

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 A - Cover Page

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

**MSEG Composting Project Project Title** 

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

Our goal is to implement a more efficient, sustainable and effective composting system for McGill Student-run Ecological Gardens. We hope to introduce two different methods of the Aerated Static Pile system in order to compare and contrast, determining which method will be more effective for future MSEG generations.

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

🛛 Macdonald	Downtown	🗌 Gault Reserve	Bellairs Research Institute	Other (Specify):
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Approximate Budget Requested to the SPF (\$): \$1,600.00

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

Indicate which of the following team members...

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

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

The Project Lead stays for the entire duration of the project:

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		
First Name & Last Name Amiya Seligman	Affiliation	Undergraduate
Phone (daytime; only put #) 514 995 0915	Specify if Other	
Emailamiya.seligman@mail.mcgill.ca	Faculty/Unit/Organization	MSEG
2. Additional Project Team Member		
First Name & Last Name Chloe Trépanier	Affiliation	Undergraduate
Phone (daytime; only put #)	Specify if Other	
Email chloe.trepanier@mail.mcgill.ca	Faculty/Unit/Organization	MSEG
3. Additional Project Team Member		
First Name & Last Name <u>Mattson</u>	Affiliation	Undergraduate
Phone (daytime; only put #)	Specify if Other	
Emailmattson.griffiths@mail.mcgill.ca	Faculty/Unit/Organization	MSEG
4. Additional Project Team Member		
First Name & Last Name <u>Mathieu Ouellet</u>	Affiliation	Undergraduate
Phone (daytime; only put #)	Specify if Other	
Email macdonaldstudentgarden@gmail.com	Faculty/Unit/Organization	MSEG

More mandatory information to be provided on next page.

Chloe Trépanier

CONSTRUCTION OF THE STATIC PILE BOXES, PURSHASE OF AIR BLOWER FOR

Approximate Total Project Budget (\$): \$1,600.00

(incl. other sources of funding if applicable)

FORCED AERATION AND THERMOMETER.

Amiya Seligman

 $\mathbf{X}$ 



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# SPF Application Form Section A - Cover Page

#### **PROJECT TEAM MEMBERS (CONT'D)**

#### 5. Additional Project Team Member

First Name & Last Name	Shaina Hayes	_ Affiliation	Undergraduate
<b>Phone</b> (daytime; only put #)	macdonaldstudentgarden@g	_ Specify if Other	
Email		_ Faculty/Unit/Organization	MSEG
6. Additional Project Team Me	mber		
First Name & Last Name	Florence Bieler	Affiliation	Undergraduate
<b>Phone</b> (daytime; only put #)		_ Specify if Other	
Phone (daytime; only put #)   macdonaldstudentgarder     Email	ntgarden@gmail.com	_ Faculty/Unit/Organization	MSEG
7. Additional Project Team Me	mber		
First Name & Last Name		Affiliation	Undergraduate
Phone (daytime; only put #)		Specify if Other	
Email		Faculty/Unit/Organization	
8. Additional Project Team Me	mber		
First Name & Last Name		Affiliation	Choose one.
Phone (daytime; only put #)			
Email			
Has any member on your to	eam been part of an SPF project i		ctly, also specifying your project title.
	of team members voluntarily self	identifying as members of ma	rginalized communities.
	-	ose one. Choose one.	
Relevant link(s): (to website(s)	or social media) <u>http://macdonal</u>	dstudentfarm.wixsite.com/ms	eg
If you plan to recruit volunt	eers to help implement your proj	ect, please indicate how many:	
How did you learn about the	SPF? SPF Ambassador Spec	tify if Other	
Please check the	e boxes to confirm that you have r	ead and agree to the following	information:
that if needed, the SPF Stewa communicate part of its conten	ers understand that the SPF is publicly fur ard, the SPF Administrator and/or the it in the case where they would need to (	SPF Working Group members read e.g. to receive professional advice, con	and/or share the application and/or nnect our team to stakeholders, etc.).
be disclosed (e.g. for contact in this box, the SPF staff will con	Ir project team members agree that their formation or through our application an imunicate with you to know whose infor-	d progress/final reports published on mation to remove before sharing you	the SPF website). <i>If you do not check r project online.</i>
IIXI All of our project team member	rs have read and understood the SPF Ter	ms & Conditions, and we confirm that	we agree to respect them.

If any aspect of the <u>SPF Terms & Conditions</u> are unclear to you, contact the <u>SPF Staff before</u> 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 <u>SPF Terms & Conditions</u> 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.



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# 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	MSEG Composting Projecet				
Project Lead First & Last Na	Amiya Seligman me	Phone (daytime)	514-995-0915	Email	amiya.seligman@mail.mcgill.ca

Before you fill out this form, make sure you have consulted all related application documents online, including the <u>SPF Evaluation</u> <u>Criteria</u>, the <u>SPF Glossary</u>, the <u>SPF Project Flow Diagram</u>, and the <u>SPF Sustainability Brief</u>. 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** A future at McGill where every student has easy access to composting facilities.

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**

(225 char. max. ~30 words)

Introducing a more sustainable composting system for MSEG to reduce its waste and become more selfnar. max. suficient by building an Aerated Static compost bin system.

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)

Our goal is to implement a more sustainable, functional and time efficient compost system for McGill Ecological Student Gardens (MSEG). MSEG lacks any effective way to compost and we believe that the Aerated Static Pile (ASP) system is the most efficient way to gain the benefits of composting without excessive cost or manual labor. We plan on implementing the ASP method in order to better deal with our waste and generate soil that can be reused, thus improving our overall operation. Composting is an essential tool for sustainable and biological farmers as it promotes healthy chemical, physical and biological processes. It helps to retain soil moisture, reduce water runoff, recycle soil nutrient, host beneficial microbes, balance soil ph, and reduce the use of fertilizers. As a farm that follow all organic processes, we want to incorporate a sustainable composting system that is not only time efficient but long lasting. We intend to build durable bins that will serve multiple generations of MSEG teams. Additionally, we have organized a detailed scheduling to ensure an efficient process that fits with MSEG's busy schedule. By building a durable system and finding a way to seamlessly incorporate compost managment into MSEG's routine, we hope to make this an integral feature of MSEG.

Effectively, the ASP system is a method in which the materials being composted are aerated by drawing air through the pile rather than by turning the materials to expose it to air. However, there are two main ways to implement this system. The first method includes forced aeration while the second is purely static. We intend to implement both systems in order to compare and contrast the efficiency of each one.

We will build a three bin composting system in order to reduce manual labor by allowing air to pass through piles. We will use two bins for the first ASP model, and one bin for the second model. In the first model, we will use an air blower to force aerate three bins. This blower will be on a timer. In the second model however, we will not use a blower. We will simply have a static pile. Implementing two models will allow us to compare and contrast models in order to choose which method we will implement in the long-term.

ASP systems have extremely good results for a diversity of different farmers, from large scale crop ventures to small scale urban community farms. By making ASP systems a key part of MSEG, we hope to inspire others at McGill on both Macdonald and Downtown campus to realize the efficiency and benefits of the model. We thus beleive that our project will not only benefit MSEG, but the entire Mcgill community.

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)

We want to implement a system that will not only be reused at MSEG, but will hopefully inspire others at McGill to adopot the same system. These bins, for example, will serve an educational purpose when volunteers and school children from Farm to School visit the garden. This ASP bin system will demonstrate to people of McGill that composting food waste is feasible and does not require that much time and effort. This may encourage people of McGill to rethink composting and encourage them to compost themselves. There is also the possibility of getting Gorilla Compost, a student run club at Macdonald Campus, involved. They do a lot of activities to spread awareness and inform students and staff on composting. Using MSEG's composting system as an example and educational resource would enable people to more clearly visualize the process and potentially be more convinced to implement it themselves. If a lot of interest is generated there is even the possibility of creating another one of these systems for the Eco Residences, where the vegetable scraps from their dorm rooms could be used to create compost for both MSEG and the community gardens.

The ASP bin composting system are intended to last many years (at least 5). After the funding is spent, MSEG will take care of maintaining them and any additional cost required to repair them. In addition to building the bins carefully and durably, we will be using the most longlasting materials, such as pressure treated wood, in order to keep maintenance costs at a minumum.

- 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 <u>SPF Sustainability Brief</u>). (1045 char. max. ~165 words)

We intend on addressing our social objective by involving other groups on campus, such as the student-run Gorilla compost club and McGill's Femmedere's club, to desensitize students, staff and the community to the composting process. In addition, we intend on including information about our compost system in all of our outreach for the CSA process. We fundementally beleive in the importance and benefits of education through food, and our farmer's markets are a great place to being the conversion about the benefits of composting. Environmentally, this composting system will greatly reduce MSEG's waste that may have otherwise ended up in a landfill and enable it to reduce its impact on the environment. Economically, this will enable MSEG to become more sustainable and reduce its input costs as it will not have to by in as much compost every growing season. This project is also low maintenance and will only require very minor costs to upkeep over the years.

Beside appear the five categories in which the McGill students, faculty, and staff think the University can make a positive difference within society. The <u>McGill</u> <u>Sustainability Strategy, Vision 2020</u>, 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: Operations
- 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
Ingrid Laplante	AG Connect	Holds Educational Tours	Yes
Paul Meldrum	MacDonald Campus Farm	Hosts tours	Yes
Audrey Constance Wagner	The McGill Permaculture Club	Takes part in research and learning	Yes
Chloe Trépanier	Gorilla Composting	Facilitates training and visits	Yes
			Choose one.

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

	Objective/ tivity	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)	<b>Related Key Success Indicator – do not forget</b> <b>to include targeted numbers for each</b> (ignore the check boxes for now) (75 char. max. ~10 words)
Objective #1	Other	Effective use of our composted soil.	Composit Materia	AS, CT, MG, MP, SH, FB	06-01-17	11-20-17	Reducing the cost of buying fertilizers by 60%.
Related Activity	Other	Determining its specific nutrients and ph level in order to most effectively apply it to the different needs of our soil.	Soil Test	AS, CT, MG, MP, SH, FB	06-01-17	11-20-17	Two comparative Soil Tests of the Composit Material
Objective #2	Other	Discovering which ASP method fits best for the MSEG model and permanently implementing it at MSEG.	Group Discussion	AS, CT, MG, MP, SH, FB	05-01-17	11-20-17	A total of 12 bi-monthly comprehensive comparisons, updating all charts and designs
Related Activity	Other	Systematically comparing the rate at which each pile decomposes and contrasting the final material.	Comparative Charts	AS, CT, MG, MP, SH, FB	05-01-17	11-20-17	Comparative charts of temperature and qualitative notes of each process.
Objective #3	Outreach	Promoting education about ASP methods throughout McGill and people affiliated with MSEG.	Tours	AS, CT, MG, MP, SH, FB	05-01-17	11-20-17	Updates Website with pictures, instructions, and of our own consturction process and system.
Related Activity	Outreach	Incorporating information about our compost system in all tours, posters and outreach talks of which we take part.	Website Page	AS, CT, MG, MP, SH, FB	05-01-17	11-20-17	7 Group Tours throughout the season.
Objective #4	Monitoring	Monitoring compost progress and activity	Design Plans.	AS, CT, MG, MP, SH, FB	05-01-17	11-20-17	A total of 12 bi-monthly additions t our desisn plans.
Related Activity	Monitoring	Routinely measuring the temperature of the compost piles	Temperature Chart	AS, CT, MG, MP, SH, FB	05-01-17	11-20-17	Bi-weekly temperature charts, with a final graph made to compare the two different methods t
Addt'l	Choose an						
Activity Addt'l	item. Choose an						
Activity	item.						
Addt'l	Choose an						
Activity	item.						
Addt'l Activity	Choose an item.						

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)	\$1,586.00	Unconfirmed
2.			Choose one.
3.			Choose one.
4.			Choose one.
	REVENUES GRAND TOTAL - add all (B)	\$1,586.00	

#### **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)	(B) ~# of Hours	(C) ∼ <b># of</b>	(D) Hourly	(E) Subtotal (\$)	(F) 20%	(G) Total Cost (\$)	(H) Funding
Position Title	per Week	Week	Wage* (\$)	(B x C x D)	Benefits	. ,	Sources**
			\$0.00	\$ 0.00	1.2	\$ 0.00	
			\$0.00	\$ 0.00	1.2	\$ 0.00	
			\$0.00	\$ 0.00	1.2	\$ 0.00	
			\$0.00	\$ 0.00	1.2	\$ 0.00	
			Expenses	s Subtotal 1 -	add all (G)	\$ 0.00	

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

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

If you answered 'Y' to one or both

of the above questions, please

disclose:

#### 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)	(B)	(C)	(D) Tatal Cast	(E) Eurodina	(A)	(B)	(C)	(D)	(E) Eurodina
Item Description	# of		Total Cost	Funding	Item Description	# of		Total Cost	Funding
( <u>inputs</u> )	Units	(\$)	(\$) (B x C)	Sources**	(inputs)	Units	(\$)	(\$) (B x C)	Sources**
Air Blower	1	\$225.64	\$ 225.64	SPF	Valves	6	\$38.57	\$ 231.42	SPF
Recycle Timer	1	\$121.32	\$ 121.32	SPF	4" PVC elbows	8	\$2.30	\$ 18.40	SPF
Thermometer	1	\$19.98	\$ 19.98	SPF	4" PVC Tees	4	\$9.23	\$ 36.92	SPF
Wood 2x6x12	33	\$13.05	\$ 430.65	SPF	4" PVC piping (10')	3	\$14.99	\$ 44.97	SPF
Wood 2x4x12	7	\$8.88	\$ 62.16	SPF	2 1/2" screws	2	\$8.47	\$ 16.94	SPF
Wood 2x4x10	3	\$7.50	\$ 22.50	SPF	1 5/8" screws	2	\$8.47	\$ 16.94	SPF
Wood 2x4x8	15	\$5.45	\$ 81.75	SPF	1" fender washers	2	\$8.81	\$ 17.62	SPF
4" PVC end cap	6	\$2.10	\$ 12.60	SPF	Galvanized hinges	6	\$4.37	\$ 26.22	SPF
Toilet flanges	6	\$19.56	\$ 117.36	SPF	Wire Mesh	6	\$13.78	\$ 82.68	SPF
Expenses Subtotal 2 - add all (D)		\$1,093.96		Expenses Su	btotal 3	add all (D)	\$ 492.11		

#### EXPENSES GRAND TOTAL (Subtotals 1 + 2 + 3)

Υ

\* See the <u>SPF Guide to Budgeting</u> 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!

\$1,586.07