



**SPF Application Form**  
**Section A - Cover Page**

Fill out this Cover Page and save it to your files for future reference before uploading it on the SPF website.

**Project Title** Re Planting the Macdonald Campus orchards for the future.

**In one to three sentence(s), explain what your project is about:**

The Macdonald Campus orchards need to be replanted. The new orchards will be built using a modern post and wire trellis system, including varieties that are suitable for organic or low spray production and also putting in place a new orchard that would accommodate u-pick activities for all McGill students and staff to enjoy.

**Indicate the McGill campus(es) where your project will be implemented:**

**Macdonald**  **Downtown**  **Gault Reserve**  **Bellairs Research Institute**  **Other (Specify):** \_\_\_\_\_

**Approximate Budget Requested to the SPF (\$):** 98,000

**Approximate Total Project Budget (incl. other sources of funding if applicable) (\$):** 141,000

**List 1 to 3 main item(s)/expense(s) for your project that SPF money will be used for (incl. approx. % of total budget):** support system +tree guards +ties(25%) sprayer(22%), labor(25%)

**Indicate which of the following team members...**

**... will be in charge of monitoring the project's budget (maximum 1 person):** Mike Bleho

**... will be the Project Lead (Project Lead will be the contact person for the SPF Staff):** Mike Bleho

**The Project Lead stays for the entire duration of the project:**  **Y**  **N**

**If no, explain in a few sentences your leadership transition plan for one or both of the Project Lead for sustainable continuation of the project:**

**PROJECT TEAM MEMBERS** (read details about [SPF Evaluation Criteria #5](#) for more information)

*The SPF encourages your team to be inclusive of individuals who voluntarily self-identify as members of marginalized communities (e.g. women, Indigenous people, people of colour, LGBTTQI, student parents, members of ethnic minorities, immigrants, people with disabilities).*

<p><b>1. Project Team Member</b></p> <p><b>First Name &amp; Last Name</b> <u>Mike Bleho</u></p> <p><b>Phone (daytime; only put #)</b> <u>+1 (514) 712-2776</u></p> <p><b>Email</b> <u>michael.bleho@mcgill.ca</u></p>	<p><b>Affiliation (select one)</b> <u>Other (specify)</u></p> <p><b>Specify if Other</b> <u>Technical staff</u></p> <p><b>Faculty/Unit/Organization</b> <u>FAES</u></p> <p><b>Campus (select one)</b> <u>Macdonald</u></p>
<p><b>2. Additional Project Team Member</b></p> <p><b>First Name &amp; Last Name</b> <u>Oliver De Volpi</u></p> <p><b>Phone (daytime; only put #s)</b> <u>+1 (514) 398-5743</u></p> <p><b>Email</b> <u>oliver.devolpi@mcgill.ca</u></p>	<p><b>Affiliation (select one)</b> <u>Other (specify)</u></p> <p><b>Specify if Other</b> <u>Executive Chef McGill University</u></p> <p><b>Faculty/Unit/Organization</b> <u>Student Housing and Hospitality ser</u></p> <p><b>Campus (select one)</b> <u>Downtown</u></p>
<p><b>3. Additional Project Team Member</b></p> <p><b>First Name &amp; Last Name</b> <u>Paul Meldrum</u></p> <p><b>Phone (daytime; only put #s)</b> <u>+1 (514) 398-8663</u></p> <p><b>Email</b> <u>paul.meldrum@mcgill.ca</u></p>	<p><b>Affiliation (select one)</b> <u>Other (specify)</u></p> <p><b>Specify if Other</b> <u>Farm manager</u></p> <p><b>Faculty/Unit/Organization</b> <u>FAES, Macdonald Campus farm</u></p> <p><b>Campus (select one)</b> <u>Macdonald</u></p>
<p><b>4. Additional Project Team Member</b></p> <p><b>First Name &amp; Last Name</b> <u>David Wees</u></p> <p><b>Phone (daytime; only put #s)</b> <u>+1 (514) 398-7756</u></p> <p><b>Email</b> <u>david.wees@mcgill.ca</u></p>	<p><b>Affiliation (select one)</b> <u>Academic Staff (AC)</u></p> <p><b>Specify if Other</b> _____</p> <p><b>Faculty/Unit/Organization</b> <u>FAES, FMT program</u></p> <p><b>Campus (select one)</b> <u>Macdonald</u></p>

## SPF Application Form Section A - Cover Page

### PROJECT TEAM MEMBERS (CONT'D)

#### 5. Additional Project Team Member

**First Name & Last Name** Mark Lefsrud  
**Phone** (daytime; only put #s) +1 (514) 398-7967  
**Email** mark.lefsrud@mcgill.ca

**Affiliation** (select one)

Academic Staff (AC)

**Specify if Other**

**Faculty/Unit/Organization**

FAES, Bioresource engineering dep.

**Campus** (select one)

Macdonald

#### 6. Additional Project Team Member

**First Name & Last Name** Valerie Gravel  
**Phone** (daytime; only put #s) +1 (514) 398-8132  
**Email** valerie.gravel@mcgill.ca

**Affiliation** (select one)

Academic Staff (AC)

**Specify if Other**

**Faculty/Unit/Organization**

FAES, Plant Science dept.

**Campus** (select one)

Macdonald

#### 7. Additional Project Team Member

**First Name & Last Name** Stephen Mcguire  
**Phone** (daytime; only put #s) +1 (438) 401-7656  
**Email** stephen.mcguire@mail.mcgill.ca

**Affiliation** (select one)

Post-graduate (PG)

**Specify if Other**

**Faculty/Unit/Organization**

FAES, Bioresource engineering dep.

**Campus** (select one)

Macdonald

#### 8. Additional Project Team Member

**First Name & Last Name** Gail MacInnis  
**Phone** (daytime; only put #s) +1 (438) 995-7848  
**Email** gail.mcinnis@mail.mcgill.ca

**Affiliation** (select one)

Post-graduate (PG)

**Specify if Other**

**Faculty/Unit/Organization**

FAES, Natural Resource Sciences

**Campus** (select one)

Macdonald

To list more members, fill a 2nd Cover Page form and save it separately. You may then e-mail it to [SPF Staff](#) directly, also specifying your project title.

Has any member on your team been part of an SPF project in the past?  Y  N *If yes, list all the projects they have been part of in a one-page appendix, which you will be asked to submit later in the application process.*

#### OPTIONAL:

If applicable, total number of team members voluntarily self-identifying as members of marginalized communities: \_\_\_\_\_

Represented marginalized communities: \_\_\_\_\_

Specify if Other(s) and/or add more: \_\_\_\_\_

Relevant link(s): (to website(s) or social media)

If you plan to recruit volunteers to help implement your project, please indicate how many: \_\_\_\_\_

How did you learn about the SPF? (select one) Word of mouth **Specify if Other** \_\_\_\_\_

#### Please check the boxes to confirm that you have read and agree to the following information:

All of our project team members understand that the SPF is publicly funded and therefore, by default SPF projects are not confidential. We agree that if needed, the SPF Steward, the SPF Administrator and/or the SPF Working Group members read and/or share the application and/or communicate part of its content in the case where they would need to (e.g. to receive professional advice, connect our team to stakeholders, etc.).

If our project is approved, all our project team members agree that their name, email, and phone number as well as their participation to the project be disclosed (e.g. for contact information or through our application and progress/final reports published on the SPF website).

*If you do not check this box, the SPF staff will communicate with you to know whose information to remove before sharing your project online.*

All our project team members have read and understood the [SPF Terms & Conditions](#), and we confirm that we agree to respect them.

*If any aspect of the [SPF Terms & Conditions](#) are unclear to you, contact the [SPF Staff](#) before you submit your application so that you can check this box in confidence. Also note that, if your project is approved, all project team members will have to confirm in writing (through email or signing the document) that they agree to the [SPF Terms & Conditions](#) before officially starting the project.*



**Sustainability Projects Fund (SPF)**  
 McGill Office of Sustainability (MOOS)  
 1010 Sherbrooke St West, Suite 1200  
 Montreal, Quebec H3A 2R7



**Fonds des projets durables**  
 Bureau du développement durable  
 1010, rue Sherbrooke Ouest, bur. 1200  
 Montréal (Québec) H3A 2R7

## SPF Application Form

### Section B - Project Overview

Answer the following questions and save this form to your files for future reference before uploading it on the SPF website with Section A - Cover Page.

**Project Title** Re planting the Macdonald Campus orchards for the future

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**Project Lead** Mike Bleho **Phone** +1 (514) 712-2776 **Email** michael.bleho@mcgill.ca  
**First & Last Name** \_\_\_\_\_ **(daytime)** \_\_\_\_\_

*Before you fill out this Project Overview, make sure you have consulted all related application documents online, including the [SPF Evaluation Criteria](#), the [SPF Glossary](#), the [SPF Project Flow Diagram](#), and the [SPF Sustainability Brief](#). Read all questions first before starting answering them. Answer **exactly** what is being asked: go straight to the point and stay clear and succinct. If need be, you will have a chance to include additional information in appendices at a later stage of the application process. The characters' limit (including spaces) is indicated for each question so that you can draft your answers in Word first if you want to (you will have to remove all formatting in Word before pasting here). Note that any skipped line will make you lose the line's characters (approx. 140 characters). Once you successfully pass this first stage of the application process, the SPF Staff will ask you to fill a Project Plan, in which you will specify your expected impacts, S.M.A.R.T. objectives and main activities, outputs, success indicators, stakeholders, main risks and mitigation measures, preliminary timeline, and costs. Although it is OK for you not to have all these details ready at this stage, having thought about them in advance will help you succeed in responding to the following questions.*

**Project Vision** To make local produce from McGill's Horticultural farm available to all McGill students and staff

A vision depicts the ideal future that someone is hoping for. Thus, a vision is a dreamed aspiration that someone intends to lead or contribute to, and it does not necessarily need to currently seem realistic. As such, tell us how you see McGill campuses in an ideal world once your project is completed successfully. The vision does not need to be completed within the timeline of the SPF funding.

**Project Goal** Environmentally-friendly production of apples at the Hort Center with reduced pesticide use and the planting of a U-pick orchard that will be open to the McGill community.

A goal is the overarching desired tangible realization (and thus change) to be achieved within the project's lifespan. The goal contributes to the project's vision in a palpable and realistic manner. The project's goal may last longer than the SPF funding lifespan. In line with the SPF mandate, when achieved, your project's goal should result in a culture shift (e.g. change in ideas, habits, behavior).

**1. What is the specific sustainability-related issue/challenge that you see on McGill campus(es) that you want to address?**  
*(530 char. max. ~80 words)*

The orchards at the Hort Center are now over 30 years old and are past their viable economic, environmental and educational life-span. They need to be replaced with new, more disease resistant varieties of apples. We need to modernize the trees support systems in order to produce quality fruit with fewer inputs than traditional growing systems require. This will allow us to meet the McGill communities demand for more local and sustainable food production and the research needs of students and researchers.

**2. What is your project idea and how will it help address the above issue/challenge?** *(2000 char. max. ~300 words)*

To re plant a new 2,500 apple tree orchard at the Hort. Center that will provide apples for the Mac Market and our McGill feeding McGill clients downtown for the next 25 years. The trees are planted at high densities and need to be supported by a post and wire trellis system. This type of production system allows for easier pruning, spraying, feeding and harvesting of the apple crop. A part of this new orchard will be planted (also with the post and wire trellis system) with scab free varieties of apples with the goal of producing apples with less chemical inputs and moving towards an organic production. We will put in place an orchard which will serve as a U-Pick orchard where McGill student groups and staff can come to enjoy the fall apple picking activity at the Hort. Center farm. These new orchards will be designed and put in place in such a way as to be accessible and to promote education, research and outreach opportunities for our faculty, staff and students. Trees will be grafted by Mike Bleho who will teach these techniques to the students, this will allow us to maximize the educational component of the project. Although the project seems focused on apple production, the lessons learned are applicable to food production in general.

**3. What impacts do you want your project to have on McGill structures, processes and/or systems? Also specify how this should positively transform peoples' behaviors/perspectives/habits on McGill campus(es).** *(935 char. max. ~135 words)*

By improving the quality and yield of our orchard we would provide some of the hundreds of bushels of apples that McGill Food and Dining Services and other food providers on our Campuses presently buy from other retailers, ensuring local sourcing of sustainably-produced apples for the McGill community. This "show-case" orchard would provide a true "living lab". Apple picking is a great way for students and staff to get together, enjoy time in nature and experience a working farm to learn about where food comes from and become sensitized to food production related issues such as pesticide use, transportation, accessibility etc..

## SPF Application Form

### Section B - Project Overview

**4. What institutional and financial arrangements will make these impacts continue after SPF funding? (530 char.max.~80 words)**

The Hort Center has been in operation since the beginning years of Macdonald College and has financed itself through sales of products produced on the farm. The SPF funding will enable us to plant new trees and properly support them. Once the new trees start producing, fruit sales at our Mac Market and to our McGill feeding McGill clients will help to keep our orchard self-sustaining for the next 20- 30 years.

#### - ABOUT SUSTAINABILITY -

**5. How do you intend to address social, environmental, and/or economic dimensions of sustainability in your project's objectives? (1350 char. max. ~200 words)**

Having a working farm on the Campus of a University is a very special thing . Social dimensions will be met by making the farm more accessible for student visits through the u-pick apple events. Not only will our students be able to enjoy a social outing with their peers but they will also see where their food comes from since most of what we produce is used in McGill cafeterias and food outlets. Having a feeling of being connected to our rural past makes us feel good.

The Hort Center is already one of McGill's important local food suppliers, located only 35 kms from our downtown Campus: our products don't have far to go from farm to table. Other environmental dimensions the project will address and one of the goals of the project is to put in place a production system for apples that will enable us to use less chemical pesticide and fungicide inputs, manage water and land more efficiently.

The project will also create valuable employment and learning opportunities for our students. Our records from past years and future years will demonstrate the projects improvements in efficiency and environmental impact.

**6. In addition to having sustainability-related objectives (Q5), how will you ensure that your project is also executed/ managed sustainably (e.g. material local sourcing; accessibility - see the [SPF Sustainability Brief](#))? (530 char.max. ~80 words)**

We will be grafting our own trees using scion wood from our orchard when possible and sourcing varieties from within Canada. Most of our trellis supplies will come from a local orchard supply distributor, all field work will be done by our McGill farm staff, initial tree fertilization will be with our farm made compost.

Beside appear the five categories in which the McGill students, faculty, and staff think the University can make a positive difference within society. The [McGill Sustainability Strategy. Vision 2020](#), describes a specific vision and goals for each of these categories, as they were defined by the McGill direct stakeholders through a comprehensive consultation process.

**7a. In the figure, check all the categories under which your project falls (you can select only one if no others apply to your project).**

**7b. Among the categories that you checked, select the one that you think is most relevant to your project:**

**Dominant Category:** Operations

**7c. How does your project concretely contribute to advancing the vision and goals described under the [Vision 2020](#) category that is most relevant to your project? (800 char. max. ~115 words)**

This project is about planting apple trees for the purpose of producing fruit sustainably and with reduced pesticide use. Most of these apples will be sold to McGill's food and dining services (who provide food to our students and staff downtown) and to our Mac Market at the Macdonald Campus. The project implementation helps us to better manage the farmland and water devoted to fruit production at the Hort Center and will greatly increase the likelihood of future research in areas related to apple production (ie: pests, fertilization, production, cultivars etc.). In a broader sense, this project is also about connectivity: linking food production, handling and consumption in the context of education and social development.

#### Vision 2020 Categories

- Finance & Investment
- Diversity & Equity
- Transparency
- Inclusiveness
- Accessibility
- Experimentation
- Accountability
- Leadership
- Human Resources

- Materials
- Energy
- Food
- Water
- Transportation
- Land
- Living Lab



- Exploring Sustainability
- Collaborative
- Community-Engaged
- Social-Ecological Footprint
- Interdisciplinary
- Applied Student Research

- Citizenship
- Leadership
- Lifelong Learning
- Experiential Learning
- Sustainability Knowledge & Skills

- Wellness & Health
- Community Engagement
- Sense of Belonging
- Accessibility
- Community Spaces
- Knowledge Sharing

## SPF Application Form

### Section B - Project Overview

**8. How does your project relate to any current/past initiative(s) on McGill campus(es) (e.g. other SPF projects)? If applicable, also indicate: 1) how your project complements the initiative(s), and 2) how you will partner with them in implementing your project (e.g. working together on some activities, sharing material/resources/costs). (2000 char. max. ~300 words)**

From 2010 to 2013 the SPF funded the McGill feeding McGill project and helped us (McGill) to put in place an award-winning local food initiative that has received a lot of attention from schools, other institutions, municipalities and the Quebec government. The re planting of our orchards will build on this initiative and enable us to offer a long term and better quality of fruit to our partners at McGill's Food and Dining Services, our students and staff.

There have been many improvements in machinery used in fruit production. New technologies like pneumatic, low output, hydrostatic sprayers allow you to spray less pesticides while still obtaining excellent quality fruit; they also drastically reduce spray drift, an important benefit for a Campus farm in an urban area.

By opening up our farm to u-pick activities, not only are our students and staff benefiting from local and sustainably produced fruit but they are also able to enjoy an outing on a working farm where they can see how food is produced. Many of McGill's student clubs like to organize activities where members get to interact; apple u-picking is a Quebec traditional fall activity that is perfect for this. This is also a good way for the McGill farms to make stronger, lasting connections with our students and staff in the hopes of stimulating interest in the agricultural world.

**9. List the other stakeholders on/off of McGill campus(es) that you will partner with for your project. (530 char. max. ~80 words)**

*Note: Under Stage 2 of the SPF application process, in the Project Plan, you will be asked to indicate your final key partners and specify how they will participate in your project. You will also be able to submit any documents that you want in appendices to demonstrate your communications and agreements with these key partners (e.g. support letters, emails).*

Our main stake holders right now are:

McGill's Food and Dining Services, which operates on-Campus cafeterias

Compass food service which operates the the "New Rez" cafeterias

Aramark food service which operates the Concordia and John Abbott College cafeterias.

**10. What key recommendations and/or lessons learned from current or past initiative(s) do you plan to build your project upon? (800 char. max. ~115 words)**

One thing we have learned is that just because we are a McGill University farm it doesn't mean that our partners are going to automatically buy the food we produce. Our partners demand a high level of quality, delivery, service and sustainability from us and so we have to make sure that our production method is current and efficient. In addition, improvements to the Hort Center and its operations must mesh creatively and constructively with current and future pedagogical and research needs.

#### - ABOUT SPF FUNDING -

**11. Why do you think that your project should be funded by the SPF rather than by, or in addition to, another source of funding - i.e. what aspects of your project make it specifically relevant to the SPF mandate? (530 char. max. ~80 words)**

The SPF funds will be used to pay for the putting in place of the support system for the new orchard which will help us to reduce our pesticide use, manage water and land use more efficiently and reduce our labour costs. The new sprayer will dramatically reduce the use and drift of pesticides used on McGill territory. The new orchard will open up the Hort farm to apple picking activities for McGill students and staff. The new orchard will serve as a site for research and teaching projects related to apple production.

**12. What other sources of funding have you approached for your project? If applicable, also provide the relevant details on these sources (e.g. responses given, amounts already committed, what these amounts will pay). (530 char. max. ~80 words)**

The Mac Farm is committed to financing the buying of the rootstocks and the production of the apple trees needed for the project. We are proposing to plant 2,500 apple trees which cost on average around 10-12 \$/ tree depending on which varieties and their availability. This is a 30,000\$ commitment by Mac Farm just for the trees , this doesn't include fees for the infra structure commitments and our expertise. The FMT program has committed to provide us with funds for orchard ladders, picking bags and some pruning tools.

*Thank you! After you save it to your files, you can now upload this form and Section A - Cover Page on the SPF website to complete this first stage of the application process. The SPF staff will contact your team within two weeks to provide feedback and accompany you towards next stage - Project Plan. Congratulations for applying to the SPF!*



## SPF Application Form Section C - Project Plan

Answer the following questions and save this form to your files for future reference before uploading it on the SPF website.

**Project Title** Re planting the Macdonald Campus orchards for the future

**Project Lead** Michael Bleho **Phone** +1 (514) 712-2776 **Email** michael.bleho@mcgill.ca  
**First & Last Name** Michael Bleho **(daytime)**

*Before you fill out this Project Plan, make sure you have consulted all related application documents online, including the [SPF Evaluation Criteria](#) and the [Project Plan Flowchart](#). Also make sure to consult the [SPF Glossary](#), as it clearly defines each term underlined in this form, as well as the [Sample Project Plan](#), which gives some concrete examples for each term. Last, also do not forget to refer back to your 'Section B - Project Overview' to make sure that all the details you specify here align with it. For more support, consult the SPF website and the SPF staff.*

**Project Vision** To make local produce from McGill's Horticultural farm available to all McGill students and staff

*As indicated in your Section B - Project Overview.*

**Project Goal** Environmentally-friendly production of apples at the Hort Center with reduced pesticide use and the planting of a U-pick orchard that will be open to the McGill community.

*As indicated in your Section B - Project Overview.*

**1. List 1 to 3 main impacts you expect/wish to have with your project - these must relate to the above Vision and Goal:**

*As per question #3 of your Project Overview. If you think of more than 3 impacts, only indicate the ones you think are the most relevant to sustainability at McGill.*

Expected/Desired Impact (200 char. max. ~30 words)	
<b>A</b>	Enhance the McGill community's access to high quality fruit.
<b>B</b>	provide a natural space where the Mcgill community can come together and experience a working farm
<b>C</b>	build a modern orchard suitable for teaching, research and outreach activities

**2. List 4 to 7 of your objectives to reach the above impacts with your project. Make your objectives as S.M.A.R.T. as possible.**

**For each objective, indicate one key Success Indicator.** (see [SPF Glossary](#), [Sample Project Plan](#), and [Sample Indicators](#))

*Of your 4-7 objectives, you should have a minimum of one "monitoring" objective, one "outreach" objective, and two "other" objectives. A monitoring objective ensures or verifies the progress and effectiveness of your project, thus allowing you to learn from it. An outreach objective ensures that your project is adequately communicated to the McGill community to increase stakeholders' awareness of and/or participation in your initiative. These two types of objectives might lead to project monitoring and outreach activities (next question). The nature of the 2-5 other objectives is for you to decide and tailor to your project. If you have more than 7 objectives, only indicate the ones that relate best to the above impacts and thus to sustainability at McGill. For each objective, specify the key success indicator(s) that you think should be used to assess the objective's degree of achievement/completion. Your indicators can be qualitative or quantitative (e.g. number of participants, participant testimonials, website analytics, quantity of energy saved, etc.). See the document [Sample Indicators](#) for inspiration.*

#	Type of Objective	S.M.A.R.T. Objectives (125 char. max. ~20 words)	Related Impact(s) (A, B, C)	Related Key Success Indicator(s) - also indicate targeted numbers for each (85 char. max. ~15 words) (ignore the circles for now)	
1	Other	Production of 2500 apple trees	A, C	80% success rate as target	<input type="radio"/>
2	Other	establishments of new orchards	A,B,C	percent tree survival	<input type="radio"/>
3	Outreach	increase understanding of food supplies within the McGill community	A,B,C	educating students and staff in issues of food production, handling and waste	<input type="radio"/>
4	Monitoring	supplying fresh fruit to the McGill community	A	quantities of seasonal fruit purchases.	<input checked="" type="radio"/>
5	Monitoring	Reduce the environmental impact of pesticide use	A	Environmental Impact quotient	<input type="radio"/>
6	Monitoring	Tree growth and production as related to environmental impact	A	Environmental impact metrics (i-Tree)	<input type="radio"/>
7	Other	enhancing teaching and research possibilities	C	number of classes and students involved.	<input type="radio"/>

**3. List the 4 to 7 most important activities that you need to conduct to reach the objectives you listed before. Make these as S.M.A.R.T. as possible. Also indicate at least one output and a key success indicator per activity. (Sample Project Plan)**

Your main activities should relate to the objectives you listed. As such, if you consider this crucial to your project, you may end up having an activity that relates to your monitoring objective(s) (e.g. developing a survey, any other activity that will help you and other stakeholders learn through your project) or to your outreach objective(s) (e.g. producing and promoting a video about the project). For each activity, indicate the output(s) that will be created as a result, such as a deliverable (e.g. video, report), training, website, network, design plan, or any other output adding value to the project and helping reach objectives/impacts.

S.M.A.R.T. Main Activities (125 char. max. ~20 words)	Related Objective #(s)	Resulting Output(s)	Related Key Success Indicator(s) - also indicate targeted numbers for each (85 char. max. ~15 words) (ignore the circles for now)	
Grafting, potting and growing of the apple trees	1	2500 apple trees	have the trees ready for late summer / fall planting 2018	<input type="radio"/>
transplanting trees and building of support system for trees	2	new orchard	orchard established by November 2018	<input checked="" type="radio"/>
tracking fruit purchases from McGill's food and dining services	4	data tracked in Excel	see an increase in sales of fruits to our McGill clients	<input type="radio"/>
Hosting organized educational tours and U-pick activities for McGill students and staff and other institutions.	3	educational tours	numbers of participants from educational institutions	<input type="radio"/>
Video and photo documenting all activities: grafting, growing, planting, tours etc..	3,7	videos and photos	relevant high quality images of all activities	<input type="radio"/>
Monitoring tree growth and production as related to E I , ie: carbon neutrality, rainfall interception, pollution removal.	6	teaching activities	course related yearly monitoring projects	<input checked="" type="radio"/>
Tracking pesticide use	5	data tracked in Excel	yearly monitoring project	<input type="radio"/>

**Provide any additional qualitative details that you would like to share with the SPF about your activities. (800 char.max.~115 w.)**

The establishment of a new orchard is a long term project, economic viability is often 20-25 years. Trees typically don't start bearing fruit until their 3rd or 4th year so any revenues generated won't be appearing until a few years down the road. It is however a great opportunity for monitoring the environmental impact associated with fruit production including carbon sequestration, pesticide use and micro climate and fauna habitat improvement (native bees, foxes, raptors), all benefits associated with tree planting. This also opens up excellent opportunities for teaching and outreach for many years to come. With the help of our student societies we will be organizing tree planting days this fall. This is in addition to the above mentioned activities.

**4. Now, about the circles...: Select a total of 3 success indicators that you wish to track more seriously and report on during your project out of all those you indicated for your objectives and activities. These 3 indicators should be the most relevant to your goal and to creating a culture of sustainability at McGill and they should be relatively easy to monitor.**

When selecting your indicators, make sure that you will have/plan the time and resources you will need to allocate to monitor them throughout the course of your project. Before you start your project, the SPF may ask you to change a chosen indicator for another that seems more pertinent to the SPF or to the University sustainability reporting. Note that, in addition to these three indicators, you will be asked to track four other generic ones that will be specified in the Award Letter. You will be required to indicate progress towards your final 7 indicators in your progress and final reports to the SPF. Because the SPF values the experiences and learning that occurs during your project (not only results), these reports will also gather related information through open-ended questions.

We have selected the 3 Success Indicators that we wish to monitor during the project:

**5. For all projects, there exist various risks, i.e. factors or preconditions whose probable presence or absence could negatively influence the successful achievement of the project's objectives. Please indicate 2 to 4 main risks for your project and the mitigation measures you intend to use/implement to reduce their likelihood. (advise if you have more to list)**

It is particularly important that you list all risks to health and safety of the project's team members, direct and indirect stakeholders, and/or the environment.

Main Risks (65 charac. max. ~9 words)	Preventative Measures (65 char. max. ~9 words)
grafting success and initial tree growth	over graft, proper care
Adverse weather conditions for trees(drought, flood, hail)	proper planning, irrigation etc
Adverse weather conditions for staff	health and safety instruction, follow McGill guidelines

If needed, list additional Main Risks in a separate appendix.

**6. List the 3 to 10 stakeholders/partners on/off McGill campus(es) that will be involved with and/or impacted by your project, and indicate their respective role in your project.** *If your project team (as presented on Section A - Cover Page) does not include a student member or a faculty or administrative staff member, please make sure to have this group represented as part of your stakeholders/partners to better align with [SPF Evaluation Criterion #5](#).*

Stakeholder's Name(s)	Affiliation	Role in the project	Confirmed support/participation
Oliver Di Volpi	Executive Chef, McGill U	administrator	Yes
Jancide Fillion	Chef, McGill U	buyer of produce	Yes
Zachariah Suhl	Chef, McGill U	buyer of produce	Yes
Marc Lintaf	Chef, Compass Canada	buyer of produce	Yes
Frederic Vibert	Chef, Aramark foods	buyer of produce	Yes
Isabelle Mailhot- Leduc	Concordia University	sustainability coordinator Concordia U.	Yes
mcss,mcgss,ssmu	McGill student societies	liaison with student groups	No
Paul Meldrum	Macdonald Campus Farm	administrator	Yes

**- PRELIMINARY TIMELINE ASSUMING THAT PROJECT STARTS IN 3 MONTHS -**

**Note:** *If your project is approved, you will be asked by the SPF staff to fill out a more detailed timeline before any funding can be allocated.*

Key Tasks and/or sub-tasks	Related Output(s)	Responsible Team Member(s) and Time <i>(initials + if paid, estimated # of hours to do task)</i>	Start Date	End Date
orchard planning and design	design complete	MB	Dec 4, 2017	Jan 12, 2018
order machinery and materials	receiving	MB	Feb 1, 2018	Apr 30, 2018
secure rootstocks and scion wood	receiving	MB	Mar 1, 2018	Apr 2, 2018
grafting, potting and growing apple trees	healthy trees	MB, SP, CM, student (200 hrs each)	Apr 2, 2018	Jun 15, 2018
Hire student staff	3 students	MB	Apr 30, 2018	Aug 31, 2018
maintenance of grafted trees	healthy trees	SP (300hrs)	Apr 30, 2018	Aug 31, 2018
prepare orchard sites	land ready	MB, CM, student (140hrs each)	May 28, 2018	Jul 2, 2018
building orchard support system	support system	MB, SP(130, CM (280)), student(280hrs)	Jul 2, 2018	Aug 31, 2018
transplanting trees	planted trees	MB,SP(75),CM(75), student volunteers	Sep 4, 2018	Oct 5, 2018
monitoring trees+ environmental impacts	data	DW, FMT 4033 class	Oct 15, 2018	Nov 30, 2018

**Provide any additional details that you would like to share with the SPF about your timeline.** *(530 charac. max. ~80 words)*

Mike Bleho (MB) has already done all the orchard planning and site measurements, ordered all rootstocks and scionwood, contacts with machinery and materials suppliers are well underway, 2 of the 3 students are in place: Sarah Persechino(SP), Connor Miller (CM), both have related orchard experience, 3rd student yet tbd, daily outdoor work is subject to weather conditions, availability of all materials needed, David Wees's(DW) FMT 4033 class will be taking all tree measurements and calculating environmental impact parameters.

**- ADDITIONAL INFORMATION -**

**Qualifications:** If applicable, a List of Tasks for each position to be funded and the CVs of those to be employed in the project are attached:

**List of appendices, if any** *(maximum 7 pages of appendices, excluding CVs, but including List(s) of Tasks for all positions to be funded):*

*If a McGill department/unit is to contribute financially to your project, make sure to include a support letter from its Financial/Budget Officer confirming contribution. Note that the SPF Working Group will evaluate your project based on your main application forms (i.e. Sections A, B, and C), not on appendices.*

Appendix #	Title/Topic of Appendix	Total Qty of Pages
1	field operations worker (official designation of student farm labor)/ description of project tasks	1
2	letter from Paul Meldrum (Mac Farm manager) confirming Farm contribution is forthcoming	
3	letter from Peter Enright (Director FMT program) confirming contribution	1
4		
5		
6		
7		



**- BUDGET -**

When completing this form, please refer to the [SPF Guide to Budgeting](#) for additional information and explanations. If you would like to submit a more elaborated Financial Model/Business Case in addition to this SPF project budget (for instance, because of the nature of your project; e.g. you plan to generate some revenues through selling some items, revenues that will then allow your project to become financially self-viable), please develop it separately and join it as an appendix to this application. If you need guidance on how to elaborate a Financial Model/Business Case, see [suggested resources on the SPF website](#).

**REVENUES**

Please indicate any funding you will receive or anticipate receiving to complete your project, including funds from McGill Departments and Units. Reminder: For McGill department/unit's financial contributions, make sure to include a letter from its Financial/Budget Officer confirming contribution in appendix. Note that this contribution will also need to be confirmed at the end of the project.

(A) Funding Source(s)	(B) Amount (\$)	(C) Status
1. Sustainability Projects Fund (SPF)	\$97,718.50	Unconfirmed
2. Macdonald Campus Farm	\$41,875.00	Confirmed
3. FMT program (teaching supplies)	\$1,350.00	Confirmed
4.		
<b>REVENUES GRAND TOTAL - add all (B)</b>	<b>\$140,943.50</b>	

**EXPENSES**

**1. Salaries & Wages** (only if applicable)

If applicable, indicate the job position(s) under your project and the associated costs. See the [SPF Guide to Budgeting](#) for further instructions.

(A) Position Title	(B) ~# of Hours per Week	(C) ~# of Weeks	(D) Hourly Wage* (\$)	(E) Subtotal (\$) (B x C x D)	(F) 20% Benefits	(G) Total Cost (\$) (E x F)	(H) Funding Source(s)**
Field operations worker	35	18	\$14.50	\$9,135.00	1.2	\$10,962.00	1
Field operations worker	35	18	\$15.00	\$9,450.00	1.2	\$11,340.00	1
Field operations worker	35	18	\$14.00	\$8,820.00	1.2	\$10,584.00	1
field operations workers	30	5	\$15.00	\$2,250.00	1.2	\$2,700.00	1
<b>Expenses Subtotal 1 - add all (G)</b>						<b>\$35,586.00</b>	

Do you already have a specific person in mind for filling the above position(s)?

Y  N

Do you have a personal and/or professional affiliation with the above position(s)?

Y  N

If you answered 'Y' to one or both of the above questions, please disclose:

I have students in mind for 2 of the 3 summer positions, the 3rd is as yet unfilled. They both have apple tree production and orchard experience which is important for this project.

**2. Other Expenses**

Indicate all of the expenses associated with your project; think back to all of your project's activities and all of the items that you need to complete them. It may be beneficial to group by category (not required); if you do so, please use the following categories: Materials-Supplies, Equipment, Printing, Events, Transportation, One-time Profess. Fees, and Miscellaneous.

(A) Item Description (inputs)	(B) # of Units	(C) Unit Cost (\$)	(D) Total Cost (\$) (B x C)	(E) Funding Sources**	(A) Item Description (inputs)	(B) # of Units	(C) Unit Cost (\$)	(D) Total Cost (\$) (B x C)	(E) Funding Sources**	
apple rootstocks	4,000	\$1.50	\$6,000.00	2	orchard sprayer	1	\$25,000.00	\$25,000.00	1	
grafting supplies	1	\$500.00	\$500.00	2	hydrostatic spray syste	1	\$7,000.00	\$7,000.00	1	
pots	4,000	\$0.50	\$2,000.00	2	posts	350	\$20.00	\$7,000.00	1	
promix	50	\$20.00	\$1,000.00	2	wire	10,000	\$0.50	\$5,000.00	1	
scions	2,000	\$0.25	\$500.00	2	clips	8,250	\$0.50	\$4,125.00	1	
machinery use	145	\$75.00	\$10,875.00	2	plastic mulch	4	\$130.00	\$520.00	1	
land fees	1	\$5,000.00	\$5,000.00	2	bamboo supports	2,750	\$2.00	\$5,500.00	1	
Mike Bleho salary	400	\$37.00	\$14,800.00	2	Misc tools	1	\$6,000.00	\$6,000.00	1	
Mac Farm admin	30	\$40.00	\$1,200.00	2	tree guards	2,650	\$0.75	\$1,987.50	1	
Apple picking supplies			\$1,350.00	3						
<b>Expenses Subtotal 2 - add all (D)</b>				<b>\$43,225.00</b>	<b>Expenses Subtotal 3 - add all (D)</b>				<b>\$62,132.50</b>	

**EXPENSES GRAND TOTAL (Subtotals 1 + 2 + 3) \$140,943.50**

\* See the [SPF Guide to Budgeting](#) for the conditions and Hourly Wages applicable to hiring under the SPF.

\*\* To indicate the one or many Funding Source(s) that will pay for the expenses, use their respective number as you listed under Revenues (SPF or other).

Thank you! After you save it to your files, you can now upload this form and any appendices on the SPF website to complete the application process. The SPF staff will contact your team within two weeks to provide feedback. Congratulations for applying to the SPF!

**Job Summary:**

Under the direction of the immediate supervisor, the incumbent may perform some or all of the listed general functions.

**Typical Functions:**

1. Carries out horticultural tasks (seeding, transplanting, pruning, weeding, hoeing, maintaining & harvesting vegetable and fruit crops).
2. Assists with indoor/outdoor markets. Prepares harvested products (trimming, cleaning, bundling, grading, weighing, packaging, storing). Occasionally assists driver with delivery of produce at selected locations.
3. Maintains mature ornamental and/or fruit trees and shrubs in designated areas, and/or seedlings in a nursery (propagation, planting, labelling, pruning, transplanting/relocating, felling, irrigating, removing invasive species, etc.).
4. Assists with ground and/or trail maintenance (lawn mowing, signage, soil transporting, trail grooming and clearing, snow clearing, fence repairs, painting, emptying trash and recycling bins, etc.).
5. Assists with land and plot preparation (soil tilling, seeding, weeding, fertilizing, irrigation, drainage). May be required to assist with data collection for research purposes (growth, size and yield observations, counting, maintaining logs and established databases).
6. Assists with large-area field work for production of forage and grain crops.
7. Carries out general maintenance tasks.
8. The list of functions outlined above is representative and not a complete and detailed list of tasks which may be performed by an incumbent.

The above is a sample of the generic job description that would apply to the three student positions needed to put in place the Re planting of the Macdonald Campus Orchard project.

The students will also be :

Grafting, potting and growing apple trees, building tall spindle trellis system for high density apple orchard, transplanting apple trees, taking photos and producing video of their summer work. All tasks will be performed under the supervision of Mike Bleho



# McGill

Faculty of  
Agricultural and  
Environmental Sciences

Faculté des  
sciences de l'agriculture et  
de l'environnement

Friday, February 9<sup>th</sup>, 2018

Mike Bleho  
Coordinator  
McGill University, Macdonald Campus Horticultural Centre

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**Subject: Financial support - Application #18-360 Redesigning Macdonald Campus Orchards**

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By this letter, I am on behalf of the Farm Management and Technology Program, documenting our financial commitment towards the effort to redesign the Macdonald Campus Orchards.

As a minimum, we will commit an amount of \$1,350, to support the purchase of new ladders and picking bags. We also commit to increasing this to a maximum of \$2,000, if initial estimates are low, or if equipment with enhanced safety features can be purchased.

Our motivation for supporting this effort is to enhance teaching in the area of safety. Operations in orchards, as is the case with other agricultural activities, often involve some level of risk. We are committed to teaching students that proper equipment, good planning, and adequate training can mitigate these risks, and that this can be achieved at a very reasonable cost.

Peter Enright, eng.  
Director, Farm Management and Technology Program  
[peter.enright@mcgill.ca](mailto:peter.enright@mcgill.ca)

cc: Francine Lacelle, Administrative Secretary, FMT Program  
David Wees, Faculty Lecturer, FMT Program  
Paul Meldrum, General Manager, Macdonald Campus Farm