

CMFC Incubator Farm Manual

1.0 Overview and Welcome

Incubator farm programs are a relatively new approach for addressing the barriers new farmers face. Although each program is different, it is appropriate to generally describe incubator farms as a land-based, multi-grower project that provides training and technical assistance to aspiring and beginning farmers. The following manual describes the specifics of Cloud Mountain Farm Center’s (CMFC) incubator farm program. Whether you are a new farm participant or an inquiring partner, we welcome you in supporting the next generation of farmers.

The 20-acre CMFC incubator farm site is located in Everson, WA, approximately 13 miles northeast of Bellingham, and 2 miles south of the Center’s main farm and facilities. The program offers, on a fee basis, river bottom soil (Puyallup Fine Sandy Loam), equipment, access to irrigation, barn space, propagation space, limited cooler and dry storage space, educational opportunities, and access to a aggregation/distribution location serving market outlets. These program nuts and bolts are further discussed throughout this document.

Who & What the Program Serves

As part of its mission to “build experience, knowledge and community in order to expand dynamic local food systems,” CMFC hosts an incubator farm program. The program aims to reduce barriers to new farm businesses by serving the following:

- Individuals trying to start or expand a farm business
- Individuals who use organic practices
- Individuals who lack access to land, equipment and/or infrastructure
- Individuals with some production experience, who are close to business-ready, and have some level of need
- Individuals who want mentorship— on broad/comprehensive farm expertise
- Individuals interested in farming in the context of a learning environment
- Intern graduates farming in the community

Outcomes

CMFC recognizes the challenges new farmers face in starting small farm businesses. While there is certainly no guarantee of success with participation in the program, CMFC is committed to building a program that aims to:

- 1) “Graduates” develop successful stand-alone farm businesses.
 - Farmers establish annual goals and benchmarks to achieve those goals.
- 2) “Graduates” are supported to transition smoothly out of our program and continue to develop a stand-alone business.
 - Graduates understand the tools and resources available to help them transition
- 3) “Graduates” stay connected to the Incubator Program and CMFC.
 - CMFC communicates with them regularly

- Graduates are willing to participate in CMFC marketing/fundraising
- Graduates are part of a growing network of farmers and ag professionals who connect through the Center
- Graduates of our program continue to look toward the Center for ongoing technical assistance and mentorship

History

Cloud Mountain Farm has been a Whatcom County food and nursery business since 1978. Over the years, it has explored a variety of farm systems in the unique Pacific Northwest climate, with a particular focus on perennial systems and high value annual systems. In 2011, Cloud Mountain began yet a new path by changing its organizational structure to a non-profit, mission-based agency with a focus on food and farmer education. In 2014, CMFC purchased a 22-acre farm and began hosting an incubator farm program. In addition to the incubator program, CMFC offers a 9-month intensive farm internship and 30+ community education workshops.

2.0 Education and Mentorship

CMFC is committed to helping participating farmers establish learning objectives and business benchmarks. There is no silver bullet to success, but there is an existing body of work around core skill areas that we believe contribute to successful farm enterprises. Although CMFC will provide technical assistance and resource match-up to participating farmers, it is ultimately the responsibility of the farmer to seek out support and tailor resources to specific enterprises and learning needs. Year-to-year lease continuation is dependent on a participating farmer's efforts to meet established benchmarks and engage with learning opportunities.

See Sample Benchmark Matrix in Appendices

Orientation

CMFC staff will provide first-year farm participants an orientation at the beginning of the season. This orientation will include an introduction the overall agency, the available infrastructure to participating farmers, available equipment, and communal expectations. Individual equipment training and will also be provided, with staff sign-off required before operation.

Educational Offerings

Prior to 2017, CMFC did not offer formal learning opportunities for participants. Farmer feedback from those years and broader national program trends indicate that structured learning is important to the advancement of beginning farmers' skills and business success. CMFC will begin hosting an annual series of collaborative learning sessions (10-12) for participating farmers that span a range of topics relevant to establishing farm businesses. Farmer input will be important in shaping workshop offerings. The proposed workshops for the upcoming year are:

Month	Topic	
January	1. Crop Planning	
February	2. Marketing/Branding	3. Tractor and tool safety
March	4. Tillage equipment	5. Food safety
April	6. Harvest and post-harvest	7. High tunnels

May	8. IPM
June	9. Weed management
July	10. Irrigation
August	11. Cover crop and fertility
September	12. Financing

In addition to the structured workshops, participating farmers are invited to educational offerings through the Center’s Community Learning Workshop Series, Internship program, and Farmer Speaker Series. There are many opportunities to guest teach an internship class. Those experiences are valued as a \$50 credit, good for attending 5 other internship educational offerings. A list of the opportunities will be made available by the Education Coordinator at the beginning of the year and Community Workshops can be found in the centers catalog. Community Workshops are fee-based, listed in the catalogue.

Food to Bank On and Other Partners

Sustainable Connections *Food to Bank On* is a 3-year farmer incubation project that connects beginning farmers with business training, markets and mentorship, while providing farm-fresh product to food banks and shelters. CMFC farmers are required to participate in Food to Bank On. The program includes:

- **Training:** Business planning, technical training workshops
- **Markets:** New farmers deliver fresh food to local food banks; farmers are connected with new markets through Sustainable Connections membership.
- **Mentorship:** In addition to valuable peer-to-peer relationships with the cohort of farmers, each new farmer is paired up with an experienced mentor farmer.

CMFC partners with local and national agencies to help provide important educational resources for farm business start-up. Some of these partners include:

Organization	Role
Bellingham Food Bank	Wholesale Purchasing and Hunger Relief
National Incubator Farm Training Initiative (NIFTI)	Program assistance
Sustainable Connections	Food to Bank On, outreach and education
Tilth Alliance	Program collaboration
Viva Farms	Program collaboration
Washington State University	Education, consultation, field trials
Whatcom Conservation District	CREP programming, farm planning education
Whatcom County	Land access opportunities
Whatcom Land Trust	Land access opportunities

Mentorship

CMFC believes farmer mentorship is an important component to farm success and community development. As part of the program, farmers are encouraged to build a relationship with an established farmer who can offer mentorship throughout the program. Mentorships established

through Food to Bank On are an excellent way to fulfill this. In addition, farmers returning with the program are encouraged to offer mentorship to new farmers. Mentors could be found within the incubator program, the internship, or more broadly in the local farming community. The incubator coordinator will work with participants to help establish mentorship goals.

3.0 Land Stewardship

The tenants of ecological farming – fertility, cover cropping, IPM, crop rotation, and water management – are imperative to sustainable food production systems. CMFC expects each farmer to develop and implement plans around these core concepts for both the success of current farmers, as well as those who are to follow.

Organic Requirements

As of August 2015, the Lawrence Rd farm is certified organic by WSDA, and all practices of participating farmers need to comply with WSDA organic standards. All crop production inputs used at the Lawrence Farm site are required to meet **OMRI and/or WSDA Listed materials**, although formal certification is not required. Additionally, the acreage managed by CMFC is GAP Certified and tenant farmer practices must not jeopardize this certification. CMFC's Food Safety Plan will be made available to incubator farmers. All incubator farmers leasing land at the site are required to keep, and make available, input records and crop maps. See provided templates.

Soil Testing

Soil tests offer a guide for managing macro and micronutrients, as well as a historical look at changes and fluctuations. Farmers are responsible for taking an annual soil test of their farm plot and having the analysis done by a local lab. Results are to be made available to CMFC staff. Farmers are responsible for maintaining their pH and nutrient needs.

Cover Crop

Cover crops can offer huge benefits to the farmer including building soil, suppressing weeds, increasing fertility, and promoting beneficial insects. Participating farmers are expected to plant cover crops by the 1st week of October on those portions of the field that are no longer in production. If for some reason this is not possible, it's the responsibility of the farmer to discuss an alternative plan with CMFC staff.

Crop Rotations

Crop rotations are used for both fertility management as well as pest and disease management. Farmers are expected to keep a current plot map that notes crop family and timing of planting. Successive plantings, within years and across years, are to be planned with a crop family rotation strategy.

Water Usage

Each 1-acre field will be equipped with a 2" water main, 1 electronic valve and access to timed irrigation scheduling. Each farmer is responsible for irrigation equipment, set-up, and maintenance for those parts after the 2" connection. Irrigation design was established for medium to large water volume (up to 100 gpm) at any one time but does not accommodate low flow scenarios. This needs to be taken into

consideration when designing irrigation zones. Given the multi-producer environment, there is a need to collaborate on irrigation scheduling, which will be established at the beginning of the irrigation season. Costs for irrigation access are listed in the fee schedule.

Weed Management

The major weeds at the CMFC incubator site are chickweed, pigweed and volunteer brassicas. CMFC is committed to reducing the weed seed bank at the incubator site, both for the success of current farmers as well as those to come. In addition, Whatcom County has a significant number of acres devoted to brassica seed production that can be impacted by rogue brassica weeds going to flower. For these reasons, CMFC offers a financial incentive for proper weed management. CMFC will purchase winter cover crop for those farmers who thoroughly manage weeds throughout the growing season (see Management Incentives). Inadequate weed management may result in non-renewal of a lease. Furthermore, CMFC reserves the right to manage farmer's weeds, including turning in crops, if they are unresponsive to requests for weed management.

4.0 Safety

"Safety is a frame of mind, so concentrate on it all the time." CMFC is committed to providing a safe working environment and we ask that all participating farmers give special consideration to the safety of themselves, other community farmers, and potential visitors. Please communicate to CMFC staff if you encounter an unsafe situation so it can be quickly corrected.

Safety Gear

Participating farmers are expected to use sound judgment about basic safety including appropriate clothing, footwear, ear and eye protection, and knowledge about tool use. CMFC will provide safety training for tractors and implements prior to use.

Ear protection is provided on each tractor and is required for operation. Both a first aid kit and fire extinguisher are located in the barn.

Farmers are responsible for safely handling and applying any inputs, such as OMRI listed pesticides. Please read and adhere to product labels before mixing or applying substances to crops.

Food Safety

Food safety is a critical aspect of agricultural systems. Each farmer is expected to be aware of proper food safety requirements for their specific products. Furthermore, farmers need to be diligent in minimizing contaminant risk in communal spaces, such as cold storage and wash/pack facilities. If a farmer chooses to use cold storage facilities at the main farm, CMFC will provide the established SOP's.

Additionally, CMFC hosts a WSDA licensed processing center that is available, for a fee, to incubator farmers. If used, farmers are responsible for contacting WSDA to create and review SOP's specific to their product.

Wash Station

The incubator farm has available basic wash/pack facilities. This includes sinks and wire tables adjacent to the barn. In order to reduce bottlenecks, a schedule of access will be developed at the beginning of the season. It should go without saying, but this space, as well as all communal spaces, need to be maintained (ex. remove trash, store boxes, remove produce) so that all farmers can effectively access.

5.0 Program Guidelines

The aim of the following guidelines is to promote the success of participating farmers and foster a healthy environment for sharing and learning about small farm businesses.

Lease Agreement

Currently, CMFC offers participants year-to-year leases, starting in February, which can be renewed for up to three years. Annual lease renewal is dependent on compliance with program guidelines, land stewardship and overall good standing with CMFC. An additional lease contract will be provided.

Business/Production Plan

A business plan is a formal statement of business goals, reasons they are attainable, and plans for reaching them. It serves as a living document that helps guide decision-making. Incubator participants are required to have a business plan upon acceptance to the program, and revise each year they continue. Business plans need to be reviewed by CMFC staff in April, corresponding to Food to Bank On. Additionally, a production plan that lists crops, timing, and location is an invaluable tool for farmers. This document also needs to be made available to CMFC staff before leases are signed. Please note that livestock are not permitted as part of production activities.

Insurance

All Incubator farmers are required to carry personal liability insurance to the amount of \$500,000 naming Cloud Mountain Farm Center as additionally insured. Please provide the Center with a copy by March 1 of each year. CMFC staff can provide recommendations for local agencies who have historically provided coverage.

Legal Compliance

All farm activities on CMFC property must adhere to local, state and federal regulations. Each farmer is responsible for maintaining compliance and reporting activities as is requested by governmental agencies.

Meetings and Evaluation

Monthly meetings are an opportunity to come together as a cohort of farmers and discuss common issues, offer/receive feedback, and stay abreast with financial obligations related to the program. In scheduling the meetings, the incubator coordinator will attempt to accommodate the seasonally heavy workloads and variable schedules of the group. Farmer participation at these meetings is required.

Additionally, quarterly meetings will be held between the incubator coordinator and individual farmer. The goal of these meetings is to assess progress on educational and business goals. Specifically, farmers

are expected to provide financial metrics (revenues and expenses) to be reviewed and compared to projected numbers laid out in the business plan.

An End-of-Year Review will take place in November/December and serve as a time for farmers and staff to more thoroughly review goals and plans established at the beginning of the year. This is also a time for farmers to offer program feedback and begin setting goals for the following season, if continuing.

Record Keeping

Often viewed as a burden, record keeping provides a wealth of knowledge and organization for the business owner. Participants are expected to keep records relevant to their businesses, especially production and financial records, and make available to CMFC at the end of year review. It is beneficial to establish record keeping templates and practices before data starts coming in. CMFC staff will offer assistance in identifying important data and an efficient means of collecting it.

Publicity

CMFC and participating farmers are in a unique working relationship. In a two-fold effort CMFC uses farmer stories to increase program visibility as well promote budding farm businesses. Farmers are expected to provide CMFC with a brief farm business bio and allow CMFC to use photos containing their farm-related workings.

Community Farm Service

At the heart of growing a farm business is building community ties. The CMFC program is no different and each farm is expected to contribute 12 hours per year, per farm towards the betterment of the program or Center. Farm service hours may include blog posts for the website, working at the festival and/or other property improvement activities.

Putting the Farm to Sleep

At the end of each season, farmers are responsible for cleaning up working areas and fields, including temporary structures, irrigation, tools, or other farming infrastructure. Additionally, farmers are expected to sow cover crop as stated in the *Cover Crop* section. End of Year Reviews will be conducted in Nov/Dec.

Community Conduct

Participation in the CMFC incubator program requires collaboration from and respect of all farmers and staff. CMFC greatly values the need for a safe learning and operating environment at the incubator farm. CMFC supports a diverse environment inclusive of all individuals, regardless of race, color, religion, creed, sex, sexual orientation, gender identity, national origin, ancestry, age, veteran status, disability unrelated to job requirements, genetic information, military service, or other protected status. With that in mind, weapons are not permitted at the farm and aggressive or disrespectful behavior will not be tolerated. Farmers serve as ambassadors of the program and are asked to respectfully represent CMFC at the farm and beyond. In the event of an issue/conflict between participating farmers arises and involves infrastructure/equipment that CMFC manages, CMFC asks that the grievance be documented and submitted to CMFC staff for review. CMFC will review and assess needed action.

Management Incentives

CMFC understands that participation in the program requires a variety of additional activities compared to what a private farm business might engage with. However, the objective of the structure is to best support farmers amidst a dynamic learning environment and within a multi-faceted organization. To this tune, CMFC offers a financial incentive for the completion of required tasks. Participants that meet the following standards will be granted a 25% rebate on land fees, to be paid at the end of the calendar year.

- Land Stewardship
 - Sow cover crop by 1st week of October (for ground not in production)
 - Thoroughly manage weeds
 - Conduct soil test
 - Implement crop rotations
- Record Keeping
 - Submit all input records
 - Submit farm map
 - Submit revenue and expense data
- Community Farm Service
 - Complete and document 12 hours of community farm service by the end of year
- Education and meeting attendance
 - Attend 10 of 12 collaborative educational offerings
 - Attend all quarterly meetings
 - Attend End of Year Review
 - Sufficiently communicate absences and/or other needs with CMFC staff
- Program Stewardship
 - Demonstrate cooperation with cohort farmers and staff
 - Maintain communal spaces

6.0 Farm Operations

For beginning farmers, CMFC has a variety of operational opportunities to engage with. That said, not everything a beginning farmer needs is available. The community of farmers and staff at the incubator rely on flexibility, feedback loops, and pragmatic perspective to continue evolving the support networks.

Access

The incubator farm is available for farmers to come and go as makes most sense for their schedule. Each farmer will be issued a key to access the Lawrence Road barn. Please lock the facilities at the end of day. The Goodwin Farm site operates under standard business hours. If accessing the Goodwin Farm before 7am or after 7pm, please send a brief text to Tom Thornton (360-815-4150), as he lives onsite.

Parking and Driving Onsite

Parking is available on the south side of the barn. Personal work vehicles may be used in the fields however, farmers are asked to minimize driving in fields during wet periods of the year. When parking adjacent to fields, please park vehicles off the main road so that other vehicles can easily pass.

Using Onsite Field Equipment

Tractors and implements are made available on a first come basis. CMFC staff will provide a calendar in the barn to help organize equipment use during peak times. Please refer to maintenance clipboards to determine before-use needs, such as greasing pivot points. A key box in the barn holds both tractor keys – please return to box after use. After using equipment please remove debris, disconnect implements, and place alongside other implement tools. If using equipment with manure or other materials that could contaminate fields, please wash tools and document. During rainy weather, tractors should be housed in the barn or under cover.

Using Offsite Field Equipment

Equipment brought onto the property should be power-washed, sanitized and free of soil from other farms to minimize the potential for cross contamination of soil borne disease, such as club root. Please document your cleaning procedure and make available to farmers who may use that equipment.

Available Onsite Equipment

Equipment	Requirements	Appropriate Use
Case 95 – 95hp, 4x4 high clear	Cat I/II implements, Tires are 80” center-to-center	Bed Prep, cultivation
Kubota – 20hp, 4x4 w/loader	Cat I implements	Use with rototiller, drop seeder, mower. Loading materials.
Case 50 – 50hp, 4x4 w/loader	Cat I implements	Used mostly at Goodwin Farm
Chisel Plow – 5 shanks w/roller, 68” working width	Cat II	Opening up ground as part of bed prep
Power Harrow – 7’ Maschio w/roller and row markers	Cat II w/PTO	Final bed prep
7’ cultivator w/spider tines and sweeps	Cat II	Cultivation between rows
5’ Rotary mower	Cat I	W/Kubota, mowing crops, field edges
5’ Drop Seeder	Cat I	Ground driven drop seeder for cover crop
12’ Drag disc	Rear Remotes (High Clear)	Discing large field areas
6’ 3-point disc	Cat I/II (does not work with Kubota)	Discing fields, specifically turnover of beds
Manure Spreader	Pull with PTO (Case 95)	Spreading amendments
2 bottom plow	Cat I (only works with Case 50)	Periodic turning ground
Buckeye mulch layer/bed shaper	Cat I (only works w/Case 50)	Final bed prep, laying plastic mulch
5’ Maschio rototiller	Cat I (Kubota or Case 50)	Final bed prep
Flame weeder	Case 50 or Case 95	Bed prep for finely seeded crops

Infrastructure at Incubator Site

The incubator farm site has a barn which houses equipment and (5) rentable storage bays. If utilized, the storage bays are intended to house farm-related equipment and tools. On the south side of the barn, a small propagation space is available. CMFC is actively working to find funds for increased propagation space. On the north side of the barn is a wash/pack space with basic washbasins, tables, and access to water. Produce is not to be stored in the wash/pack.

Outdoor space (15x15) is made available for storage of materials and equipment that can be subjected to weather. This is included in the land use fee.

Porta potty service is contracted year round, which is adequate for 10 workers on a 40hr/wk work schedule. This is included in the land use fee. Farmers requiring labor above and beyond this service are responsible for providing additional accommodations.

Compost/Trash/Recycling

All Incubator farmers must keep fields clean and free of garbage and debris. As part of land use fees, trash service is provided at the Lawrence Rd site. This is meant to be for farm related activities. If it's found that additional materials are being deposited, the service will be discontinued.

Currently, improvements to compost facilities are needed in order to minimize rodent pressure. CMFC will look to implement a closed bin system for 2017 in which farmers can deposit vegetable waste.

Goodwin Farm Site

The Goodwin Farm site offers cold storage and dry storage, on a fee basis. Additionally, there is a WSDA licensed processing center, which can be accessed for value added products. Farmers are responsible for connecting with WSDA to determine appropriate SOP's on specific products.

The Goodwin Farm site is also an aggregation/distribution site for the Puget Sound Food Hub. Farmers who sell product through the Puget Sound Food Hub can drop off their product during the designated days/times.

7.0 Costs & Payment Schedule

Payments for program costs and equipment are due 30 days after invoices are provided. CMFC staff will work to provide invoices in a timely manner, generally after monthly meetings. If you are unable to pay in a timely manner, please communicate with CMFC staff to make alternative arrangements.

Item	Year 1	Year 2	Year 3
Land	\$450/acre/year	\$550/acre/year	\$650/acre/year
Barn storage 10'x13'	\$100/yr	\$100/yr	\$100/yr
Loft storage 10'x13'	\$100/yr	\$100/yr	\$100/yr
Tractor (Diesel included)	\$20/hr	\$20/hr	\$20/hr
PTO Implements	\$10/hr	\$10/hr	\$10/hr
Non-PTO implements	\$5/hr	\$5/hr	\$5/hr

Cold storage (May-Dec)	\$20/month/pallet	\$20/month/pallet	\$20/month/pallet
Dry storage (Max 1 pallet)	\$15/month/bin	\$15/month/bin	\$15/month/bin
Processing Room	\$40/day R&D for 2 days, then \$20/hr	\$40/day R&D for 2 days, then \$20/hr	\$40/day R&D for 2 days, then \$20/hr
Total			

8.0 Indemnifications and Recourse

CMFC is committed to doing everything within reason to ensure proper function of equipment and infrastructure at the incubator farm. However, in the event of unforeseen circumstances that create lapses in service, CMFC will not be held accountable for losses.

Feedback Loops

Given the highly dynamic nature of farming, unanticipated circumstances will arise. The only way to quickly address issues is with full cooperation and communication of all participants. CMFC will work to overcome challenges so that the cohort can best function. This will undoubtedly require patience and flexibility on everyone's behalf.

Good Standing

Continued access to CMFC facilities and participation in the program is based on being in good standing with the program. This includes adhering to the Lease, punctual payment and or communication about alternatives, policies laid out in this Program Manual, progressing towards goals and expectations, and working collaboratively with other program participants and CMFC staff.

9.0 Appendices

Input Logs

Equipment Cleaning

Farm Service Hours

Benchmark Matrix

Agreement to Participate

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Program Goals	Year 1	Year 2	Year 3
Production	<ul style="list-style-type: none"> • Create crop plans • Implement production techniques at small scale • Create and utilize templates for collecting data. Ex. yield, timing, • Identify scale/tools that are appropriate for enterprise 	<ul style="list-style-type: none"> • Refine production techniques/plan: cultivation, IPM, fertility • Food safety plan, GAP, other certifications 	<ul style="list-style-type: none"> • Identify staffing needs • Acquire necessary production tools for transition
Marketing	<ul style="list-style-type: none"> • Clearly identify audience • Establish basic customer outlets • Explore marketing/advertising tools 	<ul style="list-style-type: none"> • Implement social media, website, & promotional tools • Diversify marketing outlets within audience 	<ul style="list-style-type: none"> • Build marketing outlets defined in year 2 • Identify staffing needs
Business/Finance	<ul style="list-style-type: none"> • Define Quality of Life • Create 1 year biz plan • Establish templates for tracking cash flow • Acquire insurance, biz license 	<ul style="list-style-type: none"> • Review biz plan; extend to 3 years • Continue record keeping • Identify financing needs • Create enterprise accounting 	<ul style="list-style-type: none"> • Refine business goals • Complete financing applications
Learning/Mentorship	<ul style="list-style-type: none"> • Identify learning priorities • Identify mentorship opportunities in community • Begin Food To Bank On 	<ul style="list-style-type: none"> • Provide mentorship to new farmers • Continue to build relationship with mentor • Continue Food To Bank On 	<ul style="list-style-type: none"> • Continue building on year 3 goals • Complete Food To Bank On
Transition	<ul style="list-style-type: none"> • Establish clear idea of land goals • Establish relationships w/partners who can support land goals 	<ul style="list-style-type: none"> • Identify realtor, if appropriate • Draft proposal of land criteria and solicit with partner agencies 	<ul style="list-style-type: none"> • Identify land base and begin preparation for transition

Agreement to Participate

All members of _____ (farm name) have reviewed the CMFC incubator program manual and agree to participate in the 2017 season.

Farmer name/date (printed)

Farmer signature

Farmer name/date (printed)

Farmer signature

CMFC staff name/date (printed)

Farmer signature