



## 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** Mac Bites Farming

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

Increase McGill sustainable farming activities by building and creating a small to medium scale insect farms.

**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 (\$):** \$4,900.00

**Approximate Total Project Budget (\$):** \$4,900.00  
*(incl. other sources of funding if applicable)*

**List 1 to 3 main item(s)/expense(s) for your project that SPF money will be used for** *(incl. approx. % of total budget):*

SALARY: 39%, WOOD (TO CONSTRUCT THE FARM BUILDING): 12%, HEAT PUMP 12%

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

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

Valérie Champagne

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

Caroline Begg

**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).*

**1. Project Team Member**

<b>First Name &amp; Last Name</b> <u>Valérie Champagne</u>	<b>Affiliation</b> <u>Undergraduate</u>
<b>Phone</b> <i>(daytime; only put #)</i> <u>514-236-3624</u>	<b>Specify if Other</b> _____
<b>Email</b> <u>valerie.champagne2@mail.mcgill.ca</u>	<b>Faculty/Unit/Organization</b> <u>Agriculture/Environme</u>

**2. Additional Project Team Member**

<b>First Name &amp; Last Name</b> <u>Laura Bony</u>	<b>Affiliation</b> <u>Undergraduate</u>
<b>Phone</b> <i>(daytime; only put #)</i> <u>514-6478687</u>	<b>Specify if Other</b> _____
<b>Email</b> <u>laura.bony@mail.mcgill.ca</u>	<b>Faculty/Unit/Organization</b> <u>Agriculture/Environment</u>

**3. Additional Project Team Member**

<b>First Name &amp; Last Name</b> <u>Alice Viala</u>	<b>Affiliation</b> <u>Undergraduate</u>
<b>Phone</b> <i>(daytime; only put #)</i> <u>514-220-6747</u>	<b>Specify if Other</b> _____
<b>Email</b> <u>alice.viala@mail.mcgill.ca</u>	<b>Faculty/Unit/Organization</b> <u>Agriculture/Environment</u>

**4. Additional Project Team Member**

<b>First Name &amp; Last Name</b> <u>Julien Doueihy</u>	<b>Affiliation</b> <u>Undergraduate</u>
<b>Phone</b> <i>(daytime; only put #)</i> <u>514-235-1970</u>	<b>Specify if Other</b> _____
<b>Email</b> <u>julien.doueihy@mail.mcgill.ca</u>	<b>Faculty/Unit/Organization</b> <u>Agriculture/Environment</u>

## SPF Application Form Section A - Cover Page

### PROJECT TEAM MEMBERS (CONT'D)

#### 5. Additional Project Team Member

<b>First Name &amp; Last Name</b>	Roxanne Tremblay	<b>Affiliation</b>	Undergraduate
<b>Phone</b> ( <i>daytime; only put #</i> )		<b>Specify if Other</b>	
<b>Email</b>	roxanne.tremblay@mail.mcgill.ca	<b>Faculty/Unit/Organization</b>	Agriculture/Environment

#### 6. Additional Project Team Member

<b>First Name &amp; Last Name</b>	Ingrid Laplante	<b>Affiliation</b>	Undergraduate
<b>Phone</b> ( <i>daytime; only put #</i> )		<b>Specify if Other</b>	
<b>Email</b>	ingrid.laplante@mail.mcgill.ca	<b>Faculty/Unit/Organization</b>	Agriculture/Environment

#### 7. Additional Project Team Member

<b>First Name &amp; Last Name</b>	Caroline Begg	<b>Affiliation</b>	Academic Staff
<b>Phone</b> ( <i>daytime; only put #</i> )	5143988749	<b>Specify if Other</b>	
<b>Email</b>	caroline.begg@mcgill.ca	<b>Faculty/Unit/Organization</b>	FAES/Plant science

#### 8. Additional Project Team Member

<b>First Name &amp; Last Name</b>		<b>Affiliation</b>	Choose one.
<b>Phone</b> ( <i>daytime; only put #</i> )		<b>Specify if Other</b>	
<b>Email</b>		<b>Faculty/Unit/Organization</b>	

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: Caroline Begg

**OPTIONAL:**

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

**Represented marginalized communities:** Choose one. Choose one. Choose one.

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

**Relevant link(s):** (*to website(s) or social media*) <https://github.com/TinyFarms/OpenBugFarm/wiki> \_\_\_\_\_

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

**How did you learn about the SPF?** Through a Friend **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 of 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, the Project Lead and the person monitoring the project's budget 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.**

Thank you! Save this form to your files for future reference and fill Section B 'Project Plan' of the SPF Application Form to complete the process.



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



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

## SPF Application Form Section B – Project Plan

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** MacBites Farming

**Project Lead** Dr. Caroline Begg      **Phone** 514-398-8749      **Email** caroline.begg@mcgill.ca

**First & Last Name** \_\_\_\_\_ **(daytime)** \_\_\_\_\_

*Before you fill out this form, 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 answering them. Answer **exactly** what is being asked: stay straight to the point, clear, and succinct. The character limit (including spaces) is indicated for each question.*

**Project Vision** Develop an alternative source of protein on MacDonald Campus, which would be local and sustainable

*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 seem realistic at this time. 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** Create an insect farm in order to introduce in the McGill community a sustainable alternative source of protein and agricultural production  
 (225 char. max. ~30 words)

*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 period. 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).*

**1a. What is the specific sustainability-related issue/challenge that you see on McGill campus(es) that you want to address?**  
**1b. What is your project idea and how will it help address this issue/challenge?** (3000 char. max. ~485 words)

We want to bring more sustainable practices and projects to the campus by complementing the existing agricultural practices of the Faculty and diversifying them. This falls under McGill's Vision for 2020, which aspires "to achieve the highest possible standards of sustainability on its campuses and in its day-to-day activities through its academic practices, in its facilities and operations, and by its outreach to the broader community." Having an insect farm on the University's agricultural campus would involve students in a multidisciplinary and multidimensional project which incorporates many agricultural aspects.

We know that in the next years, the challenge will be to feed (9) billion people. In order to do this, our methods of production and the trend in our consumption need to change. We think that introducing insects in the western diet can contribute to solve part of this problem. By introducing insects into our diets, we could reduce the consumption of other produce such as meat and fish and have a greater variety in our diet and production. Insects are also a "low environmental impact" source of protein, using much less water, feed, land, and other resources compared to traditional production of chicken, beef and pork as notably demonstrated by the FAO (Food And Agriculture Organization of the United Nations) in a report of 2013 entitled "Edible insects: future prospects for food and feed security."

2a. List 1 to 3 main impacts you expect/wish your project to have on McGill structures, processes and/or systems. These must relate to the Project Vision and Project Goal you mentioned above. Specify how those impacts will positively transform peoples' behaviors/perspectives/habits on McGill campus(es).

2b. How will this continue after funding is spent (i.e. how will you institutionalize the project)? (1550 char. max. ~250 words)

One major impact we wish to have on the McGill establishment is to establish a insect farm facility where the production for this new food product would be developed by students as an interdisciplinary project. Research could also be done to improve different aspects of the production and become a staple for the University. Students would therefore benefit from this facility for research, and knowledge in this emerging sustainable domain. Another point that we seek to impact is the shift in mentality regarding entomophagy (eating insects). Having insects grown on campus would bring awareness to the community and promotes the use of this food in the western diet as an alternative source of protein.

On the long term, this project could fall along side the other food facilities, where it could produce to become financially sustainable, selling the insects to either farm as food for livestock or for human consumption both on and outside campuses. It could be an independent project that has partnership with the school for using it's facilities and resources, although limited as much as possible. In both cases, the ecological footprint is reduced compared to meat production, making this kind of protein production, much more environmentally sustainable.

3a. How do you intend to address social, environmental, and/or economic dimensions of sustainability in your project's objectives?

3b. Please also address how the project will be planned and managed/executed sustainably (e.g. material local sourcing, accessibility, etc.; see the [SPF Sustainability Brief](#)). (1045 char. max. ~165 words)

We are McGill students from different social and educational backgrounds that are coming together to create this farm. The project will also involve all students that would be interested in participating in the project at different levels by knowledge sharing. We intend to spread awareness on the role of entomophagy in promoting food sustainability. We want to be able to easily maintain the farm in an urban environmental and improve food security in urban food deserts. Developing a local farm can decrease the produce costs especially related to transportation, therefore being more accessible to the population and with shorter the production routes. We can sell our produce at the farmer's market or even introduce insects into the cafeterias of McGill Macdonald and Downtown campuses. Environmental sustainability will be achieved by requiring less space for rearing (less heating, lighting, etc.), using less resources (water, grain, etc.), by using recycled materials, and eventually using food waste to feed the insects.

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.

4a. In the figure, check all the categories under which your project falls (Select only one if no other categories apply to your project).

4b. Among the categories that you checked, select the one that you think is most relevant to your project:

Dominant Category: Research

5. List 3 to 5 key stakeholders on/off McGill campus(es) that will be involved with and/or impacted by your project, and indicate their respective role in your project.



Stakeholder's Name(s)	Affiliation	Role in the Project	Confirmed Support
Laura Bony	MacBites Education	Raise awareness, /education	Yes
Ociane Canadal	Farm to School	Education	Yes
Ingrid Laplante	Ag-Connect	Volunteering	Yes
Anna Gottheil	Out of the Garden Project	Create recipe + selling to student	No
Césarée Morier	Global Food Security	Collaboration for food security	Yes

**6. List the 4 most important objectives of your project and at least one key related activity that you need to conduct to reach each of these and your project impacts. Make your objectives and activities as S.M.A.R.T. as possible. Also indicate at least one output and a key success indicator per activity. (read instructions below; you can also refer to the [Sample Project Plan <5K](#) for guidance)**

*Of your 4 S.M.A.R.T. objectives, a minimum of one should relate to “monitoring” your project’s progress and effectiveness. Another objective should relate to “outreach” (e.g. raising awareness about your project’s topic, promoting your project in the McGill Community and/or calling for individuals’ participation), and two should be more specific to your project, i.e. “other” objectives. The nature of these “other” objectives is for you to decide and tailor to your project.*

*For each of your 4 objectives, you should indicate at least one key activity.*

*The bottom of the table is for you to list four additional activities that you think are crucial to the success of your project. As such, depending on what you think is important to having the impact(s) you envision, you may end up having three activities in total that relate to your monitoring objective (e.g. developing a survey, any other activity that will help you and other stakeholders learn through your project) or to outreach (e.g. producing and sharing a video about the project). In any case, since you have limited space, only indicate the objectives and activities that relate best to the impacts you listed under Question 2, and thus to sustainability at McGill.*

*For each objective/activity, specify a key success indicator that you think should be used to assess its 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. Also indicate the output(s) that will be created as a result of each activity and objective, 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 its objectives/impacts.*

Type of Objective/ Activity		Main S.M.A.R.T. Objectives / Activities (125 char. max. ~20 words)	Resulting Output(s) (15 char. Max.)	Responsible Team Member(s) and Time (initials + if paid, estimated # of hours to complete objective/activity) (35 char. max.)	Start Date (MM-DD-YY)	End Date (MM-DD-YY)	Related Key Success Indicator – do not forget to include targeted numbers for each (ignore the check boxes for now) (75 char. max. ~10 words)	
Objective #1	Other	Within the two first months, have the facilities/farm built and ready to operate.	Design plan	JD. Paid. 40 hours	04-01-17	06-01-17	Have our first generation of insects by July.	<input checked="" type="checkbox"/>
Related Activity	Other	Create the plan of the first & very simple version of the farm (plastic container as main resource)	Insect farm	AV, JD. Paid. 20 hours each	05-01-17	05-15-17	Have a protocole used for anyone in contact with the facilities, and the plan of the facilities	<input type="checkbox"/>
Objective #2	Other	Increase sustainable food sources on campus.	Partnership(s)	LB, VC	09-01-17	10-01-17		<input type="checkbox"/>
Related Activity	Other	Try the possibilities for selling our products on campus	Money	VC. Paid. 3 hours	09-01-17	10-01-17	Have at least 1 channel of distribution/selling on campus (ex: OGP, Farm to School, etc)	<input checked="" type="checkbox"/>
Objective #3	Outreach	Increase awareness about insects as a dietary protein source	Data of surveys	LB	09-01-17		Surveys through out campus & during workshops about insects consumption. Twice/semester	<input checked="" type="checkbox"/>
Related Activity	Outreach	With MacBites, hold 2 workshops; 1- why consuming insects & tasting session. 2- how consuming & integrating them in our diet	Pamphlets	MacBites Education. Paid 20 hours	09-15-17		Have at least 40 participants every event	<input type="checkbox"/>
Objective #4	Monitoring	Increase the quality and quantity of our production of insects over the project	Final report	AV, RT	05-01-17		By January, have at least 4 kg of insects produced/batch	<input type="checkbox"/>
Related Activity	Monitoring	Creating a database, and collect data every week, to keep track of our production.	Final report	RT. Paid. 4 hours	06-15-17		Double our insect production by Sept. 1rst, and quadruple it by March 1rst.	<input type="checkbox"/>
Add'l Activity	Choose an item.	Once the production has started, create recepies using insects and share them on social media (facebook page)	Cooking blog	AV, LB. Paid. 2 hours/week	07-01-17		Share 1 new recepie/week & have 100 new likes on our fb page/month for the 6 first months	<input type="checkbox"/>
Add'l Activity	Choose an item.	Within the 3 first months, visit insects farm in Sherbrooke we have contacted already, in order to have new ideas	Report	All, not paid, 15 hours each	05-01-17	08-01-17	Bring informations, tips and make at least 4 changes on our initial farming plans	<input type="checkbox"/>
Add'l Activity	Choose an item.	Within the 1st month, find information about insect: optimal growing conditions, feeding, regulation for insect farming etc	Report	VC, RT. Paid. 7 hours each	01-17-04	05-01-17	Find for 3 different insects: temperature, feeding needs, 3 methods for safe manipulations	<input type="checkbox"/>
Add'l Activity	Choose an item.							<input type="checkbox"/>

**7. Now, about the check boxes: Select a total of 3 success indicators that you wish to track and report on during your project. These 3 indicators should be the most relevant to your goal and to creating a culture of sustainability at McGill. They should also 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:

**- BUDGET -**

Please refer to the [SPF Guide to Budgeting](#) to complete your project's budget.

**REVENUES**

Indicate any funding you will receive or anticipate receiving to complete your project, including funds from McGill Departments and Units.

Reminder: If your project is approved, any financial contributions from McGill department/unit will need to be confirmed with a letter or email from its Financial/Budget Officer at the beginning and end of the project.

	(A) Funding Source(s)	(B) Amount	(C) Status
1.	Sustainability Projects Fund (SPF)	\$4,881.00	Unconfirmed
2.			Choose one.
3.			Choose one.
4.			Choose one.
<b>REVENUES GRAND TOTAL - add all (B)</b>		<b>\$4,881.00</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 Week	(D) Hourly Wage* (\$)	(E) Subtotal (\$) (B x C x D)	(F) 20% Benefits	(G) Total Cost (\$) (E x F)	(H) Funding Sources**
Genie en chef	2	15	\$13.75	\$ 412.50	1.2	\$ 495.00	1
Logistic et communication	2	15	\$13.75	\$ 412.50	1.2	\$ 495.00	1
Food coordinator	2	15	\$13.75	\$ 412.50	1.2	\$ 495.00	1
Insect coordinator	2	15	\$13.75	\$ 412.50	1.2	\$ 495.00	1
<b>Expenses Subtotal 1 - add all (G)</b>						<b>\$1,980.00</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:

Those positions will held by the 4 main participants of the project: Laura Bony, Valère Champagne, Julien Doueihy and Alice Viala.

**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 Misc.

(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**
Plastic container	6	\$17.00	\$ 102.00	1	Cricketts (30 000)	2	\$40.00	\$ 80.00	1
Feeding bag	10	\$6.00	\$ 60.00	1	Plywood	4	\$60.00	\$ 240.00	1
Water facilities	4	\$14.00	\$ 56.00	1	Plastic cloth	4	\$23.00	\$ 92.00	1
Microwave	1	\$68.00	\$ 68.00	1	Work clothes(coverall)	2	\$85.00	\$ 170.00	1
Heat pump	1	\$600.00	\$ 600.00	1	Inside door	2	\$53.00	\$ 106.00	1
Construction tools	1	\$250.00	\$ 250.00	1			\$0.00	\$ 0.00	
Sanitationequipemnt	1	\$150.00	\$ 150.00	1	Outside door	1	\$130.00	\$ 130.00	1
Electricity equipemnt	1	\$120.00	\$ 120.00	1	Plexiglass	2	\$166.00	\$ 332.00	1
		\$0.00	\$ 0.00		Wood beams	15	\$23.00	\$ 345.00	1
<b>Expenses Subtotal 2 - add all (D)</b>				<b>\$1,406.00</b>	<b>Expenses Subtotal 3 - add all (D)</b>				<b>\$1,495.00</b>

**EXPENSES GRAND TOTAL (Subtotals 1 + 2 + 3)** **\$4,881.00**

\* 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 (e.g. SPF = 1).

Thank you! After you save a copy of your file, you can now upload this form and Section A - Cover Page on the SPF website to complete the application process. The SPF staff will contact your team within two weeks to provide feedback. Congratulations on applying to the SPF!