incubator with Training and Technical Assistance for Beginning Socially Disadvantaged Farmers in Wisconsin	COMMUNITY GROUNDWORKS, INC.
2011-08-17	GrassWorks Apprenticeship Program: Career Paths for Beginning Farmers	GRASSWORKS, INC.
2011-08-22	Organic and Sustainable Experiential Learning for Beginning Farmers	MID WEST ORGANIC AND SUSTAINABLE EDUCATION SER
2012-06-27	Urban Farms for America with a Focus on Socially Disadvantaged Farmers in the Urban Agriculture Sector	GROWING POWER INC
2012-06-13	GrassWorks Apprenticeship Program: Career Paths for Beginning Farmers	GRASSWORKS, INC.
2012-05-09	Gaining Ground: A Farm Incubator with Training and Technical Assistance for Beginning Socially Disadvantaged Farmers in Wisconsin	LINDA AND GENE FARLEY CENTER FOR PEACE JUSTICE
2014-11-26	Dairy Grazing Apprenticeship: A National Program for Training New Dairy Farmers	DAIRY GRAZING APPRENTICESHIP, INC.
2014-12-12	Intensive Farmer Training with a Focus on Socially Disadvantaged Beginning Farmers	GROWING POWER INC
2015-08-21	Securing Beginning Farmers Through Succession Planning Project	EASTER SEALS WISCONSIN INC
2015-09-15	A Pathway to Livestock Farming: Providing Access to Land and A Guiding Hand	SOUTHWEST BADGER RESOURCE CONSERVATION AND DEV
2015-09-01	Organic Grain Resources And Information Network (OGRAIN): Supporting beginning organic grain growers in the Upper Midwest	SAES - UNIVERSITY OF WISCONSIN
2015-08-20	New Organic Stewards: Expanding Community, Resources and Financial Knowledge	MID WEST ORGANIC AND SUSTAINABLE EDUCATION SER
2017-07-24	Dairy Grazing Apprenticeship: Building Capacity, Curriculum, and Partnerships for Nationwide Work- Based Training of Beginning Dairy Farmers	DAIRY GRAZING APPRENTICESHIP, INC.
2017-08-10	Organic Grain Resources and Information Network (OGRAIN): Growing with beginning organic grain farmers in the Upper Midwest	SAES - UNIVERSITY OF WISCONSIN