

Options for New Farmer Training

A Scan of Farmer Training Programs in North American

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EXECUTIVE SUMMARY

This research was designed and completed as a partnership between Food: Locally Embedded, Globally Engaged (FLEdGE), the Ecological Farmers Association of Ontario (EFAO), and the Collaborative Regional Alliance for Farmer Training Southwest Ontario (CRAFT). The goal was to explore and synthesize different models of practical farmer training across North America. In the first phase of research, various programs offering practical, on-farm training were researched, documented, and categorized to better understand the different models in use today. Part 1 of this report includes a description of the five categories of farmer training (Informal Associations for Farm Internships; Centralized Internship Programs; Private/Non-profit Programs; Formal Academic Programs; Independent and Self-Directed Learning) , as well as discussion of the implications of the various models in the Ontario context. In the second phase of research, presented in Part 2, farm internships (a subset of one of the five categories developed in Part 1, and a relatively common form of farmer training in Ontario today) were explored in greater detail to describe the range of existing approaches within this model.

Our research determined that there is an opportunity to expand farmer training options in Ontario in all five of the categories, should sufficient support and funding be secured. It was further determined that while there is great interest in practical farmer training programs, there is limited published research and information in this area. Further research is recommended into practical farmer training options – and associated funding and support mechanisms – both domestically and internationally.

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RESEARCH GOALS

This research was a partnership project between the Food: Locally Embedded, Globally Engaged ([FLEdGE](#)) research group, [CRAFT Southwest Ontario](#) (Collaborative Regional Alliance for Farmer Training), and Ecological Farmers Association of Ontario ([EFAO](#)). The goal was to research, document, and categorize existing and emergent models of practical farmer training. Practical farmer training, for the purposes of this research, is considered to be farmer-to-farmer education with a significant on-farm component; it is hands-on in nature. The results were analyzed to better understand the range of practical farmer training options in existence today, in Ontario and across North America, to learn from these existing models, and to identify various practices that could be adapted in other places to improve farmer training.

CONTEXT

In Ontario, the on-farm internship¹ is a very common model of farmer training in North America, and unwaged or low-waged farm internships have grown tremendously in popularity in recent years (Ekers et. al., 2015). In a typical internship of this type, workers (usually with little to no prior experience in farming) trade labour on the farm for a combination of benefits that usually includes room and board, a small stipend, and – importantly for most interns – training. It is by nature an informal, individual farm-based approach to farmer training. Given the recent rapid growth in farm internships, they clearly hold appeal for both host farmers and interns. In Ontario at present, there is very little organization or regulation to farm internships. Even the well-established CRAFT Southwest Ontario is only a network, not a formal organization or legal entity, and it does not have the capacity to enforce labour regulations (Lekx, 2017).

¹ Although the word “intern” is used throughout this report to describe a wide range of on-farm work/learn experiences, paid and otherwise, not all of these necessarily meet the legal definition of an internship in any given jurisdiction. Analysis of the legality of various farm internships is beyond the scope of this project, but it is a subject of ongoing conversation in both the farming and academic community. For a resource on intern rights in Canada and Ontario, see [Canadian Intern Association, 2016](#). For legal perspectives on farm interns and agricultural workers in Ontario, see [Mandryk, 2017](#) and [Lambek, 2017](#).

In certain jurisdictions such as California and Oregon, there has been a regulatory push-back on such internships, with many small farms running internships being fined for violating federal and state labour laws (Alcorta et. al., 2013). Even when farmers and interns are mutually satisfied with the arrangement and do not consider their relationship to be “employment”, it may not be legal in that jurisdiction (Alcorta et. al., 2013). In Ontario, the question of the legality of farm internships is further complicated by the many exemptions to the Employment Standards Act to which farm employees are subject (Ministry of Labour, 2011).

Some parties (including those who participate in farm internships as both interns and mentor farmers) also have concerns over the potential ethical, social, and educational quality implications of farm internships. This is very much an emerging and evolving conversation in both the farming and research communities (perspectives on this are varied; for a start, see Salatin, 2013 and Levkoe and Ekers, 2017).

It is important to note that there is great diversity within farm internships, with a wide range of types of agriculture, living arrangements, teaching styles, and compensation strategies represented. This diversity is visible in Ontario’s farms offering internships.

Other avenues of practical or experiential farmer education are less visible in Ontario, although they do exist. Many agriculture training programs offered by post-secondary institutions are classroom-based and do not include a significant practical component. While there is some federal and provincial support to help new farmers access education, such as the Growing Forward 2 program, there is little in the way of a strategic approach to farmer training, and low or insufficient funding available for training is a constant challenge cited by both farmer and training organizations.

METHODOLOGY

This research emerged from a shared interest of the three research partner organizations in exploring and better understanding different models of farmer training, both within and beyond the context of farm internships. As such, the research was conducted in two stages. The research was conducted in summer of 2017. First, an environmental scan of farmer training programs was conducted to understand the different categories of farmer training models that exist. We explored examples of practical farmer training programs from across North America and created a set of profiles. These profiles were used to develop categories to describe the different structural approaches to farmer training. This research was largely based on literature review and internet-based searches. Results are found in Part 1: Categories of Farmer Training.

In the second stage, farm internships (a subset of one of the five categories developed in Part 1) were explored in greater detail to describe the range of existing approaches within this one specific model of farmer training. This research was based on a literature review and exploratory conversations with the research team, farmers and interns. Results are found in Part 2: On-farm internships.

PART 1: CATEGORIES OF FARMER TRAINING

Farmer training programs from across North America were scanned and categories were developed in to capture themes to represent the different structures. This section begins with a chart that gives the description of each category and several examples within it. This is followed by a more detailed description of each category and a discussion of the implications for this category in Ontario. Finally, Appendix B: New farmer training profiles contains profiles of some of the example programs in each category. Neither the chart nor the profiles are exhaustive, but were written to highlight the types of programs found in each category.

SUMMARY CHART OF TRAINING MODEL CATEGORIES

Grey cells under “Examples” are profiled in Appendix B: New farmer training program profiles.

TRAINING MODEL TYPES				
Informal Associations for Farm Internships	Centralized Internship Programs	Private/Non-profit Programs	Formal Academic Programs	Independent and Self-Directed Learning
A network of farms where internships are managed at individual farm level. Farmer and intern agree to an exchange of certain amounts/types of labour for certain benefits (may include food, housing, training, stipend, employee benefits, etc.). There is some coordination between member farms (e.g. coordinated field trips) but very little/nothing in the way of established	A central organization sets certain standards for host farms (which may include curricula, hours, minimum compensation, etc.) and brokers/mediates the relationship between interns and farmers. Central organization typically also offers some training directly to interns off their host farm (e.g. courses, farm tours).	Courses or training programs delivered for a fee by an organization other than a formal academic institution. Typically these fall into either a "farm school" category, which has an operational home farm site that receives students/interns/trainees for a set curriculum of hands-on training and work, or non-farm-based model that organizes training programs/workshops at	Practical training for new farmers at a formal academic institution, such as a college or university. The training may or may not be for a formal academic program. This list is limited to programs with significant practical education components.	Programs where most learning is self-directed and experiential; typically beginning farmers have a few years' experience and are in the early stages of running their own operation.

standards, mandatory curriculum, or mediation of the intern-mentor relationship.		other locations (typically on private farms).		
EXAMPLES				
CRAFT Southwest Ontario	Rogue Farm Corps (Oregon)	Everdale's Sustainable Farming Certificate (Ontario)	University of Santa Cruz Center for Agroecology & Sustainable Food Systems (CASFS) – Apprenticeship in Ecological Horticulture (California)	The Seed Farm incubator program: Steward and Enterprise farmers (Pennsylvania)
WWOOF Canada	North American Biodynamic Apprenticeship Program (NABDAP)	Everdale's Farm Planner course (Ontario)	Fleming College - Sustainable Agriculture Program (Ontario)	ACORN's Grow a Farmer mentorship program (Atlantic Canada)
	Dairy Grazing Apprenticeship (Wisconsin)	The Seed Farm Apprenticeship program (Pennsylvania)	UBC farm practicum and internships (BC)	MOFGA's Journeyman Program (Maine)
	Stewards of Irreplaceable Lands (SOIL) (Western Canada)	The Seed Farm individual workshops (many in partnership with Penn State Extension) - these are the courses apprentices take	U of G Dairy Herdsman Apprenticeship (Ontario)	EFAO Advisory Service (Ontario)
	FARRMS Internship Program (North Dakota)	School of Adaptive Agriculture (California)	Michigan State University Student Organic Farm - Organic Farmer Training Program	FarmStart's incubator farms [no longer operating] (Ontario)
	Quivira Coalition - New Agrarian Program (Southwest USA)	ACORN's Grow a Farmer Learning Series (Atlantic Canada)	Centre for Environmental Farming Systems - Farm Apprenticeship Program (North Carolina)	Farm Beginnings Journeyman program (Minnesota)
		Farms at Work Field Courses (mentorship)	Warren Wilson College - Farm Crew (North Carolina)	

		(Ontario)		
		Farms at Work Workshops (Ontario)	Kwantlen Polytechnic University - Bachelor of Applied Science in Sustainable Agriculture (BC)	
		Farms at Work Farm Business Planning program (Ontario)	Kwantlen Polytechnic University - Farm School (BC)	
		SOIL Association - Future Growers Program (UK)		
		EFAO workshops and courses (Ontario)		
		Canadian Organic Growers (COG) courses		
		Stone Barns Apprenticeship (Growing Farmers Initiative) (New York)		
		The Organic Farm School (Washington)		
		Farm Beginnings Class (Minnesota)		

DESCRIPTION OF TRAINING MODEL CATEGORIES

Category 1: Informal Associations for Farm Internships

DESCRIPTION

Informal associations for farm internships are organizations that provide a network between farms that offer internships or other on-farm education experiences. These types of internships are managed at an individual farm level: the farmer and intern agree to an exchange of certain amounts/types of labour in exchange for certain benefits (which may include food, housing, training, stipend or wage, employee benefits, etc.). Note, however, that interns may have little power to alter these terms, other than withdrawing their labour. There is some coordination between the member farms that may be used to add value to the intern experience, for example, in the form of field trips, group lessons, and intern social events. The network may also facilitate connections between potential interns and farms. However, there is very little or nothing in the way of established internships standards, mandatory curriculum, or mediation of the intern-farmer relationship.

There are also farms that offer internships that are not part of any network and operate independently. These types of internships would also fit into this category; however, none are profiled in the appendix because there is too much variety and specificity to be useful at this level of analysis. This discussion focuses on organizations such as the CRAFT networks. Instead, further analysis of farm-level internship variation is explored in Part 2: On-farm internships.

EXAMPLES

[CRAFT Southwest Ontario](#)

[WWOOF](#)

IMPLICATIONS

Informal associations for farm internships are a well-established model for training new farmers in this region (particularly for ecological farming, with CRAFT networks in several regions of the province). WWOOFing also occurs on some Ontario farms, although it does not tend to offer the same depth of education. This category is notable for delivering farmer training with the lowest cost and administrative burden, in a grassroots style; informal networks depend on the volunteer time of dedicated host farmers. Farmer training programs often struggle to maintain funding. The relative popularity of this type of low-cost, low-infrastructure training in Ontario may be indicative of a systemic lack of funding and structural support for practical farmer education.

Given the low capital, operational, and infrastructure requirements of running a CRAFT-type informal network, it would certainly be possible to expand this model if there were more farms interested in participating; however, this would not really change farmer training options in the region (other than to perhaps expand them geographically).

It is also important to note that informal networks rely on a certain density of farms offering internship within a few hours' drive of each other. While this works well in the southwest, for example, it may not be a viable model in more sparsely populated, or sparsely farmed, regions, such as the north. In such places, a farm school model (see category 3), where new farmers spend a whole season on a dedicated teaching farm, may be more appropriate.

Category 2: Centralized Internships Programs

DESCRIPTION

Centralized internship programs also provide a network between farms that offer internships, but they have some degree of coordination. In these instances, a central organization sets certain standards for host farms, which may include curricula, work hours for interns, minimum compensation, etc. The host organization also mediates the relationship between interns and farmers to some degree: in some cases, interns apply to participate directly to the central organization, which then brokers connections between selected interns and participating host farms, and interns have a third party to turn to if complications arise with their host farmer(s). The central organization also might offer some training directly to the interns off their host farm, such as workshops, farm tours, and socials; these days are organized and offered by a dedicated central office in coordination with each host farm. Upon program completion, interns typically receive a certificate of some kind.

EXAMPLES

[North American Biodynamic Apprenticeship Program](#)
[Rogue Farm Corps \(Oregon\)](#)

IMPLICATIONS

Centralized internships have been seen as advantageous in certain regions. It is much easier to build recognition around one central organization than around many different individual farms, so a certificate of completion from a central organization (e.g. [NABDAP](#)) may have better/wider recognition than that from an individual farm, even if that farm has an excellent training program. Centralized

organizations have also been used in regions where the legality of non-waged farm internships has become questionable or where farm internships have been banned outright. For example, in Oregon, [Rogue Farm Corps](#) was developed in consultation with the Oregon Department of Agriculture and the Bureau of Labor and Industry after a crackdown on illegal non-waged farm internships in Oregon and other states. RFC is now the primary (if not only) way to participate in a legal on-farm internship there as we in Ontario might conceive of it. (Many small scale and ecological farms in Oregon also simply now pay minimum wage to employees, beginners or otherwise.)

Given that agriculture is exempt from many labour laws in Ontario, including minimum wage, the situation in Ontario may not become as extreme as that in Oregon. Nevertheless, it is not a stretch to imagine the development of a centralized farm internship program out of the strong network of collaboration between training-oriented farms that already exists here. An organization like EFAO could even play the central organizing role, building on infrastructure and resources already in place. This centralized format could simply evolve out of and replace one or all CRAFT nodes, but a less dramatic scenario would be an optional centralized program that CRAFT (and perhaps non-CRAFT) farms could opt into, rather like [NABDAP](#). Some organizations such as Rogue Farm Corps now offer consultation services to organizations interested in developing a centralized internship program.

Category 3: Private/Non-profit Programs

DESCRIPTION

Private and non-profit programs include courses or training programs delivered (usually for a fee) by an organization other than a formal academic institution. Typically, these fall into three broad groups:

- a) A “farm school” group which is centred on an operational home farm site and receives students/interns for a set curriculum of hands-on training and work.
- b) A workshop-based group that organizes training programs/workshops at other locations (typically on private farms).
- c) Business planning courses, which typically operate through the winter.

The “farm school” group is differentiated from farm businesses with training-focused internship programs (which would fit into categories 1 or 2) in that the entire farm school organization has an educational focus.

Some of the programs in this category are operated by organizations which used to facilitate category 1 informal associations of farm internships, but have stepped away from offering them (e.g. [ACORN](#)). Their reasons for halting the informal internship associations are not clearly stated publicly, but the move is interesting in light of the evolving regulatory context for unwaged/low-waged internships discussed earlier.

The [Soil Association's new model](#) is intriguing. They used to offer a program which could have fit in category 2, coordinating two year paid apprenticeships and regular off-farm training opportunities. Having found the administrative burden heavy and the two-year commitment a barrier, however, they backed away from coordinating the placements and now offer a series of intensive weekend training programs throughout the growing season (Harries, 2017). While it is no longer required, they encourage participants to obtain paid work on a farm while they take the course. They also encourage farmers to support (both logistically and financially) their staff to take the courses.

All examples found in this category are run by non-profit or charitable organizations.

EXAMPLES

[Everdale's Sustainable Farming Certificate](#)
Stone Barns Apprenticeship
[Farms at Work's Field Courses](#)
Everdale's and Farms at Work's business
planning courses

IMPLICATIONS

Ontario has many organizations in this category (e.g. EFAO, Farms at Work, Just Food, Everdale, etc.). Funding is one of the biggest challenges; many groups have found it difficult to retain core funding to offer their programming reliably year after year, or to build upon it. Growth in this type of farmer training is an option in Ontario. Workshop-based programming is certainly replicable and likely scalable, and there are not yet many “farm school” models based on a home farm operation (such as [Everdale](#)). The funding question, however, would need to be addressed. [The Seed Farm](#) (Pennsylvania) has noted that funding can be a challenge for their program too, as operation a teaching farm is a fairly expensive (although, they argue, effective) proposition. The [Stone Barns Centre](#) in New York takes an interesting approach by offering a wider range of programming than is seen most places, including an award winning gourmet restaurant on site (this apprenticeship is similar to The Seed Farm's). However, while the Stone Barns' approach may be replicable in Ontario, it may not be particularly scalable (it can only take limited numbers of interns per year, and how many Stone Barns Centres - restaurant and all - could the Ontario market support?

Although this was not set as a criterion for the definition, most of the examples we have found to date are non-profit or charitable organizations. Given that education is considered a social good and a type of charitable activity in Canada and the US, and that there are certain financial and practical benefits to operating an educational organization as a registered non-profit, this is not particularly surprising. The fact that a great deal of farmer education programming is delivered through non-profit organizations (some of which receive government funding, some of which do not) could be a useful starting point for a more policy-focused analysis of the farmer training sector.

Category 4: Formal Academic Programs

DESCRIPTION

This category includes practical training for farmers at formal academic institutions, such as colleges and universities. As the emphasis is on practical training, this list is limited to programs with significant hands-on components; “traditional” classroom-based 2- and 4-year agricultural diplomas/degrees have not been included. Programs may or may not be for academic credit.

As with other farmer training categories, programs in this group are also diverse. Some are diploma or certificate programs dedicated to training new farmers; others are enrichment, employment, or summer options available to students of other programs; still others are non-accredited training programs open to anyone, not just students of the institution (such as internships or training programs on farms housed on university or college campuses).

A note on college farms in the US:

In the United States, there are many colleges and universities with farms on campus which are built into programming in various ways. Some of these are on “land grant universities”², though not all.

EXAMPLES

[The UBC Farm](#) (has both a practicum open to anyone and internships for registered students)
[University of Guelph Dairy Herdsperson Apprenticeship Fleming College Sustainable Agriculture Program](#)
[Kwantlen Polytechnic University](#) (Bachelor of Applied Science in Sustainable Agriculture, and Farm School non-credit programs)

² Land grant universities were first established in the United States in 1862. Certain colleges were given federal lands to sell to raise funds to create endowments. In exchange, these colleges were charged with creating and offering programs in agriculture, engineering, and military science (along with more classical/liberal arts studies, which were the focus at the time). There is at least one land grant college in

This research focuses on the programming offered through such campus farms which is aimed at training prospective new farmers, although it is worth noting that many of these campus farm programs engage students who may have no intention of pursuing agriculture as a career (for example through a campus employment program, as an extracurricular activity, as a project-based lab component of certain courses, or for a co-op work course credit).

IMPLICATIONS

Ontario has very little practical farmer training available through formal academic channels, although [Fleming College's Sustainable Agriculture Program](#) is one exception. There are several ways that formal academic programs could be expanded in Ontario. The American "college farm" model is quite compelling for the range of educational opportunities it presents, from summer work to internships to course-related research, (see [Centre for Environmental Farming Systems](#), and [Michigan State University Student Organic Farm](#)), and although [UBC](#) has an extensive and successful campus farm there is nothing to rival it in Ontario. Replicating this model at an Ontario school could have great impact. It would require bureaucratic and administrative commitment, but so long as funding could be ascertained it holds significant possibility for Ontario.

Another formal channel in Ontario is apprenticeships registered with the College of Trades. Given the growth of the [Dairy Grazing Apprenticeship](#) in the United States (it is included under category 2, but it is also a formally recognized apprenticeship in the US), the possibility of creating new formally recognized agricultural apprenticeships in Ontario was considered. On further research, however, this has been ruled out as unfeasible under current conditions. The Ontario College of Trades does recognize three agricultural apprenticeships at present, but enrollment numbers are very low and decreasing, and the programs are at risk of disappearing altogether (A. Power, OCT, personal communication, November 2017). More information on agricultural apprenticeships and the Ontario College of Trades is provided in Appendix A: Formal apprenticeships in Ontario and the Ontario College of Trades.

In general, it could be argued that Ontario lags behind many other jurisdictions in its formal academic offerings for practical and/or ecological agricultural education. [UBC Farm](#) is one such example, and there are so many college farms in the United States that they have their own [top 20 lists](#). Although only a few

each state; many of them have become large, well-known public colleges/universities which today offer a full spectrum of programming, along with some of the best-known agricultural programs in the country (e.g. Iowa State, Oregon State, Cornell). (See [APLU, n.d.](#))

college farms are included in the profiles in Appendix B: New farmer training program profiles, a deeper scan here could be useful for advocacy in the future.

Category 5: Independent and Self-Directed Learning

DESCRIPTION

This category captures training opportunities that are independent and self-directed in nature. They are typically used by farmers who have some experience and are in the planning or early operational stages of establishing their own farm. They can often be thought of as a “bridge” or “level two” learning experience for beginning farmers who have likely already received training in at least one of the other categories, but still require and value a certain level of support or mentoring.

This is an important category to include because many organizations that work in farmer training attempt to address the problem that interns/students have few options after basic training experience.

The lack of access to appropriate programming or options for these not-quite-beginner farmers is a common theme in barriers facing new farmers across North America. Organizations like FarmStart, Maine Organic Farming and Gardening Association, and Rogue Farm Corps (in Oregon) cite this barrier as a major motivator for the development of their “level two” programs.

EXAMPLES

FarmStart Incubator Farms (no longer operational)
[The Seed Farm](#) (Pennsylvania)
[ACORN Grow a Farmer Mentorship Program](#)
[Rogue Farm Corps](#) (apprenticeship program)
[MOFGA Journey person program](#)

IMPLICATIONS

Many possibilities exist here, particularly as the challenge of bridging the gap from intern to independent farmer has been widely recognized. An argument could certainly be made for more incubator farms in Ontario. [FarmStart](#) was one Ontario farmer training organization that offered incubator farm plots to farmers establishing their businesses, but at the time of this writing its programming has been discontinued. There is now space for additional incubator farms to be developed in this wake. Again, funding has typically been a significant challenge in this space. However, increasing public awareness of the importance and needs of agriculture, particularly in peri-urban areas, could be helpful. Incubator farms can work particularly well in peri-urban areas because the farmers typically require off-farm housing and employment. Going forward, there may be opportunities to leverage this

growing awareness to support incubator farms, particularly in southwestern/central Ontario where provincial and municipal governments are thinking and talking more about agriculture and the rural-urban interface. (E.g. See Ch. 5 of the [Crombie Report](#) on land use planning in the Greater Golden Horseshoe.) Perhaps partnerships could be struck with upper tier municipalities, conservation authorities, or other landowners/land trusts to support them.

PART 2: ON-FARM INTERNSHIPS

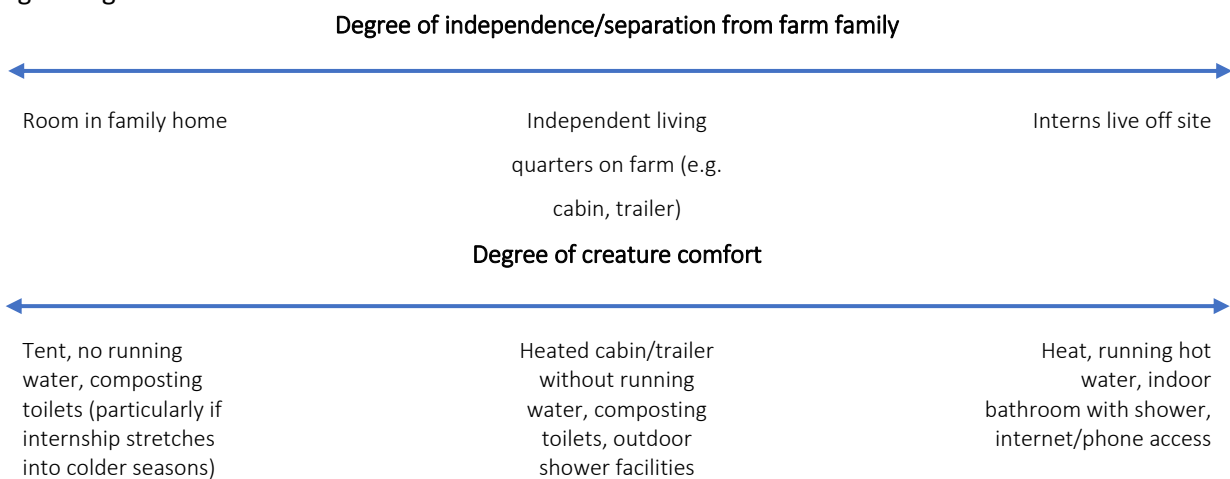
The diversity in how on-farm internships are organized presents challenges in the best way to describe and categorize them. Rather than ‘force’ different programs into set categories, we describe the possible characteristics of internships, or a ‘menu of core elements’ that can be used to construct an internship opportunity. We have divided this description into three categories: logistics, structure of learning, and communication. Some of the elements are best described using a spectrum (e.g. meals: interns feed themselves independently, eat with their host family, or a variation of both). This list is not comprehensive, but captures some of the variation of farm internship models.

Note that there is no inherent valuation to any of these characteristics or spectrums. Different approaches may be better suited to different interns’ and farmers’ goals. An appreciation of these possible internship characteristics can be useful to farmers in designing an internship that works for their farm, as well as to prospective interns in selecting an internship that meets their needs and goals. Indeed, a farm may wish to use these characteristics to describe their internship to prospective interns, and interns may choose to use them to frame questions for potential internship providers.

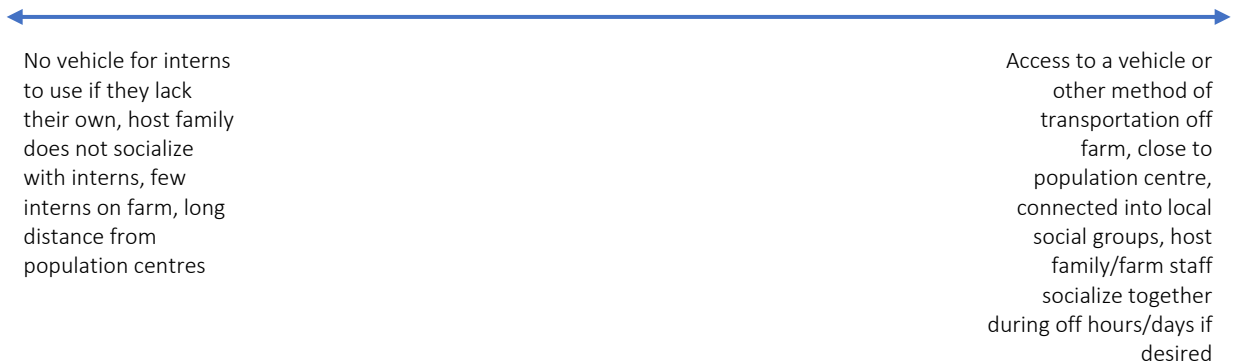
INTERNSHIP DESIGN CHARACTERISTICS

LOGISTICS

Living arrangements

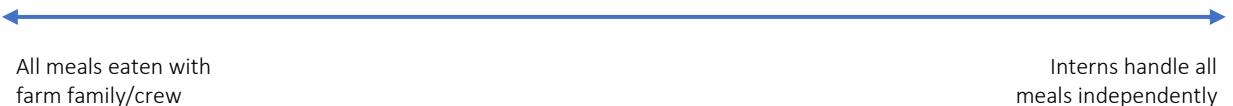


Degree of social connectivity/isolation

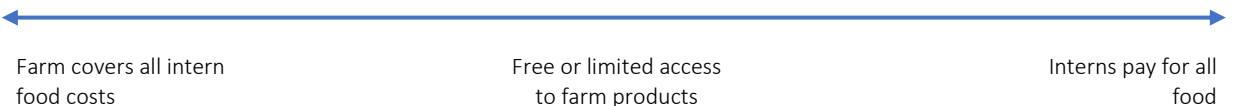


Meals

Degree of independence



Food budget/access



Ratio of interns to farmers/experienced staff



Work hours

- Hours worked per week? Per day?
- Number of days off per week?
- Variability of work hours? (same every day or varied to accommodate different activities? How is variation managed between different interns?)
- What percentage of intern work hours are spent working alone, alongside farmer, alongside experienced staff? (E.g. 20%, 30%, 50% respectively)

Payment structure – some options:

- Interns receive share of profits at the end of the season
- Interns receive non-monetary benefits – e.g. use of land for personal growing, other

- Straight non-cash trade of labour for learning and room and board
- Interns receive monthly stipend. (How much?)
- Interns receive wage, salary or hourly, and farm makes EI/ CPP contributions
- Interns pay farmer for room and board (may be combined with above/deducted from wages as taxable benefit)

Workplace safety

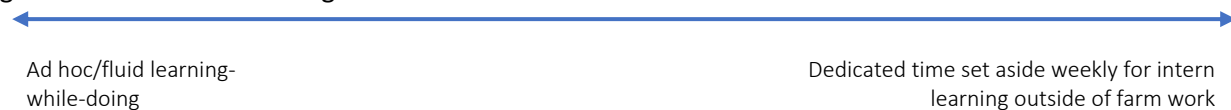
- Workplace Safety and Insurance Act (WSIA) and Workplace Safety and Insurance Board (WSIB) no-fault workplace insurance in place for all employees/interns
- Occupational Health and Safety Act (OHSA) rights and duties for employers and workers are explained and met, including providing mandatory information about health and safety on the farm and the right to refuse work if it is believed to be dangerous.

Formality of arrangement

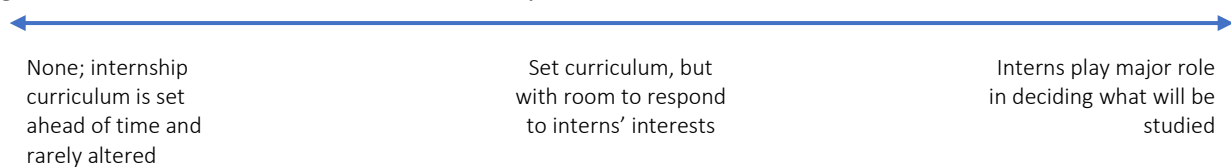


STRUCTURE OF LEARNING

Degree of structure to learning



Degree of influence interns have over internship structure



What percentage of interns' time is spent on four different categories of learning? (e.g. 70%, 20%, 5%, 5%)

- Practical skills
- Agricultural theory
- Business management (farm, marketing, retail, etc.)

- Social movement building (connections with organizations that work towards societal goals shared by the host farm, such as food system transformation, local food movement-building, organic farming education, etc.)

(these categories are discussed further below)

How are new skills taught?

Some teaching elements used by farmers:

- o Dedicated classroom time built into schedule (typically focused on theory or business)
- o Field walks for observations and object lessons
- o Dedicated skills workshops/lessons throughout season to teach new physical skills
- o Time trials, competitions, benchmarking, ergonomics, and other techniques to improve physical awareness and skills
- o Farmer teaches interns new skills ad hoc as they are encountered throughout workday and season
- o Question-driven approach: farmer goes about running the farm and organizing farm work, and responds when interns pose questions
- o Support for independent study and projects

How and when is the farmer available to answer intern questions?

- (E.g. during workday, over meals, during dedicated learning time)
- Consider practical realities: how often does farmer work beside interns, how many meals are shared?
- If a more in-depth question is posed, what flexibility is there to create time and space to answer the question later with appropriate resources at hand?

Other teaching elements of some internships:

- Core book or manual used to guide learning
- Assigned readings
- Library of optional resources accessible by interns
- Field trips and other off-farm learning opportunities. (frequency?)
- Interns take on independent projects (e.g. personal garden plot, own livestock)
- Interns given independent responsibilities core to the farm for the duration of the season (e.g. greenhouse manager, poultry chores)
- Interns are on a rotating (often weekly) chore schedule to look after core farm needs.

- Checklist used to set intern learning goals and track progress through season
- Interns use a journal for self-reflection and to track learning
- The farmer connects interns with others in a broader network who can further interns' learning on their individual interests

COMMUNICATION

Communication tools used by some farms/internships:

- Farm team meetings to discuss work (plans, progress, needs) (daily, weekly, and/or monthly)
 - o Do interns have visibility into overall work management (for the day, week, season), or are they typically assigned tasks one at a time with little view to overall approach to work management?
- Farm team or intern group meetings with farmer to check in and discuss internships (weekly, monthly)
- Regular one-on-one check-ins between farmer and intern re: expectations, progress of learning, goals, etc. (e.g. three times throughout season)
- Day to day communication tools to support effective work and/or intern understanding:
 - o Farm calendar/schedule
 - o Dry-erase/chalk boards with job lists
 - o Spreadsheets/logbooks or tablet/computer templates for recording activities
 - o Walkie-talkies or cell phones subsidized by farm
- Dispute mechanisms in place
- 3rd party moderator available if needed to mediate relationship or communication between intern and host farmer
- Structured, in-depth interview process in place to ensure good fit between intern and host farm, and/or use of trial/probation period
- Farm actively connects interns with a broader network such as CRAFT, EFAO, Sustain Ontario, Food Secure Canada, FNU, etc.

NOTES ON INTERNSHIP CHARACTERISTICS

Structure of learning

Interns' learning can be broken into four categories: practical skills, agricultural theory, business management, and social movement building. As many interns in Ontario start their internship with little to no farming experience (FarmON, 2012), there is a great deal to learn in each category. Different farms place differing degrees of emphasis on these four categories:

- **Practical skills.** All the physical aspects of farming. This may vary by products and production methods on each farm. As many interns arrive with very little experience of repetitive physical work, the learning curve here can be steep. Some examples:
 - o Safety training
 - o Tool handling
 - o Animal handling
 - o Equipment handling and maintenance
 - o Specific skills for each stage of the production, processing, and marketing of each individual crop or type of livestock
 - o Speed, quality, and efficiency
 - o Stamina (over a day, week, season)
- **Agricultural theory.** Firstly: understanding the natural/physical “why” behind farm tasks. This may include biology, horticulture, soil science, botany, zoology, livestock behaviour, crop and field management, organic/ecological farming theory and practice, equipment design, etc. Secondly: applying this knowledge to crop plans and rotations, livestock management, soil management, weed/pest/disease management, harvest/handling/storage, etc. Much of biodynamic theory and principles would fit into this category as well.
- **Business management.** Understanding the financial and business “why” behind farm tasks and decisions. Marketing, retail, budgeting, record keeping, crop/livestock selection and cost-benefit analysis, human resources, next steps, financing, etc. This category could also include understanding how various standards, regulations, labels and policies apply on the farm, such as: organic certification, Canada GAP certification (food safety for fresh produce), biodynamic certification, and processed food safety regulations.

- **Social movement building:** Making links and connections to movements and organizations that aim to build a healthier, more equitable and sustainable food system locally, regionally and/or nationally/internationally.

The above was compiled through a scan of information available through websites of farms and organizations who work with farm interns, what literature is available on the subject (primarily reports, largely from non-profit organizations), discussions with the project's advisory council, and anecdotal conversations with current and former farm interns. If this is of interest to the community, greater detail and depth could be sought to the above in future research. Recommendations on this front include a survey of farmers and interns to identify the popularity of some of the elements described above and/or identify more, in-depth interviews with farmers and interns to assemble profiles of a variety of internships styles, and use of a survey and/or interviews of farmers and interns to explore their thoughts and feelings about various styles of internship or internship elements.

RESOURCES FOR FARMERS

Appendix C: Resources for farmers includes some additional resources which may be of use to farmers or other practitioners engaged in farmer training programs. While the References to this report include a number of reports and articles related to farmer training, Appendix C is focused on items which may be more directly applicable to farmer training, such as manuals and guidebooks about establishing and running on-farm internships (for both farmers and interns), case studies on internship/training programs, and skills checklists from various farmer training programs.

RESEARCH CHALLENGES AND LIMITATIONS

While conducting the resource scans for this project, a number of trends and limitations were revealed, from data availability issues to trends in the programming itself. This section discusses some of these trends and limitations.

LACK OF PUBLISHED DATA OR RESEARCH

There is very little published research on the subject of farmer training programs. This has been noted by other recent researchers in the field (e.g. Serkoukou, 2014). Based on anecdotal experience and conversations with both researchers and practitioners throughout this research, there is a great deal of interest in the subject of farmer training. Considering the increasing average age of Canadian farmers and the number of farms which lack succession plans (Smith Cross, 2017), as well as the barriers facing new farmers (e.g. access to land, capital, and training) (Grossenbacher, 2015), it is clear that this is a significant gap in the literature that ought to be addressed.

MAJORITY OF PROGRAMS PROFILED FOCUS ON ECOLOGICAL/ORGANIC FARMING

When searching for farmer training programs for this project, there was no intentional focus on ecological or organic farming. Nevertheless, the vast majority of the programs discovered and profiled fall into this category.

This may relate to the evolving ways that people enter farming. Several generations ago, farming was a profession one usually learned from one's parents, family members, or close community. It was something a person grew up around, learning the practical side through chores or local work experiences as a young person. However, Ekers et. al. (2015) note a recent increase in non-family members participating in farm internships on small- and medium-scale ecological farms. A survey on farm training and resource needs of new and aspiring farmers in Ontario conducted by the FarmON Alliance, focused on "sustainable and locally oriented farm businesses" (FarmON Alliance, 2012, p.3), found that 73% of respondents had no family background in farming. There may be a correlation between new farmers without a family connection to agriculture and an interest in ecological or organic farming practices. These new entrants need practical, hands-on training, not typically offered in agricultural degree and diploma programs at Ontario post-secondary institutions.

NORTH AMERICAN INFORMATION BIAS

The literature review component of this research was based largely on key term searches in both academic and non-academic databases. Despite there being a range of practical, farmer-to-farmer training programs in the Global South, this research was limited to the Global North for its contextual relevance to Ontario. That said, there was no explicit intention to limit the search for farmer training

programs to North America, but we encountered a surprising lack of documentation on European training programs for new farmers. As a result, almost all programs profiled here are North American. Serkougou (2014) noted a similar challenge in her work: that almost all research on support programs for new farmers (including training) was North America-based, and that it was very difficult to collect information on European programs, despite European programs being a particular target region of her research.

Throughout this project, some references to new farmer training programs in Europe did surface. The UK's Soil Association has an extensive website and is referenced in North American papers and has been included in this report. Furthermore, conversations with both European CRAFT interns and European academics repeatedly revealed examples of a very different approach to farmer training in certain parts of the European Union (EU), particularly in France and Germany, but we found limited detailed documentation on these programs. That said, we suggest that European farmer training programs could be a valuable research topic for a future project.

FUTURE RESEARCH

Based on the above research, the following are recommendations for future research:

FARMER TRAINING PROGRAMS IN OTHER REGIONS

As discussed above, there is little in the way of comprehensible summaries of European farmer training programs for a North American audience. This could be a valuable research project in its own right. The European context is quite different from the North American context in its history, culture, economy, policy framework, financial support for farmers, and educational models, and it is unlikely that a European training model could be implemented unaltered in Ontario. However, the research could offer some comparative value and a more global perspective, and may provide novel ideas.

Similarly, there could be valuable lessons to gain from the farmer-to-farmer agroecology training programs in Latin America (despite, again, a very different context).

In all cases, important topics of study would include: training models, connection between farmer training and formalized education, paths to becoming a farmer, and, critically, funding structures for all of these programs.

DEEPER EXPLORATION OF THE AMERICAN COLLEGE FARM MODEL

The college farm model is uncommon in Ontario, and is in fact quite particular to the United States and the legacy of the land grant universities. The educational potential of college farms could make them worthy of further research, to determine whether there might be a way to incorporate elements of the concept here.

FUNDING STRATEGIES FOR PRACTICAL FARMER EDUCATION

In the United States, the federal [Beginning Farmer and Rancher Development Program](#) (BFRDP) funds a significant number of farmer training programs that fall into categories 3 and 4. In the Canadian context, Québec is generally considered a leader in farmer development and support programs (see Serkoukou, 2014 for a summary of some of these). It would be valuable to compare public funding and institutional supports for farmer training programs in the United States, Québec, and other jurisdictions with what is available in Ontario, and to assess the efficacy of different funding models. This level of analysis was beyond the scope of this project but could have comparative or advocacy value.

FEASIBILITY STUDY OF A MODEL(S)

Any of the models presented here could be adapted for use in Ontario. In that scenario, a detailed feasibility study that further clarifies its opportunities and challenges would be a valuable next step.

CONCLUSION

The intent of this research was to explore and synthesize different models used for practical training for new farmers. Literature review and web searches revealed a wide range of programs, which were ultimately described by five categories: 1. Informal associations for farm internships, 2. Centralized internship programs, 3. Private/non-profit programs, 4. Formal academic programs, and 5. Independent and self-directed learning. Possibilities exist in Ontario to develop and/or expand programming in all of these categories, should appropriate resources be secured. Further exploration was conducted into on-

farm internships, a common model in Ontario and a subset of category 1, Informal associations, to begin to describe the diversity of approaches found within this one model of farmer training.

This research revealed a significant lack of published information on farmer training programs, both domestic and international. That said, strong interest in this research was encountered in farmers, researchers, and other practitioners throughout the project. Therefore, future research into and documentation of new farmer training programs, such as the American College Farm Model and European farmer training programs, is recommended to provide a stronger international perspective and, perhaps, more new ideas for developing Canadian farmer training options. Comparative research into funding for new farmer training programs in other countries of the Global North is also recommended.

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APPENDIX A: FORMAL APPRENTICESHIPS IN ONTARIO AND THE ONTARIO COLLEGE OF TRADES

The Ontario College of Trades regulates formally recognized skilled trades in Ontario. These include both compulsory trades, in which registration as a trainee and practitioner is mandatory (such as plumber and electrician), and voluntary trades, in which registration is optional (OCT, 2015a). Apprenticeships typically include a classroom learning component, making up approximately 10% of an apprentice's total hours, and paid employment with a registered mentor, making up the other 90%. The College of Trades recognizes four agricultural apprenticeships in the province: Agricultural – Dairy Herdsperson; Agricultural – Fruit Grower; Agricultural – Swine Herdsperson; and Agricultural Equipment Technician. All are voluntary. Given the specificity of the Agricultural Equipment Technician position, it was deemed beyond the scope of “farmer training” programs and research focused on the other three.

Registration is very low in all agricultural apprenticeships. In the early 2010s there were over 50 apprentices registered in the dairy herdsperson program and a handful in each of the fruit grower and swine herdsperson programs. According to Alice Power of the Ontario College of Trades, these numbers have since dropped to under a dozen in the dairy herdsperson and none at all in the other two (personal communication, October 31, 2017).

While the agricultural apprenticeships were never very popular, their numbers have plummeted in recent years for a few reasons. The dairy herdsperson and swine herdsperson apprenticeships required an in-class component, which was once offered at the University of Guelph's Kemptville campus. This campus recently closed, leaving the swine herdsperson apprenticeship essentially defunct, although the dairy herdsperson program is still listed on the University of Guelph's Ridgetown campus website. Unless new training delivery partners come forward – and given the low demand, this seems unlikely – these apprenticeships may essentially disappear within a few years. Broader trends in labour in the agricultural sector may also be factors. Furthermore, since these are voluntary trades, registration is not a requirement for employment in the field.

A final factor is that responsibility for formal apprenticeships in Ontario was transferred to the newly created College of Trades in 2009. Prior to that, apprenticeships were managed under the provincial Ministry of Training, Colleges and Universities. Unlike provincial ministries, the College of Trades is

entirely funded by members' registration fees (A. Power, personal communication, October 31, 2017). This makes it inherently reactive in its programming, compelled to focus on the needs and interests of its current members. Agricultural apprenticeships have dwindled to little more than a rounding error in the College of Trades' membership, and are therefore unlikely to receive much focus. Whereas, hypothetically, it may have been possible to develop agricultural apprenticeships when they were managed by a provincial Ministry (*if* such development met stated policy objectives with dedicated funding), under the College of Trades' current operational model such development seems extremely improbable and impractical.

APPENDIX B

APPENDIX B: NEW FARMER TRAINING PROGRAM PROFILES

This appendix contains profiles of programs in each of the five categories. The information provided for each falls into these categories: mandate/vision, basic structure, type of training/education, target participants, cost/compensation, and funding sources. The website for each program is provided for further information. The profiles are presented by category, with colour-coded headers for clarity. The following programs are profiled:

Category 1: Informal associations for farm internships

World Wide Opportunities on Organic Farms (WOOF) Canada

Collaborative Regional Alliance for Farmer Training (CRAFT) Southwest Ontario

Category 2: Centralized internships programs

Biodynamic Association: North American Biodynamic Apprenticeship Program (NABDAP)

Rogue Farm Corps (Oregon)

Dairy Grazing Apprenticeship (Wisconsin + 8 other states)

Category 3: Private/non-profit programs

The Seed Farm (Pennsylvania): Internship Program

Atlantic Canada Organic Research Network (ACORN)'s Grow a Farmer Initiative: Learning Series

Everdale (Hillburgh, ON): Sustainable Farming Certificate

The Soil Association's Future Growers Program (UK)

Category 4: Formal academic programs

University of California Santa Cruz's Center for Agroecology & Sustainable Food Systems (CASFS):
Apprenticeship in Ecological Horticulture

Fleming College (Lindsay, ON): Sustainable Agriculture Program

University of Guelph, Ridgetown: Dairy Herdsperson Apprenticeship

Kwantlen Polytechnic University: Bachelor of Applied Science in Sustainable Agriculture (Richmond, BC)

Kwantlen Polytechnic University: Farm School (Richmond, BC or Tsawwassen First Nation, BC)

Centre for Environmental Farming Systems (North Carolina): Farm Apprenticeship Program

Michigan State University Student Organic Farm: Organic Farmer Training Program

University of British Columbia (UBC) Farm Practicum and Internship

Category 5: Independent and self-directed learning

The Seed Farm (Pennsylvania): Incubator Program

Atlantic Canada Organic Research Network (ACORN)'s Grow a Farmer Initiative: Mentorship Program

Maine Organic Farming and Gardening Association (MOFGA): Journeyperson Program

World Wide Opportunities on Organic Farms (WWOOF) Canada

<https://wwooof.ca/>

Mandate/vision

Mission: WorldWide Opportunities on Organic Farms, Canada (WWOOF™ Canada) is part of a worldwide movement linking visitors with organic farmers and growers to promote cultural and educational experiences based on trust and non-monetary exchange thereby helping to build a sustainable global community.

The aims of WWOOF are to provide individuals from all around the world the opportunity:

- to get first-hand experience of organic farming & gardening and to lend a helping hand wherever needed;
- to get into the countryside and experience Canada and Canadians;
- to help the organic movement, which is often labour intensive and does not rely on artificial fertilizers & pesticides;
- to make contact with other people in the organic movement;
- to have a wonderful enriching experience;
- to have a cultural exchange with Canadians.

(WWOOF Canada website)

Basic structure

WWOOFers live and work alongside organic farms hosts, trading a certain number of hours of work per day for room and board at the farm. The details of this arrangement are managed at the individual farm level and can vary greatly. Visits may be as short as a few days or as long as a season, but are typically shorter than training-focused programs and may therefore involve less instruction. WWOOF Canada facilitates connections between host farms and prospective WWOOFers essentially by providing a database of each, but otherwise all arrangements are worked out between WWOOFers and hosts. WWOOF Canada is part of a network of WWOOFing organizations in many countries around the world.

Type of training/education

Varies greatly by host farm. Typically less structured than a training-focused program. WWOOFing occurs on all types of farms.

Target participants

19 years and older. Travelers from abroad interested in “voluntourism” and “ecotourism”; those curious about organic farming, frequently with very little (or no) training or experience; those interested in communal living and cultural exchange; more experienced farmers may WWOOF in other regions to learn about different styles of farming.

Cost/compensation

Annual registration fee to WWOOF Canada is \$50. No other cash exchange; trade of labour for room/board/experiences.

Funding sources

WWOOF Canada takes registration fees from both WWOOFers and host farms.

Collaborative Regional Alliance for Farmer Training (CRAFT) Southwest Ontario

<http://craftsouthwestontario.ca/>

Mandate/vision

“CRAFT SW Ontario is a network of farms that offer internships and plans education workshops for all the interns in their area. We support the pursuit of practical skills and career development in ecological agriculture.”

“The goal of CRAFT is to enhance the internships offered by its member farms. The primary method of doing this is to offer regular field trips which usually take place at selected CRAFT farms.”

(CRAFT website)

Basic structure

The CRAFT model was developed in 1994 in the Hudson Valley, and has since spread to many other jurisdictions. There are four regional CRAFT “nodes” in Ontario, including the Southwest Ontario network. CRAFT functions as an informal, member-driven collaboration and liaising network between farms that offer internships. CRAFT SW ON does not oversee member farms, although they are expected to farm according to organic principles and practices and to teach/mentor their interns these principles and practices during season-long internships. The structure of the internships and all details of the intern-farmer relationship are left up to individual farms. CRAFT interns attend monthly Field Days held at six different CRAFT farms in their regional node, which include a talk/workshop, potluck lunch, farm tour, and work project.

Type of training/education

Varies by the farm and the production activities on it, but most CRAFT farms involve mixed vegetable production and some include livestock as well. Interns are typically involved in all aspects of production and marketing.

Target participants

People interested in ecological farming. CRAFT SW ON recognizes that not all participants will go on to run their own farming operations, instead pursuing other careers (which may have other connections to the world of sustainable agriculture), but many do successfully start up farms. No experience is necessary to intern at most farms; most have little to no experience, although some interns will do a second or even third internship to gain more experience.

Cost/compensation

Varies by individual farm. Most CRAFT interns live on their host farm and also receive some combination of food and stipend.

Funding sources

Due to the member-based bare-bones model, very little funding is required to operate the CRAFT network itself. (Each member farm must of course balance its own finances and operations - this approach varies.)

APPENDIX B CATEGORY 2: CENTRALIZED INTERNSHIP PROGRAMS

Biodynamic Association - North American Biodynamic Apprenticeship Program (NABDAP)

<https://www.biodynamics.com/nabdap>

Mandate/vision

The North American Biodynamic Apprenticeship Program (NABDAP) helps aspiring farmers develop the skills and knowledge they need to build successful organic and biodynamic farms. The program combines:

- 24 months of structured on-farm training and mentoring
- An independent, on-farm project
- Classroom study in biodynamics

Apprentices benefit from a comprehensive training curriculum, carefully selected mentor farms, and access to networking, support, and educational resources. Upon completion of their training, apprentices are awarded a certificate in biodynamic farming from the Biodynamic Association

Basic structure

24 months of on-farm training at a mentor farm(s), plus a participating classroom study course of at least 78 hours. Interns may work at the farm(s) and take a classroom study course of their choosing, from a list of approved farms and courses. Interns conduct an independent project in their second year. The Biodynamic Association provides structure by checking in regularly with mentors and interns, providing curriculum structure for the program which host farmers agree to use, and providing a network beyond the host farm (including conferences, workshops, farm visits). A certificate of achievement is received upon completion. Applications are standard but are made directly to the desired farm.

Type of training/education

All aspects of biodynamic farming. Interns have freedom to choose the type of farms they work on and what their independent project will be. Biodynamics Association provides a skills checklist for mentors and interns to use to set goals and track progress; 40 of the skills are identified as mandatory minimum skills interns must acquire.

Target participants

Typical apprentices have very little farming experience, but have a fairly serious interest in and commitment to biodynamic farming as a career.

Cost/compensation

Mentor farms and interns make their own arrangements for room/board/stipend/benefits/etc. Interns pay a \$100 enrollment fee to NABDAP coordinator, which covers their participation for 3 years. Interns must also pay the tuition for the classroom study course of their choice (some scholarships are available).

Funding sources

Tuition paid by interns; donations from foundations or individuals (BDA is a non-profit).

APPENDIX B CATEGORY 2: CENTRALIZED INTERNSHIP PROGRAMS

Rogue Farm Corps (Oregon)

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

Mandate/vision

“Mission: Rogue Farm Corps exists to train the next generation of farmers and ranchers through hands-on educational programs. We support our local agricultural economy and serve as a model for other communities.”

Basic structure

RFC has taken a lead on developing a legal framework for on-farm internships in Oregon, in response to state agencies’ concerns over the previous quasi-legal status of farm internships. RFC is now “the only organization in Oregon with a structured, entry-level education and training program for beginning farmers that is based on commercial farms”. This structure was developed through collaboration with Rogue Community College and with guidance from the Oregon Department of Agriculture and the Bureau of Labour and Industry.

Two programs: Internship for new farmers with little/no experience. Interns live, work and are mentored full time for 6-8 months at a host farm. They also participate in skills classes, workshops, farm tours, and discussion circle potlucks 3-5 times/month.

Apprenticeship for new farmers with at least 1-2 years’ experience. Apprentices live, work and are mentored full time on host farm for up to two full farming seasons, deepening understanding and taking on more responsibility over time. Apprentices also take 6-8 in depth training sessions from Oregon State University Extension’s Small Farms Program and other agencies.

Interns and apprentices apply directly to RFC, which brokers connections with participating farms.

RFC now offers consultation to other organizations wishing to start up beginning farmer and rancher training programs.

Type of training/education

On-farm education and mentorship in a wide range of farm types (vegetable, seed, dairy, poultry, meat, etc.), plus workshops and classes on various topics.

Target participants

Internship: new farmers with little to no experience. Apprenticeship: farmers with at least 1-2 years’ experience and a serious interest in making farming a career.

Cost/compensation

Intern program tuition: \$1,500. This covers RFC’s costs to run the program. Exact compensation package is determined by the host farm, but typically include room, board, and a \$400-600 monthly stipend.

Apprenticeship: no tuition. Exact compensation package is determined by the host farm, but typically includes room, board, and a \$600-1000 monthly stipend or an hourly wage.

Funding sources

Intern fees, host farmer fees, government grants, private/foundation donations.

APPENDIX B CATEGORY 2: CENTRALIZED INTERNSHIP PROGRAMS

Dairy Grazing Apprenticeship (started in Wisconsin, now in 9 states)

<https://www.dga-national.org/>

Mandate/vision

Dairy Grazing Apprenticeship is dedicated to providing a guided pathway to independent dairy farm ownership, developing grazing careers, and strengthening the economic and environmental well-being of rural communities and the dairy industry.

We accomplish this mission by:

- Linking current and aspiring graziers in the transfer of farms and graziers skills and knowledge.
- Developing alliances with agricultural, environmental, and consumer groups.
- Providing opportunities for farmers and their customers to invest in the next generation of grazing farmers.

(DGA website)

Basic structure

DGA is a formal National Apprenticeship, accredited by the U.S. Department of Labor-Employment and Training Administration. It is a 2 year program consisting of 3,712 hours of on-farm employment and mentorship under a Master Dairy Grazier and 288 hours of instruction. A DGA Training Manual guides mentorship to cover all competencies required to own and manage a grazing-managed dairy, including pasture management, dairy nutrition, and business management. Upon graduation, apprentices are given Journey Dairy Grazier status and have access to ongoing career support services.

Type of training/education

All aspects of grazing-managed dairy farming

Target participants

Typically have some experience of farming, and may or may not have grown up on a farm. Are seriously committed to a career in grazing-managed dairy farming.

Cost/compensation

Tuition for apprentices is approximately \$1,500 over two years. Apprentices earn an hourly wage from their mentor farm for work – minimum of \$8/hr.

Funding sources

Interns' tuition, government grants, donations from foundations.

The Seed Farm (Pennsylvania): Internship Program

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

Mandate/vision

The Seed Farm is a teaching farm that was designed to address barriers facing new farmers who did not grow up in the industry: lack of access to land, training, and capital. Its long-term goals are “to increase the success of beginning farmers by providing the skills necessary for successful farm start-ups and to increase the number of sustainable farms in our region by providing access to land, mentoring, and networks” (Pointeau et al, 2016, p. 62). It was founded in 2010 by a collaboration between Lehigh County and Penn State Extension under a USDA Beginning Farmer and Ranchers Development Program grant.

Basic structure

(Note: The Seed Farm also runs an incubator program for more advanced beginning farmers, such as the graduates of their internship program, profiled under self-directed learning.)

Internship program: Interns participate in 600 hours of hands-on training. Approximately 100 hours of this is workshops and courses offered by Penn State Extension and other nearby organizations and farm. The balance is in running a two-acre market garden, from seed ordering to market. Interns are trained and given decision-making responsibility on all aspects of small scale sustainable vegetable farming, including business planning and

Members of the public can also sign up for some or all of the off-farm courses the interns take.

Type of training/education

All aspects of sustainable vegetable farming.

Target participants

Interns: little to no experience of farming

Cost/compensation

Interns pay a tuition fee. Compensation received are the off-farm courses. Interns do not live on site.

Funding sources

Intern tuition, government grants, donations, product sales, corporate sponsorship, county support.

School of Adaptive Agriculture (California)

<http://www.school-of-adaptive-agriculture.org/>

Mandate/vision

“The SAA is a vocational training center that equips the current and next generation with essential skills in the science, art and business of food production. Through our workshops and residential practicum program, the SAA has gained a reputation for being one of the premier agriculture schools in Northern California.” (SAA website)

Basic structure

SAA offers 14-week intensive educational programs for adults. Participants live on-site at the 5,000 acre working ranch (a few acres of which are managed by the school).

Type of training/education

With a focus on “sustainable” or “adaptive” agriculture, a wide range of types of farming are covered. Instruction includes classroom sessions, labs, readings, discussions, workshops, and working experience on the farm. Curriculum includes sustainable agricultural theory, critical thinking, historical/environmental/social/financial contexts of food production, and four core units: crop production, business management, livestock, and industrial arts. Students also go on 25 field trips to nearby farms and businesses.

Target participants

Little to no experience in farming, but an interest in building a career in it.

Cost/compensation

The 14 week program’s tuition is \$2,500, and room and board is an additional \$1,500 (not required but highly encouraged). Actual cost of delivery is higher but the balance is made up by donations and sponsorship.

Funding sources

Tuition, donations (individual and institutional), government grants.

Atlantic Canada Organic Research Network (ACORN)'s Grow a Farmer Initiative (Atlantic Canada): Learning Series

<https://growafarmer.ca/>

Mandate/vision

Our mission:

ACORN's **Grow A Farmer Initiative** promotes organic farming as a viable and empowering form of livelihood. With a focus on farmer-to-farmer training, the program intends to cultivate, renew and diversify the organic sector in Atlantic Canada, through the preservation, growth, and use of local knowledge, land and community.

Our goals:

- To **share knowledge and build community** among experienced, new and aspiring organic growers in Atlantic Canada.
- To **minimize start-up barriers** for new entrant organic farmers and assist them to gain confidence, inspiration and financial profitability from their decision to farm.
- To **inspire new markets** and agricultural opportunities.
- To **preserve, renew and increase access to farmland** in Atlantic Canada.
(Grow a Farmer website)

Basic structure

(Note: ACORN's Grow a Farmer Initiative also has a mentorship program, profiled under self-directed learning)

ACORN hosts a series of workshops (from a few hours to a few days in length) on specific topics throughout the year. These events are hosted in various locations, typically on farms, by expert guest speakers. Events are open to both members and non-members. Participants can register for as many or as few sessions as they like.

Type of training/education

Practical, on-farm, farmer-to-farmer education on a specific topic each day. Topics range from cover crops to vegetable and seed production to livestock and more.

Target participants

Typically farmers with at least a little experience, although this varies by the workshop. Focus on practicing or hoping-to-practice farmers, although some gardeners may find some workshops useful.

Cost/compensation

Workshops priced individually, in the range of \$50 for a full day. Discounts available to ACORN members. (Annual membership cost is \$50/individual and \$100-\$250/farm or business.)

Funding sources

Registration fees, donations (individual and institutional), membership fees, government grants.

Everdale's Sustainable Farming Certificate (Hillsburgh, ON)

<http://everdale.org/farmertraining/sustainable-farming-certificate/>

Mandate/vision

Everdale's mission is to be a farm-based organization that provides hands-on, solution-based food and farming education to build and engage healthy local communities.

The Sustainable Farming Certificate (SFC) is an intensive, curriculum based program designed to help participants looking to acquire comprehensive food growing skills and explore the world of sustainable local farming.

(from Everdale website)

Basic structure

Sustainable Farming Certificate (SFC) students live, learn, and work on the farm. They receive dedicated instruction each week in amounts that fluctuate through the season (0.5 – 1.5 days/week, more in the spring and fall and less in the summer), and spend the balance of the 5-day workweek working on the farm alongside farm staff. The full program is 32 weeks but they will consider applicants for as few as 12 weeks.

(Note: Everdale also offers a farm business planning course, similar to that of Farms at Work.)

Type of training/education

All aspects of organic vegetable farming, as well as some small livestock work (optional): greenhouse and field management, harvesting, post-harvest handling, and marketing. Also includes training on crop planning and farm business planning. Delivery format is a mix of classroom lectures, hands-on workshops, field trips, independent work/study, and farm work supervised/mentored by farm staff.

Target participants

People interested in farming, typically with little to no experience.

Cost/compensation

Students pay for the cost and materials of their education as well as their room and board, and receive an hourly wage which increases over the season. The net financial impact to students for the full 32 week program is a gain of \$1630. Students pay an \$865 deposit upon registration.

Funding sources

Program funding comes from student fees, donations (individual and foundation), government grants, and product sales.

Farms at Work - Field Courses, Business Planning Program (Peterborough, ON)

<http://www.farmsatwork.ca/>

Mandate/vision

Mission: to promote healthy and active farmland in east central Ontario.

In order to accomplish this, we strive to:

- Support farmers in diversification and expansion to ensure that farmland stays in production
- Attract new farmers to the region
- Ensure access to local farmer training opportunities
- Provide opportunities for new and establishing farmers to integrate into the agricultural community through mentorship, internship and events
- Support access to farmland and financing by new farmers
- Engage farmland owners who are non-farmers in active use of their land for agricultural purposes
- Create partnerships and outreach that result in on-the ground farm stewardship in the region.

(FAW website)

Basic structure

Field courses (former mentorships): multi-day training programs offered over the course of a season on commodity-specific skills (e.g. beekeeping, sheep farming, maple syrup). Courses are taught by expert farmers on farm locations and attended by a limited number (e.g. 8) of new farmers. Courses are typically 5-6 days through the season.

Farm business planning program: Six-day course delivered over 3 months covering the basics of farm business planning and management, intended to guide participants through the development of a complete farm business plan (production, marketing, human resources, financial planning and projections) based on their individual farm goals/vision.

Note: FAW also offers one-day skill-building workshops for farmers of all skills levels taught by experts in various aspects of farming. These are similar in concept to those offered by The Seed Farm, Everdale, EFAO, COG, etc. and are not profiled here in detail.

Type of training/education

Field courses: hands-on, on-farm, small group over the course of a full season. Each field course covers the following topics, regardless of commodity: on-farm production systems, practical skills and techniques, business planning, financial management. Courses may include a certain number of hours of one-on-one mentorship/teaching.

Farm business planning program: Classroom format taught by a range of experts and industry insiders. Students develop business plans as “homework” throughout the course and receive one-on-one feedback on it. Small number of students accepted.

Target participants

Field courses: Beginning farmers with little to no experience but interest in a specific commodity.

Farm business planning program: Beginning farmers with enough production experience in their commodity(ies) of choice to be able to develop a production/business plan. Might be building up to launching their own operation, or trying to improve (or put together a plan for lenders for) a recently started business.

Cost/compensation

Field courses: varies by course; \$700-\$800.

Farm business planning program: \$595

Funding sources

Participant fees, government grants, donations (foundations and individual).

Soil Association's Future Growers program (UK)

<https://www.soilassociation.org/farmers-growers/supporting-you/future-growers/>

Mandate/vision

The Soil Association is the UK's leading membership charity campaigning for healthy, humane and sustainable food, farming and land use.

In farming, our work at the Soil Association goes wider than setting and certifying to organic standards. We also work with farmers, businesses and community initiatives to put these ambitions into practice. We offer training, technical guidance and knowledge sharing events to help all farmers, organic or otherwise, to share and develop practices that are better for the environment and their businesses. In addition we influence policy, grounding our campaigns in this practical experience.

(Soil Association website)

Basic structure

The Soil Association used to facilitate work placements/apprenticeships, but stopped in 2017. Instead, the new Future Growers program consists of 6 weekend-long farm-based training sessions offered over the growing season. Participants are strongly encouraged to work on a farm throughout the program. Each weekend workshop has a different educational focus

Type of training/education

Each weekend field trip training is held at a different farm with a different educational focus (all organic). Training style includes workshops, lectures, farm tours, and discussions.

Target participants

People interested in farming, typically with little to no experience, although ideally they are working at a farm throughout the program. Farms are encouraged to encourage or even require their new farm staff to participate, and even to cover some/all of their expenses to do so. It essentially provides a basic educational program so that farms don't have to do it themselves.

Cost/compensation

Program cost is £1,500 (~\$2,500 CDN) for low-waged earners (e.g. farm staff) or £1,920 (~\$3,200) for high-waged earners or organizations (e.g. farms paying for their staff to attend).

Funding sources

Participants' fees, donations (individual and foundation), government grants.

University of California Santa Cruz's Center for Agroecology & Sustainable Food Systems (CASFS): Apprenticeship in Ecological Horticulture (Santa Cruz, CA)

<https://casfs.ucsc.edu/apprenticeship/>

Mandate/vision

"The mission of the UC Santa Cruz Center for Agroecology & Sustainable Food Systems (CASFS, the Center) is to research, develop, and advance sustainable food and agricultural systems that are environmentally sound, economically viable, socially responsible, nonexploitive, and that serve as a foundation for future generations. ... The goal of the Apprenticeship is to increase the number and diversity of individuals who have a command of the fundamental skills and concepts associated with organic horticulture and agriculture, such that they will be prepared to actively participate in commercial or social service projects that aim to improve human health and environmental quality through organic practices." (program website)

Basic structure

A six-month, full time apprenticeship on UC Santa Cruz's 30 acre Farm and 3 acre Garden comprising approximately 300 hours of formal training and 700 hours of in-field training and work experience. It is an immersive experience as most apprentices live on-site. Apprentices and their mentor-instructors manage the planning, production, and marketing of a wide variety of fruits, vegetables and flowers. Successful graduates receive a Certificate in Ecological Horticulture.

Established in 1967, the Apprenticeship is one of the oldest and most influential models of ecological farm apprenticeships in North America. Over 1,500 people have completed the program, and many other training programs have been based on this one.

Type of training/education

Practical work/learning covers all aspects of planning, production, care, and marketing of a wide range of vegetables, fruits, and flowers. Topics covered include: growing methods, botany and crop culture, soils, pest and disease management, marketing, environmental issues in agriculture, and social issues in agriculture. Teaching methods include garden- and field-based work, lectures and workshops, practical skills classes, and field trips to other farms and gardens.

Target participants

35-40 apprentices participate each year. They must be over 21. Applicants typically have a strong interest in organic farming/gardening and social justice and have a well-considered plan to incorporate this learning into their career (be it farming, teaching, social justice work, or otherwise), but come from a range of backgrounds. (The program accepts roughly one of every three applicants.)

Cost/compensation

The course fee for 2018 is \$6,000; personal tools and books are \$375. Living on-site is free for apprentices, group food costs (optional) are approximately \$110/month, and campus parking permits approximately \$55/month. Some course fee assistance is available through grants and donations. Americorps payments can be used to cover tuition.

Funding sources

Grants, donations, UC Santa Cruz/CASFS budget (entire farm is located on campus).

Fleming College: Sustainable Agriculture Co-op (Lindsay, ON)

<https://flemingcollege.ca/programs/sustainable-agriculture-co-op>

Mandate/vision

“The Sustainable Agriculture program is designed for new farmers seeking an intensive, applied learning experience in sustainable, ecological or natural farming methods.” (program website)

Basic structure

A three-semester (one year) co-op program taught by a mix of experienced farmers and practitioners. Instruction includes classroom sessions, field days, and panel discussions. Students develop a viable business case and farm plan by the end of the program. The program includes a 21-week on-farm co-op experience.

Type of training/education

Classroom work covers a wide range of the aspects of sustainable farming, including business planning, marketing, food safety and regulations, soil fertility, crop planning and management, and livestock husbandry. Everything is taught from the perspective of a sustainable (and typically small scale) approach. The curriculum includes opportunity for introspection and developing individual goals, philosophies, and approaches, as well as a personal farm business plan. The co-op term provides hands-on experience and the opportunity to further personalize the training.

Target participants

Students must have at least two years of post-secondary education at a college or university, or a combination of farm-related work experience and/or formal or informal education. Participants are typically committed to a career in sustainable agriculture.

Cost/compensation

Tuition is approximately \$6,700 for domestic students. Benefits (e.g. room, board, stipend) are determined by the host farm/organization. Graduates receive an Ontario College Graduation Certificate.

Funding sources

Government funding, students' tuition.

University of Guelph, Ridgetown: Dairy Herdsperson Apprenticeship

http://www.ridgetownc.uoguelph.ca/future/programs_adh.cfm

Mandate/vision**Basic structure**

The 2-year dairy herdsperson apprenticeship is recognized by the Ontario College of Trades. It is a voluntary apprenticeship, meaning it is not required for employment in the field. 90% of the program (5,520 hours) is on-the-job training; 10% (480 hours) is in-class training offered at the Ridgetown campus in blocks of four days at a time approximately once per month. Apprentices must have an employer willing to train them and sign a training agreement, and must become a member of the Ontario College of Trades. Apprentices must arrange employment with a farmer willing to sponsor them first, on their own, and then register as an apprentice with Employment Ontario and apply for the Guelph program.

(Note: Ontario College of Trades also recognizes voluntary apprenticeships for fruit growers and swine herdspeople, but I've been unable to find in-class training opportunities for these.)

Type of training/education

Practical, 90% on the job. Sponsor farmers/employers do not have to be registered on any list; the Training Agreement just needs to be approved by an Employment Ontario Apprenticeship Training Consultant.

Target participants

Grade 12 education or equivalent required. Little to no farming experience formally required, although apprentices do need to be able to secure employment on a dairy farm.

Cost/compensation

Ontario College of Trades membership fee, \$67.80. Other university costs unclear (not detailed on website). Apprentices are paid an hourly wage for their labour, which is established by the sponsor farmer/employer.

Funding sources

University budget, OCT membership fees.

Kwantlen Polytechnic University: Bachelor of Applied Science in Sustainable Agriculture (Richmond, BC)

<http://www.kpu.ca/calendar/2017-18/science-hort/sustainableagriculture/sustainableagriculture-deg.html>

Mandate/vision

“The Bachelor of Applied Science in Sustainable Agriculture degree is unique to North America and is distinguished from other agriculture degree programs by providing a broad scope of study related to sustainable food production as an integral and fundamentally critical element of sustainable human existence.” (program website)

Basic structure

A four-year Bachelor of Science program including both classroom-based and on-farm learning, following a complete crop cycle from spring through fall. Students develop skills in sustainable/ecological fruit and vegetable crop production; the business, sales, marketing, and management of sustainable agricultural businesses; and researching, analyzing, and understanding the context in which such operations exist (including government, policy, economic, NGO, and private sector influences).

Type of training/education

Classroom work includes broad foundational courses in natural sciences, political sciences, food systems, and business skills, as well as more focused courses on soil, pest, and agro-ecological management. Farm-based courses are the focus of the third year and include animal, vegetable, fruit, and nut production.

Target participants

Students must meet Faculty of Science admission requirements and an English proficiency test if applicable. The program is aimed at students with an interest in either engaging in sustainable farming themselves or working in a context where familiarity with sustainable agriculture may be relevant (e.g. policy, NGOs, planning, resource management, etc.).

Cost/compensation

Tuition is approximately \$7,000 for domestic students. This includes all school-related fees but does not include room and board or other life expenses.

Funding sources

Government funding, students' tuition.

Kwantlen Polytechnic University: Farm School (Richmond, BC or Tsawwassen First Nation, BC)

<http://www.kpu.ca/farmschool>

Mandate/vision

“The Bachelor of Applied Science in Sustainable Agriculture degree is unique to North America and is distinguished from other agriculture degree programs by providing a broad scope of study related to sustainable food production as an integral and fundamentally critical element of sustainable human existence.” (program website)

Basic structure

A nine-month program focused on practical training in sustainable small scale farming for direct markets. Includes a mix of classroom education and practical on-farm education. Offered in two formats:

Tsawwassen: four days per week on a 20-acre high production working organic farm and orchard. 325 hours of lesson time (includes both classroom and field-based time), 350+ hours of practicum experience.

Richmond: one day per week, focused on high value production in small urban plots (up to ½ acre). 250 hours of instruction, 50 hours of recorded co-op experience.

Type of training/education

Practical on-farm training with some classroom learning as well. Topics include soil science and management, crop production, integrated pest management, livestock management, farm tools and machinery, business planning and marketing, etc. Tsawwassen program includes learnings on Indigenous food systems.

Target participants

No prerequisites for registration. Anyone from beginning farmers to complete novices welcome.

Cost/compensation

Tuition is \$5,000 for Tsawwassen program, \$2,200 for Richmond program.

Funding sources

Government funding, donors, students' tuition.

Centre for Environmental Farming Systems - Farm Apprenticeship Program (North Carolina)

<https://cefs.ncsu.edu/academics-and-education/apprenticeships/>

Mandate/vision

CEFS is one of the nation's most important centers for research, extension, and education in sustainable agriculture and community-based food systems. It is recognized as a national and international leader in the local foods movement, and celebrated for its work in building consensus around policies, programs and actions that facilitate a vibrant local food economy.

CEFS' Sustainable Agriculture Apprenticeship Program is a hands-on work and study program that trains participants in many aspects of sustainable agriculture production and research.

(CEFS website)

Basic structure

CEFS is a partnership between North Carolina's two land-grant universities, NC State and NC Agricultural and Technical State University, and the NC Department of Agriculture and Consumer Services. Its primary location is a 2,000 acre research farm in Goldsboro, with satellite operations at/near both schools. Both universities offer academic programs in agriculture, but CEFS also offers 6-9 month full time internships for people serious about a more hands-on program. Four to five interns are taken per year. Each intern focuses on a particular production unit of the farm (e.g. small farm production, farming systems research) and also completes an individual study project. Field trips are made to other farms.

Type of training/education

Training is on-the-job through mentoring by farm staff and CEFS educators. The specializations for interns are varied across the farm's different production units, and some are more traditional production-focused internships while others have a research-based slant. All are focused on production skills.

Target participants

Grade 12 education or equivalent required. Little to no farming experience required, although interns are typically serious about building a career in agriculture. Competition can be intense.

Cost/compensation

Interns receive a stipend of \$200/week. There is no housing or food provided (nor a stipend for them). Interns must supply their own housing and daily transportation to the site.

Funding sources

University budgets, CEFS budget, government grants (including in-kind via land-grant).

Michigan State University Student Organic Farm: Organic Farmer Training Program

<http://www.msuorganicfarm.org/organic-farmer-training-program.html>

Mandate/vision

(long but interesting - taken from website)

The Student Organic Farm was started in 1999 by a group of MSU students who were interested in learning to grow food sustainably. At the time there were no classes in organic agriculture at MSU and students were looking to acquire knowledge in a hands-on, experiential format. They wanted to apply what they were learning in their classes in the context of a working farm. Inspired by other student farms around the country, these students felt that MSU -- the nation's first land grant college -- should have a student farm of its own. At the same time, Horticulture Professor John Biernbaum began researching possibilities for 4-season farming in Michigan. The connection of these two projects was ideal, as year-round farming provided opportunities for students to engage in farming during the main part of the academic year (September to May).

...

As the farm developed, it became clear that many students wanted the farm to offer a more formal approach to learning about organic farming. The Organic Farmer Training Program was a product of the evolution of the ideas and vision held by the original group of students and faculty and all those who have come since then. Additionally, MSU now also offers a Bachelors of Science in Sustainable and Organic Horticulture as well as a Sustainable Food and Agriculture Minor.

...

The [OFT] program is designed to give participants a strong background and working knowledge of farm production, management, marketing, and business operations necessary to operate a diversified small farm.

Basic structure

Students participate in an 8-month training program, meeting every Friday 9am-5pm. Delivery methods include lectures, readings, writing assignments, hands-on demonstrations, hands-on activities, farm walks, visits to other farms, and individual advisory meetings. Through the program, students develop their own farm business and production plan. Although this is not an academic program, they receive a certificate of completion from MSU's Student Organic Farm, the Department of Horticulture, and the Centre for Regional Food Systems.

Type of training/education

Training happens on the 15-acre certified organic farm, which includes 20,000 sq ft of passive greenhouse (hoop) space. The farm is primarily vegetables although there are also pigs, cattle, and laying hens. The curriculum covers all aspects of managing a diversified farm, including business planning; vegetable, fruit, and flower production; livestock management; greenhouse management; and marketing.

Target participants

Individuals committed to building a career in sustainable agriculture, be it starting their own farm, managing existing farm businesses or non-profits, or working "for other organizations promoting farm and food education and /or food production". No experience is necessary.

Cost/compensation

Program cost is \$3,600. Scholarships based on financial need are available between \$500 and \$3,000. Housing and food are not provided.

Funding sources

Student tuition, product sales, university budget.

University of British Columbia (UBC) Farm Practicum and Internship

<http://ubcfarm.ubc.ca/community/practicum-in-sustainable-agriculture/>

<http://ubcfarm.ubc.ca/get-involved/internships/>

Mandate/vision

The mission of the UBC farm is: To enable UBC to be a global leader in the creation of new patterns for sustainable and healthy communities integrated with their surrounding ecology, through exemplary, academically rigorous research, through transformative learning, through innovative cross-faculty and interdisciplinary collaboration, through socially responsible community engagement, and through international dialogue and knowledge-dissemination.

Practicum: Our goal is to inspire and cultivate new farmers and sustainable agriculture educators who will transform their communities and their food systems through initiatives and enterprises that are socially, ecologically, and economically healthy and viable. (Practicum Overview)

Basic structure

The practicum is an 8-month experiential learning program that follows the production season on the 24-hectare teaching, research, production, and community farm on UBC campus. The farm produces over 200 fruit and vegetable crops as well as honeybees and some forest products. Practicum students receive 7-20 hours/week of instruction and hands-on learning on the farm (more summer, less in spring and fall) and grow their own project gardens. Most students work part-time while participating to be able to afford to live in Vancouver, but are expected to make the practicum their primary focus.

The internships are shorter, unpaid, for-credit programs offered under a fourth year course code. All UBC students may apply. There are typically specific titles for different interns, e.g. food skills intern, farm management application intern. Interns work specified hours on the farm, 9-18 hours/week for 3-6 months, depending on the number of credits they will receive. They must also complete reflection journals.

Type of training/education

Practicum: lecture, experiential, and self-directed learning, and some field trips. Curriculum includes vegetable production from sourcing seed to marketing, farm management skills, beekeeping, poultry care, orchard care, etc.

Internship: varies by specific internship position, but is primarily experiential learning.

Target participants

Practicum: “beginning farmers, urban and community gardeners, aspiring environmental educators with a focus on food production systems, and students with an interest in applying their learning about sustainable agriculture and food systems.” (Practicum Overview)

Internship: UBC students in any faculty.

Cost/compensation

Practicum: \$4,160 tuition fee; no compensation. Certificate of completion.

Internship: no tuition fee (beyond other school fees); no compensation beyond course credit

Funding sources

University budget, student fees.

The Seed Farm (Pennsylvania): Incubator Program

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

Mandate/vision

The Seed Farm is a teaching farm that was designed to address barriers facing new farmers who did not grow up in the industry: lack of access to land, training, and capital. Its long-term goals are “to increase the success of beginning farmers by providing the skills necessary for successful farm start-ups and to increase the number of sustainable farms in our region by providing access to land, mentoring, and networks” (Pointeau et al, 2016, p. 62). It was founded in 2010 by a collaboration between Lehigh County and Penn State Extension under a USDA Beginning Farmer and Ranchers Development Program grant.

Basic structure

(Note: The Seed Farm also runs an internship program, listed under private business courses/program)

Incubator program: Farmers who demonstrate sufficient experience, skill, and business and marketing plans can run an incubator business out of the Seed Farm for up to three years. They are given discounted rates on access to 1-3 acres of land, irrigation and cultivation equipment, greenhouse and cooler space, wash/pack area, and storage space. They are also connected with a network of businesses and mentors, and may in turn mentor the interns.

Type of training/education

All aspects of sustainable vegetable farming.

Target participants

Incubator program participants: new farmers with a few years’ experience and a realistic business and marketing plan.

Cost/compensation

Incubator farmers receive discounted lease/access rates for land, equipment, tools, and infrastructure on the farm. They run their own business and keep all income. They also have access to a network of other farmers and local businesses and services through The Seed Farm. Incubator farmers do not live on site.

Funding sources

Intern tuition, government grants, donations, product sales, corporate sponsorship, county support.

Atlantic Canada Organic Resource Network (ACORN)'s Grow a Farmer Initiative: Mentorship Program

<https://growafarmer.ca/>

Mandate/vision

ACORN's **Grow A Farmer Initiative** promotes organic farming as a viable and empowering form of livelihood. With a focus on farmer-to-farmer training, the program intends to cultivate, renew and diversify the organic sector in Atlantic Canada, through the preservation, growth, and use of local knowledge, land and community.

Our goals:

- To **share knowledge and build community** among experienced, new and aspiring organic growers in Atlantic Canada.
- To **minimize start-up barriers** for new entrant organic farmers and assist them to gain confidence, inspiration and financial profitability from their decision to farm.
- To **inspire new markets** and agricultural opportunities.
- To **preserve, renew and increase access to farmland** in Atlantic Canada.

(Grow a Farmer website)

Basic structure

(Note: ACORN's Grow a Farmer Initiative also includes a learning series, profiled under private business courses/programs)

The Mentorship Program pairs new farmers (either with their own land in the first few years of production, or in the development stage of their own operation) with experienced organic farmers based on their educational goals and mentors' expertise. New farmers apply to participate and are given information about pre-registered mentor farmers whose experience and location match well. Once a mentorship is established, the mentor farmer communicates regularly through the year with the new farmers to provide advice and suggestions, and arranges to visit the new farmer on-site once or twice in the season.

Type of training/education

Farmer-to-farmer mentorship based on specific educational needs and mentors' experience. Could cover any aspect of any type of farming, provided there is a mentor with relevant experience available.

Target participants

New farmers either developing their operational plan or in the first few years of farming. New farmers are expected to have some farmer training and experience already. ACORN's network is focused on organic production.

Cost/compensation

The program is free for ACORN members. Membership costs from \$50/year for an individual to \$100-\$250/year for a farm/business. Mentor farmers receive a \$200 honorarium for mentoring one new farmer for one season.

Funding sources

Donations (foundation and individual), membership fees, government grants.

Maine Organic Farming and Gardening Association (MOFGA): Journeyperson Program

<http://www.mofga.org/Programs/JourneypersonProgram/tabid/228/Default.aspx>

Mandate/vision

“MOFGA's Journeyperson Program provides hands-on support, training, and mentorship for people who are serious about pursuing careers in organic farming in Maine.

The program is designed to fill the continuing education gap between apprentice and independent farmer, and to provide the resources and opportunities for prospective new farmers who have completed an apprenticeship or have farmed for at least 2 years to further develop the skills they need to farm independently and successfully. “ (MOFGA Journeyperson Program website)

Basic structure

A two-year program that pairs a new farmer with an experienced mentor, and also gives the new farmer access to various educational programs and opportunities (conferences, educational stipend, conferences/workshops/events, etc.). The program can also help prospective journeypeople find land if necessary. Over 30 farms are participating in the 2016-2017 season.

Type of training/education

Depends on the farming and educational goals of the apprentice farm, but all are expected to practice a form of sustainable agriculture, and typically farms produce field crops or livestock for direct sales or wholesale markets.

Target participants

New farmers with a minimum of two years of farming experience (at least one in Maine) who are serious about building a farming career. Most participants have land and have developed a business to some extent and are in the early stages of building it. They must also demonstrate a serious commitment to the Maine farming and broader community.

Cost/compensation

There is no fee to participate, but there is an application process.

Funding sources

Donations (foundation), government grants ([BFRDP](#)).

APPENDIX C

APPENDIX C: RESOURCES FOR FARMERS

The References to this report includes a number of documents, reports, books and articles on subjects including new farmer training and support, farm labour, internships, and more, both in Ontario and elsewhere in North America. Readers interested in pursuing these topics further are encouraged to explore it.

This appendix includes additional resources which may be of use to farmers or other practitioners engaged with farmer training programs. It includes manuals and guidebooks about establishing and running on-farm internships (aimed at both farmers and interns), case studies on some internship/training programs, and skills checklists from some farmer training programs. As the distinctions between these types of documents can be blurry, they are listed by geographical region.

APPENDIX C

AUTHOR / ORGANIZATION	TITLE (YEAR)	DESCRIPTION	LINK
ONTARIO			
Jacinda Fairholm, Ignatius Farm	Oh, to grow: An Educational Primer for New Farmers (2nd ed.) (2015)	77-page primer on organic farming designed for use with Ignatius Farm's beginning interns	https://ignatiusguelph.ca/wp-content/uploads/2014/07/Oh-to-Grow-Book-2015.pdf
Caitlin Hall, Ignatius Farm	Nurturing New Farmers: A Practical Guide to hosting interns and mentoring the next generation of farmers	68-page primer on whether/why/how to host interns on your farm, for established farmers	https://ignatiusguelph.ca/wp-content/uploads/2014/07/Nurturing-New-Farmers-2015.pdf
Helen Prinold and Marsha Eldridge, Ontario CSA Farm Directory	So you want to become a CSA farmer! (2008)	7-page introductory guide to the planning/business/regulatory/administrative side of starting up a CSA farm in Ontario	http://csafarms.ca/wp/wp-content/uploads/2016/09/So-you-want-to-become-a-CSA-farmer.pdf
CANADA			
North American Biodynamic Apprenticeship Program (NABDAP)	Skills Checklist (last update 2013)	Skills checklist used for the NABDAP apprenticeship program. It is broken into 9 categories (plant cultivation, animal husbandry, basic construction), with the skills listed in each divided into those mandatory for NABDAP and those optional. Includes instructions for both farmers and apprentices on how to use it to set goals and track growth.	https://www.biodynamics.com/files/images/nabdap/NABDAP_SkillsChecklists_2013.pdf
Atlantic Canada Organic Regional Network (ACORN)	ACORN Guide for Beginning Farmers	This 122 page manual features comprehensive articles, essays, illustrations, resource-listings, and words of wisdom from members of the Atlantic Organic Farming community, covering all of the essential topics that should be considered by one pursuing a career in organic agriculture. (\$10 + \$7 shipping.)	https://growafarmer.ca/acorn-guide-for-beginning-farmers/
Stewards of Irreplaceable Lands (SOIL)	SOIL Apprenticeship Manual (~2004)	53 pages aimed at both farmers and apprentices; largely comes down to lists of topics, questions for interns to ask about them, ideas for farmers to teach about them, and lists of further resources by topic.	https://static1.squarespace.com/static/5273e3b6e4b083ae555c0582/t/529e3cffe4b0417e4d277ba2/1386102015669/SOIL_Manual_Compressed.pdf
Canadian Intern Association	The Canadian Intern Rights Guide (2016)	Overview of intern's rights and how to fight for them. Aimed at interns. Includes section for each province.	http://internassociation.ca/guide/

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UNITED STATES			
Thorsten Arnold / Grey Bruce Centre for Agroecology and Angelic Organics Learning Center	Collaborative Regional Alliances for Farmer Training: Best Practices of CRAFT Alliances in North America (2015)	56-page report on activities and best practices of CRAFT alliances across Canada and the United States, broken down by region. Includes a cross-sectional analysis that summarizes findings across all CRAFT groups by categories such as field days, steering committees, and finances and funding.	http://gbcae.com/GBCAEdownloads/Best%20Practices%20of%20CRAFT%20Farmer%20Alliances%20in%20North%20America.pdf
Greenhorns	Guidebook for Beginning Farmers (2010)	84-page guide for new farmers embarking on apprenticeships. Includes lists of resources on a wide range of topics.	http://www.thegreenhorns.net/wp-content/files_mf/1390779671greenhorns_guide_sept2010_web.pdf
Kristina Hemstead, Richard Cates, Jr., Thomas Cadwallader / Centre for Integrated Agricultural Systems (CIAS) at University of Wisconsin - Madison	Passing Along Farm Knowledge: A Mentor-Intern Handbook for Dairy and Livestock Farmers	A 36-page guidebook on establishing and maintaining an on-farm mentorship on a dairy/livestock farm (although elements would be relevant for other farms too)	http://www.cias.wisc.edu/wp-content/uploads/2013/01/mentorinternfinal.pdf
Northeast Organic Farming Association of New York (NOFA NY)	Internships in Sustainable Farming: A Handbook for Farmers (1999)	16-page document about the logistics of running an internship on your farm. Includes information on recruitment, program design, physical/infrastructure requirements, and legal obligations, as well as links to organizations for further information.	http://mofga.org/Portals/2/Files/internshiphandbook.pdf
Northeast Organic Farming Association of New York (NOFA NY)	On Farm Skills Development Guide	Essentially a skills checklist, with a "Learning Plan" form for tracking progress, for a wide range of types of agriculture (e.g. livestock, dairy, produce, fruit, field crop). Also available in Excel format on NOFA-NY website.	https://www.nofany.org/files/On_Farm_Skills_Development_Guide.pdf
Rogue Farm Corps (Oregon)	Student Intern Handbook	Gives overview and logistics of the program, including a list of curricula topics. Sidebar links also provide sample program schedule and resources page.	http://www.roguefarmcorps.org/next-handbook/
Beginner Farmer and Rancher Development Project (BFRDP) (USDA)	Best practices for mentoring, internship and apprenticeship programs for beginning farmers and ranchers	One-page summary of break out session discussion on best practices discussion from BFRDP project director's meetings	https://nifa.usda.gov/sites/default/files/resources/Best%20practices%20for%20mentoring%20farmers%20and%20ranchers.pdf
Beginner Farmer and Rancher Development	Best Practices for Better Serving Socially Disadvantaged and Limited	Two-page summary of break out discussion at BFRDP project director's meeting	https://nifa.usda.gov/sites/default/files/resources/Best%20practic

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Project (BFRDP) (USDA)	Resource Beginning Farmers and Ranchers		es%20for%20mentoring%20disadvantaged%20farmers%20and%20ranchers.pdf
Trainers' Resource Guide	Trainers' Resources Guide	Developed through BFRDP grant: online resources to help farmers train employees/successors in business management and financial literacy skills. Includes topics such as "how to train" "evaluation" and "mentoring" as well as more specific resources like 1-page business plans and links to webinars on various topics.	http://www.farmbiztrainer.com/
California Guide to Labor Laws for Small Farms	National Centre for Appropriate Technology (NCAT) and California FarmLink / Marisa Alcorta, Jessy Beckett, and Reggie Knox (2013)	Written in response to recent legal actions taken against farms in California and Oregon for violating federal and state labor laws, this guide is to educate small farm owners on their legal obligations regarding anyone working on their farm. Note that most interns, apprentices, and volunteers in California are considered employees under the law. Outlines 5 options for small farmers to continue training new farmers, including registering a formal apprenticeship program with the Division of Apprenticeship Standards (first done by an organic farm in CA in 2011).	https://attra.ncat.org/attra-pub/summaries/summary.php?pub=461
Farmers' Legal Action Group (FLAG) (Minnesota)	Farmers' Guide to Farm Internships: Federal and Minnesota Labor and Employment Law (2013)	173-page guide to federal and Minnesota law governing all aspects of on-farm employment and internships. Again, generally, most "interns" are actually considered employees under the law. Federal law information is common across the US. (Referenced by NCAT/California FarmLink report as useful re: federal laws.)	http://www.flaginc.org/publication/farmers-guide-to-farm-internships/
Community Involved in Sustaining Agriculture (CISA) (Massachusetts)	Labor Law and Management Tipsheet: Farm Apprenticeships	3-page overview of Massachusetts law regarding on-farm internships. Agricultural exemptions do exist to minimum wage, if certain conditions are met.	https://www.buylocalfood.org/upload/resource/Labor.farmapprenticeshipsfinal.pdf
Community Involved in Sustaining Agriculture (CISA) (Massachusetts)	Management Case Study: Apprenticeships	Brief overview of two different Mass. farms with different apprenticeship models.	https://www.buylocalfood.org/upload/resource/Labor.managementcasesestudyfinal.pdf
New England Small Farm Institute	The On-Farm Workstays Project - On-Farm Mentors and Labor Law: Year End Report 2008	13 page summary of labor laws relevant for small farms wanting to host interns or workstays (including WOOFers), particularly in three areas: wage & hour laws, housing, and workers' compensation. Includes information specific to New England states (Connecticut, Maine, Massachusetts, New Hampshire, New York, Vermont).	http://www.smallfarm.org/uploads/uploads/HTML/workstays%20labour%20law%20summary.htm

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UNITED KINGDOM			
Capital Growth / Paul Bradbury and Eloise Dey (United Kingdom)	Future Farmers: A guide to running an urban food growing traineeship	28-page guide to running a traineeship in an urban food gardening context. Mostly focused on logistics, curricula, training, timeline, etc.	https://www.sustainweb.org/publications/future_farmers_a_guide/
LISTS OF OTHER RESOURCES			
FarmON	Agricultural Education in Canada: The Ultimate List of Programs	A recent list with good links to agricultural education programs across Canada. Generally these are college/university programs; not necessarily practical/hands-on.	http://farmon.com/agricultural-education-in-canada-the-ultimate-list-of-programs/
ACORN: Grow a Farmer program	Resources for Host and Mentor Farmers	An excellent list of (largely online) resources from textbooks to internship how-to guides to sample contracts.	https://growafarmer.ca/host-and-mentors/