



## SP0191 Final Report

Please answer the following questions and return the completed form to the [SPF Staff](#) via e-mail.

**Project Title:** Faraday's Farm

**Final Report prepared by:** Jeremy Dawkins, William Odette

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**Actual Project Start Date:** 5/1/2018 **Actual Project End Date:** 12/31/2018

**1. Please summarize the project and its key accomplishments in 1-2 sentences.**

(400 characters maximum)

Started a garden for McGill Chemistry department. Setup of a seedling starting area. Interior composting bins set up in 4 groups, with expansion to other groups underway (4 other groups are in the process of joining).

**2. Your team listed the following goal in your application:**

A (green) chemistry department with a strong and contiguous student-directed gardening community and a genuine commitment to the health & wellness of its members.

**Did your team achieve your project's goal? In your answer, please describe the impact your project had on McGill's structures, processes, and/or systems. Also, please specify how this positively transformed people's behaviors/perspectives/habits on McGill campus(es).**

(Unlimited characters, suggested minimum ½ page or approximately 250 words)

We did achieve our goals. The main goal of the project was to provide a garden space for the chemistry department to both improve the (aesthetic) quality of the outside space (between Otto Maass and Pulp & Paper buildings) available to primarily members of the chemistry department but also the broader McGill community who passes through this space. In doing so, we sought to generate interest and engagement within the department concerning sustainable practices as a general approach and gardening as a specific activity. We successfully established this garden and secured the necessary infrastructure and departmental support for the continuation of the project in the immediate future.

A position in the chemistry graduate student society (CGSS) was created to serve as a liaison with departmental administration and garden managers. In the interest of streamlining the process this position will ideally always be filled by the garden manager(s). The VP of sustainability is responsible for managing the Faraday Farms project and coordinating composting efforts within the department. This position also opens the door for further development in sustainability within the department including but not limited to: reusable utensils and plates used from the plate club, reusable cups sold through the department, composting of Halloween pumpkins etc. Moreover, by the creation of a permanent position within the students' society we have established the garden as a permanent departmental entity and ensured its continuation beyond the scope of the founders' tenure at McGill.

The Faraday Farms project has been quite popular within the department, and the development of intra-departmental composting efforts as well as off-season indoor herb gardens and seedling growth areas for the 2019 season will continue to improve student engagement within the department. Therefore, while our key metrics of strength and continuity are difficult to realistically evaluate after only one season, the indicators are very positive.

**3. Please describe the key successes and challenges of your project. (Minimum of two examples for each)** (Unlimited characters, suggested minimum ½ page or approximately 250 words)

Established the structural and administrative framework for a gardening program within the McGill chemistry department; developed necessary connections within the department for the garden program to be self-sustaining following initial season supported by SPF funding

Developed nascent composting program, something that has not previously been attempted within the department. By limiting the size of the composting program and only including (at present) groups within which individuals have directly expressed interest in participating, the composting program will be able to develop organically. We believe that this approach will allow the benefits of composting to be self-evident and will ultimately lead to a more efficacious program than a more aggressive push to implement new practices broadly.

Our challenges within this project were minimal. There were some minor issues regarding garden boundaries and inter-group communication at the outset of the season. A more formalized meeting of garden groups prior to the growing season to clearly delineate (a) which groups are working where and (b) who from a given group is responsible for a particular set of tasks would likely significantly ameliorate this concern. The other main challenge this year was theft. A significant fraction of our tomato crop, for example, was lost to human theft while animal herbivory was a comparatively minor issue. Planned strategies for addressing this issue in coming seasons include the use of fencing and increased signage to clarify the purpose and intended use of the garden and its produce.

**4. What key points of advice or *lessons learned* would you give to other SPF teams either regarding your experience managing your project or the project itself?**

(Unlimited characters, suggested minimum ½ page or approximately 250 words)

Creatively use and respond to change: have contingency plans in place and anticipate that the execution of any project will necessitate change during the process

Communication and documentation is critical in any project, and maintaining equanimity in this process is an overlooked but highly important attribute

Minimize bloat and look for ways to streamline every aspect of a project: strive for an appropriate balance of diversity of opinions and directive leadership

**5. What recommendations do you have for the future of this project to be continued and are there any opportunities for complementary projects? Who will take responsibility for the project's future and how can interested persons be in touch? The SPF team will also be in touch with this contact for updates on the project's progress in coming years, if ongoing.**

(Unlimited characters, suggested minimum 1 paragraph)

We made a huge emphasis on continuity. In terms of membership, Jeremy Dawkins will be VP sustainability until 2021-2022, after which a new person will be selected and this will be communicated to the SPF. The future has a lot of room for improvement. A solar-powered automated watering system could be included for the potted plants (using a microcontroller and a solenoid valve) and is currently being developed by JD. Additionally, animal proofing (squirrels and slugs) our plants will help with our yields. Theft has been an issue so a solution to this will have to be found next year.

**6. Would you or your project team member(s) be willing to serve as a mentor to SPF project teams?**

**Please choose one. If yes, SPF Staff will contact you with more information.** (800 characters maximum)

Yes  No

We are available for support to current, and future SPF projects and teams.

**7. In your application, you listed the following sources of funding:** CGSS, \$500; McGill Chemistry Department, \$300.

**Please confirm if you received this funding in the space below. In your response, please list the actual amount (in dollars) that you received. Note: If you received funding from a McGill Department or Unit, please attach a letter from its Financial/Budget Officer confirming the actual amount of support.**

(1,800 characters maximum)

The chemistry department has promised 400\$ annually for the project. This funding will begin in 2019 and continue for the foreseeable future of the project.

**8. Did you purchase equipment or make an installation on campus?**  Yes  No

**If yes, please briefly describe how these items will be maintained and used in the future.**

(1,800 characters maximum)

The pots are very durable and should last 3-4 years at a minimum. They can also be replaced by a few extra pots that were leftover from spatial constraints. The seedling starting area materials will also all last at least 10 years, with the fan and light bulbs being the first to require replacement. Replacement of both will be well within the means of the annual 400\$ budget we will receive from the department.

Finally the compost bins are extremely cheap (roughly 15\$ each) and very durable. If one were to break, it could be replaced from our annual budget as well.

**9. The following Key Success Indicators were indicated in your project application and selected for tracking. Please indicate the actual results that you have achieved in the "Actual" column.**

Selected Key Success Indicators	Target	Actual
Bagel Hours use or help distribute vegetables from the new garden	5	3
One departmental education campaign created around the composting initiative	Complete	Complete
# of surveys implemented to assess success and gather stakeholder feedback on the project	1	1

**If there is a significant difference in the target numbers and the actual numbers achieved, please explain. If you have any additional information to share about these success indicators, please also include it below.**

(1,800 characters maximum)

There is no significant difference. The bagel hours were not all achieved because of theft of the tomatoes, therefore the harvest was not bountiful enough to share for the last 2 harvests of the season.

**10. Please report on your results for the standard SPF Key Success Indicators in the “Actual” column.**

Standard SPF Key Success Indicators	Actual #
# of volunteers directly or indirectly engaged in the project	15
# of people (student, staff, or other) trained in the context of the project	10
\$ raised for project activities subsequent to SPF funding	0
# of partnerships or collaborations developed between the project team and other McGill administrative units, student groups, community groups, other universities, and/or other groups/organizations.	3
# of tons of GHG emissions reduced by your project	?

**Regarding the last Key Success Indicator, please list the groups and/or organizations that you counted.**

(Unlimited characters; point form acceptable.)

We collaborated with a coordinator of undergraduate lab courses in the department (Dr. Danielle Vlaho) and supplied real-world samples of hot peppers for use in an analytical chemistry experiment in the quantitation of capsaicinoids. This collaboration was unofficial as of this year but will be written into the lab manual as an official component of the experiment next year and beyond. We have further discussed the possibility with Dr. Vlaho of developing an entire experiment involving garden produce as a major component. We have been in contact with the Chemistry Undergraduate Students' Society (CUSS) regarding the use of some of their space in a high-traffic area of the department to place a seedling tent during the winter, which will increase visibility within the department and provide a means for the involvement of the undergraduate community within the department. We also collaborated significantly with McGill grounds (Franco Nardi and Eric Champagne) who were indispensable to this project.

**If you have any additional information to share about the Standard SPF Key Success Indicators, please include it below.**(1,800 characters maximum)
**11. Please indicate the McGill stakeholder groups that were involved with your project as a team member or collaborator/partner. Choose all that apply.**

Undergraduate  Postgraduate  Administrative Staff  Academic Staff  Alumni

**12. Please rate your project team's overall satisfaction with the support provided by the SPF Staff. Choose only one response.**

Very Dissatisfied  Dissatisfied  Neither Satisfied Nor Dissatisfied  Satisfied  Very Satisfied

**13. Please provide any feedback or recommendations regarding your team's experience with the SPF.**

(Unlimited characters, suggested minimum 1 paragraph)

We are very satisfied with the support we received from SPF staff in the execution of this project. Shona and Krista provided essential assistance for navigating the application process and securing generous funding for our project. Shona was always available as a point person to handle our orders and field any questions we had as the project progressed. An increase in the autonomy of purchasing power (i.e. the speed with which an order can be placed) would be ideal, but we understand such a change may not be feasible. Clarification of organizational responsibilities within the broader MOOS framework as it relates to the SPF would also be beneficial.

The one issue we would like to make note of (approval process for lifted beds originally included in proposal) does not strictly concern the SPF and so is difficult to articulate. Therefore we wish to be clear that our intention is not to complain or lay blame on any individual or department; we remain very grateful for all of the assistance provided us by the SPF. We will simply note our frustration with the fact that the approval process

which ultimately led to the rejection of the proposed beds was conducted primarily behind closed doors with communications we were not party to, effectively negating our ability to make a strong case for what we considered to be a very important component of the project. This is simply a statement of our perception of the events as they occurred; we recognize that electronic communications as a toneless medium are especially prone to misinterpretation and so we refrain from any speculation of why or how things progressed as they did. We would therefore request the same consideration from the SPF staff in our assertion that our desire to install those lifted beds was strictly in the interest of completing our project as nearly as possible to how we had originally proposed and that our intentions and attitude – regarding all McGill entities involved in this decision process, the SPF and all of the garden projects – have been and remain exclusively and unequivocally positive.

We consider the overall result of the first season a resounding success. While there is much optimization still to be done and the harvest was somewhat limited, the most important metric of success is continuity, and in this regard we have surpassed our expectations.

**14. If there is additional information you would like to share about your project, please use the field below.**

(Unlimited characters)

**15. Has involvement in this SPF project positively impacted your team in the area of professional growth?**

**Please choose one. If you would like to elaborate, please use the field below.** (800 characters maximum)

- Yes  No  Prefer Not to Share

We have both gained a lot of knowledge on organizing people, applying for grants and starting micro projects. This has been a great learning experience for us both.

**16. Has involvement in this SPF project positively impacted your team in the area of personal growth?**

**Please choose one. If you would like to elaborate, please use the field below.** (800 characters maximum)

- Yes  No  Prefer Not to Share

I believe we are both more enriched in community outreach and gardening knowledge.

**17. Which of the following skills or attributes has your team improved through involvement in your SPF project? Choose all that apply.**

- |   |  |  |
|---|--|--|
| <input checked="" type="checkbox"/> Budgeting           | <input type="checkbox"/> Networking                    | <input type="checkbox"/> Systems Thinking                          |
| <input checked="" type="checkbox"/> Communications      | <input checked="" type="checkbox"/> Planning           | <input checked="" type="checkbox"/> Teamwork                       |
| <input checked="" type="checkbox"/> Conflict Resolution | <input type="checkbox"/> Problem Solving               | <input type="checkbox"/> Technology                                |
| <input type="checkbox"/> Leadership                     | <input checked="" type="checkbox"/> Project Management | <input checked="" type="checkbox"/> Time Management                |
| <input type="checkbox"/> Listening                      | <input type="checkbox"/> Public Speaking               | <input type="checkbox"/> Writing                                   |
| <input checked="" type="checkbox"/> Mentoring           | <input type="checkbox"/> Stakeholder Engagement        | <input type="checkbox"/> Other (Please specify in the field below) |
| <input checked="" type="checkbox"/> Negotiating         | <input type="checkbox"/> Stakeholder Identification    |  |

Other:

**18. Since starting your SPF project, has your team improved its knowledge of sustainability?**

**Please choose one. If you would like to elaborate, please use the field below.**(800 characters maximum)

Yes  No  Prefer Not to Share

**19. (Optional) If applicable, please list the total number of team members voluntarily self-identifying as members of marginalized communities:**

**Please identify the represented communities below.(e.g. women, Indigenous people, people of colour, LGBTTQI, student parents, members of ethnic minorities, immigrants, people with disabilities)**

(1,800 characters maximum)

**Thank you for completing your Final Report!**

Please e-mail your report to the [SPF Staff](#) attaching any additional information that you would like to share about your project (e.g. other reports, research, documents, photos, etc.). Please note that this Final Report will be shared publicly on your SPF project's webpage.