

CSSS Communications Plan



Developed by Samantha Fowler CSSS Communications Intern samantha.anne.fowler@gmail.com June 2020

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I. Executive Summary

Overview

The Canadian Society of Soil Science (CSSS) is "a non-governmental, non-profit organization for scientists, engineers, technologists, administrators, and students involved in professional soil science" (CSSS, 2019). The society's mission includes promoting the field of soil science through the collaboration of scientists and practitioners, the dissemination of research, and the celebration of research accomplishments (CSSS, 2019). As outlined in the March 2020 CSSS Newsletter, the CSSS aims to further its mission statement by "working towards a society communication plan" (CSSS, 2020). Communications is a valuable tool in promoting scientific disciplines and enhancing communication and collaboration within an organization and community. The CSSS Communications Plan proposes a strategy for this effort.



The proposed CSSS Communications Plan will run for a 2-year trial and is to be reviewed in June 2022.

Target Audiences

The target audiences identified for the CSSS Communications Plan are based on conversations with key stakeholders, including CSSS council members. Key target audiences, in order of priority, are:

- 1. CSSS members, including scientists and practitioners
- CSSS graduate students
- 3. Canadian scientific societies and organizations
- 4. Hobbyists and enthusiasts
- 5. Undergraduate students
- International organizations
- 7. Youth educators
- 8. Media

Overall Communications Mission

The communication mission of the CSSS is to inspire understanding and stewardship of the Earth's soils by engaging scientists and practitioners alike in soil research and facilitating collaboration among soil scientists and the non-specialist community.



Summary of Major Recommendations

To achieve the CSSS Communications Plan objective, a set of tactics and communication channels have been identified to be implemented as required resources become available.

1. Build communications capacity

To meet the demands of the CSSS Communications Plan, we recommend that new resources be created to build upon the pre-existing structure and optimize member engagement.

- A standing CSSS Communications Committee to oversee the continued implementation of this plan
- A Social Media and Blog Manager position to oversee the implementation of the Social Media Strategy
- Allocate CSSS financial resources towards the CSSS Communications Plan implementation, including funding the Social Media Manager

2. Advance current communications channels

The following tactics build upon the success of pre-existing communications channels by integrating best practices and recommendations from the Communications Team.

- Develop newsletter design templates that emphasize and differentiate between academic, professional, and student content
- Support member communications contributions by writing articles on communications best practices for the CSSS website for members to reference while producing communications content
- Continue hosting photography competitions to collect quality content to support communications channels

3. Implement new communications channels

The following tactics are recommended by the Communications Team as new ways of engaging key audiences.

- Develop a social media strategy for Twitter, LinkedIn, and Facebook to ensure meaningful engagement of all key audiences
- Implement a blog for non-specialists on a separate website to include member spotlights and accessible articles
- Host online webinars geared towards members, students, and hobbyists and enthusiasts
- Promote undergraduate student engagement by targeting outreach to soil science professors, including student competitions and blog writing opportunities

II. Introduction

A. CSSS Overview

The Canadian Society of Soil Science (CSSS) is a non-governmental, non-profit organization for scientists, engineers, technologists, administrators, and students involved in professional soil science (CSSS, 2020). Activities of the CSSS include an annual conference to connect soil scientists and practitioners, publications (newsletters, Canadian Journal of Soil Science, books), awards, and educational resources for Canadian students. Stated in the CSSS mission statement, the goal of the organization is to "nurture the discipline of soil science in Canada and ensure its relevance in the future" (CSSS, 2020). It works to achieve this goal by:

- promoting the wise use of soil for the benefit of all society,
- promoting information and technology exchange among people in the professional soil science community,
- fostering the integration of students into the professional soil science community,
- providing a link between soil scientists in the private, public, and university sectors,
- disseminating research and the practical application of findings in soil science,
- representing the Canadian soil science community in international organizations and meetings, and
- celebrating the accomplishments of Canadian soil scientists. (CSSS, 2020)

Dr. Nathan Basiliko, acting 2020 CSSS President, identified gaps in the CSSS communications inhibiting the progress towards achieving these goals. In particular, the use of social media as an engagement tool and outreach to non-specialist audiences were identified as the organization's goals. The CSSS seeks to increase its relevancy in the Canadian society by engaging non-specialist audiences more frequently in discussions and information sharing about soil science.

As an effort to further the communications strategy and the greater CSSS mission statement, Dr. Basiliko initiated a collaboration with the Laurentian University Masters of Science Communication Program in March 2020. A team of four students (Victoria Banderob, Tess Dufour, Samantha Fowler, and Joseph Ulmer) launched the CSSS Member Communications Survey (Appendix A) and began work on the communications plan that was then completed by Samantha Fowler, CSSS Communications Intern, in May-June 2020.

B. Communication Vision

The CSSS Communications Plan envisions a Canadian society in which the dynamic exchange of knowledge between scientists, practitioners, and their communities strengthens the mutual wise use of soil and sustainable future research.

C. Communication Mission

The communication mission of the CSSS is to inspire understanding and stewardship of the Earth's soils by engaging scientists and practitioners alike in soil research and facilitating collaboration among soil scientists and the non-specialist community.

D. Strategic Communication Objectives

Two goal areas have been identified that will guide the CSSS Communication Plan's work to increase its effectiveness its duration:

- Promote membership with CSSS by demonstrating that the Society remains relevant and beneficial to the field of soil sciences and provides clear benefits to its members
- Foster active outreach and communications activities to increase the visibility of the CSSS and promote soil science

III. Situational Analysis

Currently, the CSSS uses three main communications channels: email newsletters, member emails, and the CSSS website. CSSS also has an inactive Twitter account. CSSS has no formal communications plan or strategy. Each platform has different strengths and weaknesses which can be taken into consideration when crafting a comprehensive communications plan.

To explore the current use of CSSS communications channels, we launched the CSSS Communications Member Survey. This survey was open for two weeks in May 2020 and promoted through a member email; a total of 54 responses were received. The survey was launched a second time by the recommendation of the CSSS Graduate Student Representative through an email specifically to graduate students in order to elicit a better understanding of this specific audience. Five additional responses were received, for a total 19.8% response rate from all members. The survey can be viewed in **Appendix A** and survey responses in **Appendix B**.

Email Newsletter

The email newsletter is sent to all CSSS members, including soil scientists and soil practitioners. The email newsletter consists of a PDF attachment that is archived on the CSSS website. Newsletters are sent out approximately every semester, with three to



four newsletters a year. Content of the newsletter includes a letter from the current president, information about relevant conferences, updates about the Canadian Journal of Soil Science, relevant job postings, CSSS prizes, and external grants. Email newsletters engage CSSS members regularly, which is one of the goals of the communications plan. Member emails are sent out sporadically and include general announcements, reminders, updates, and requests.

Survey results suggest that member emails and email newsletters are a successful communications channel with high engagement rates. Although not a common way of accessing the newsletter, as significant portion of members also access the newsletter PDF through the website. However, fewer graduate students open the PDF attachments as compared to other member groups and only 61.4% of members like the newsletters in their current form.

Table 1 Email Newsletter SWOT Analysis

Strengths	Weaknesses			
 Personal nature (shows respect and appreciation to members) Member focused newsletters encourage community engagement Newsletter archive on website is a valuable resource for referencing of past newsletters 	 Unknown ongoing engagement and interactions as no email marketing software is used Lack of engaging images and visuals Lack of engaging design Large amount of content Hard to post up-to-date information 			
Opportunities	Threats			
 Newsletter content provides a strong framework for generating content on social media (ex. sharing of research articles, deadlines for registration and awards, etc.) 	 Possible content overlap with social media Newsletter format may hinder accessibility for younger and external audiences 			

Member Emails

Member emails are sent out sporadically to CSSS members to provide organization updates and an overview of activities. Content includes requesting members to submit content to the newsletter, announcing the opening of nominations for certain awards, motion for voting on activities, and reminders of upcoming deadlines.

Table 2 Member emails SWOT Analysis

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Strengths	Weaknesses					
 Provides more frequent updates on CSSS activities than the newsletters Good medium for more community engagement 	 Limited in terms of scope of information that can be shared in e-mail format (ex. PDF, links) Unknown engagement and interactions as no email marketing software is used 					



Opportunities	Threats		
 Member engagement in a broader communications plan can be facilitated through e-mail correspondence 	 Must balance between community engagement and inundating members who lead busy, professional lives with frequent questions and requests 		

CSSS Website

The CSSS website (www.csss.ca) focuses on diverse audiences with specific content for CSSS members, financial stakeholders, students, educators, and CSSS partners. The *Quick Links* focus on: publications, professional opportunities, Pedology Committee, Soil Education Committee, Provincial Organizations, and Useful Links.

Table 3 Website SWOT Analysis

Strengths	Weaknesses
 Clearly outlines a specific page's target audience based on what aspects of CSSS are featured most prominently Quick Links section highlights important content and guides visitors Emphasis on educational committee content Easy design for members to find information Valuable database of information on CSSS that is easy to read and navigate Frequently updated 	 Website design skews towards academic and formal, which may not be engaging to non-specialist audiences The focus of content is on specialists and members, with few specialized pages for non-specialists (general public)
Opportunities	Threats
Integration of non-specialist content can be used to increase outreach and promote pre-existing educational resources	 Important to balance content for specialists and non-specialists Important to incorporate the framework of the website into the communications plan to avoid making it a list of external links

Social Media

The CSSS Twitter account (@CSSS_Soils) has not been active since June 2017 and currently has 162 followers (June 15, 2020). Content included photos caught in the moment of events, scientists at work, and award winners. Although inactive, this platform has the potential of achieving the communication plan's goals of outreach and engaging the public in soil science.



Survey results suggest that social media is a potentially successful platform for engaging members due to current high usage, particularly on Facebook, LinkedIn, and Twitter. However, one-quarter of members do not use social media; therefore, cross-promotion of content across other platforms will be important to ensure effective communication to all members. Results were consistent across professional and student members.

Table 4 Twitter SWOT Analysis

Strengths	Weaknesses		
 Showcases scientists at work, which could increase accessibility Effectively showcases key society activities Retweets related accounts (ex. Soil and ecology research labs) 	 Account not active but still searchable Low quality photography Content emphasizes other accounts over original content (too many retweets) 		
Opportunities	Threats		
 Create strategy focused on communication objectives Use partnership with SSSA to emphasize content Have engaged members contribute content, including beautiful photography 	Sustainability of account long term may be difficult without including the role in a specific member job description		

IV. Key Audience Analysis

A. Target Audiences Overview

Target audiences were selected through consultation with the CSSS President, Councilors, and members. The recommended priorities were selected based off of the ability of communications with this audience to achieve different aspects of the CSSS's organizational mission statement. This return on investment can be defined both by the ability to increase funds for the CSSS, as is the case with increased numbers of members paying fees, or by the number of engagements with a piece of communications increasing the relevancy of the CSSS, as is the case with a hobbyist or enthusiast reading an article. However, the audience's future goal of increasing engagement with the general public is not accurately reflected in the current mission statement. The priority of this audience, divided into youth educators and hobbyists and enthusiasts, has been increased to better reflect the direction and goals of the CSSS. We recommend that the mission statement be reworked to better reflect this vital goal.

The "general public" audience is considered too broad category to successfully implement communication strategies. For this reason, this audience was broken down



into more specific categories, with a focus on non-specialists. Non-specialists are important to engage for the overall communication objective because they are a large proportion of the population that can have a significant impact on the Earth's environment and soils. This audience is directly impacted by CSSS member activities, but may not be aware of or appreciate this. The non-specialist, interested audience is the most efficient group of non-specialists to engage because they will be new to the CSSS but already have intrinsic interest in the CSSS activities. For this reason, "hobbyists and enthusiasts" was selected as one audience to represent the organization's goal of reaching the general public.



Table 5 Target audience relevance to different aspects of the CSSS mission statement

	CSSS Mem	CSSS Members		o,		īs		ر suo	nal ons
Mission Statement	Scientists	Practitioners	Graduate Students	Undergraduate Students	Hobbyists and Enthusiasts	Youth educators	Media	Canadian scientific societies and organizations	International organizations
promoting the wise use of soil for the benefit of all society	Х	Х	Х	Х	х	Х	Х	Х	Х
promoting information and technology exchange among people in the professional soil science community	х	Х	X					Х	Х
fostering the integration of students into the professional soil science community			X	X					
providing a link between soil scientists in the private, public, and university sectors	х	Х	X					Х	
disseminating research and practical application of findings in soil science	х	Х	Х	Х	Х	Х	Х	Х	Х
representing the Canadian soil science community in international organizations and meetings								Х	Х
celebrating the accomplishments of Canadian soil scientists	Х	Х	Х	Х	Х	Х	Х	Х	Х



B. CSSS Members

CSSS members are important to engage for the overall communications objective because they are the primary stakeholders of the CSSS and can be empowered to further share the CSSS messages. In 2019, the total 284 CSSS members consisted of 57.1% academic (including students and professors), 0.4% farmers, 9.4% industry, 16.1% government, and 7% retired. The remainder of CSSS members did not list any professional affiliation. Due to this diverse representation, it is important to consider both scientists and practitioners as distinct audiences with different values and communications objectives

Soil Scientists

Soil scientists are formally recognized as scientists based on education, training, experience, and professional position. This group includes a mix of professors, government, and industry scientists. This audience is highly engaged in the research world and academic journals. CSSS communications can benefit this group because the seek to enhance and add to their own research, network with other soil scientists, feel a sense of community among Canadian soil scientists, celebrate and receive recognition for major accomplishments, and stay informed about upcoming events, conferences, and awards. Potential barriers for reaching this audience is that they are busy and engaged with many other activities, and may only be interested in information that directly applies to their research.

Audience Communication Objectives

- 1. Increase awareness and interaction between CSSS and non-specialist audiences
 - a. Raise awareness of the value of CSSS and the impact CSSS science has within the broader scientific community
 - b. Promote opportunities for scientists to contribute to and impact society
- 2. Facilitate beneficial collaboration and interactions
 - a. Facilitate collaboration, learning, and information sharing between CSSS scientists and the broader scientific community
 - b. Promote a shared mission and sense of community in the soil science field by strengthening communication channels
- 3. Contribute to scientist's research through the dissemination of research and academic opportunities
- Increase opportunities for scientists to highlight accomplishments to funders and employers



Key Messages

- 1. Your contributions are valuable and make an impact on the society.
- 2. Collaboration between scientists, practitioners, and the community will support your research and the broader impacts.
- 3. The CSSS is a strong, beneficial platform within which to disseminate your research and highlight accomplishments.

Professional soil practitioners and industry

Professional soil practitioners are those who use soil science in their work, including farmers, farming company administrators, engineers in the agriculture sector, and urban or city planners. This audience is motivated by relevant applications of science to their own work and may have little advanced training in soil sciences. They seek communication to be informed about practical implications, network with other soil practitioners, stay informed about relevant activities, and feel a sense of community among Canadian soil professionals. Potential barriers to reaching this audience is the need for immediate relevancy in information, the focus of the CSSS on academic awards, and the lack of framing of research towards industry applications.

Audience Communication Objectives

- 1. Strengthen the connections between practitioners and soil scientists as a means to integrate practical knowledge with research and ensure relevancy
- 2. Inform them about the practical implications of soil science on their work
- 3. Acquaint them with contacts in the field
- 4. Strengthen their sense of community in the Canadian soil science field

Key Messages

- Collaboration with soil researchers can lead to solutions that can help you in your practice
- 2. Real world experience can better inform practical soil science research
- 3. The soil science network in Canada is a valuable community that can benefit your work.

C. CSSS Graduate Students

Graduate students in programs related to the study of soil science, including mining and agriculture, are most likely to hear about the CSSS by having a connection an academic member of the CSSS. They are likely at the stage of their academic career when they are looking for specialized research opportunities. They seek communication for professional networking connections and up-to-date information about the state of



soil science research in Canada. Graduate students care most about job opportunities, awards, and incentives for their actions. Potential barriers to reaching this audience include the lower likelihood of them using newsletters as a communications medium and the lack of tailored student information to their education level and specialization.

Audience Communication Objectives

- 1. Foster the integration of students into the professional soil science community
- 2. Reach a greater number of student in soil science-related programs
- 3. Engage students already familiar with CSSS more regularly with the organization's tools and resources

Key Messages

- 1. Soil science is a critical field to issues of sustainability and environmentalism in our society, and has a wealth of career paths.
- 2. The CSSS is a reliable source of up-to-date information on soil science and soil science research in Canada, and provides valuable academic and professional networking opportunities

D. Canadian scientific societies and organizations

Canadian scientific societies and organizations have an invested interest in the dissemination of quality Canadian scientific research. These groups include the Canadian Geophysical Union and the Canadian Society for Agriculture and Forest Meteorology, among others. Members of these organizations seek collaboration to benefit their own research and discipline. Although specialists in their respective field, members of this audience are not necessarily an expert in soil science; communications should adjust language to ensure that it is accessible to non-specialists. It is important to note that communications with individual members should acknowledge the broader organization to raise joint awareness; for example, a tweet should mention the member and the society.

Audience Communication Objectives

- 1. Disseminate research and practical application of findings in soil science
- 2. Foster collaboration between scientists in diverse disciplines

Key Messages

- 1. The CSSS is a relevant, essential part of the Canadian scientific community.
- Soil science is a critically relevant field that impacts many other scientific disciplines.



E. Hobbyists and Enthusiasts

Hobbyists and enthusiasts are non-specialist audiences that have an intrinsic interest in soil sciences, including: urban gardeners, small scale farmers, landscapers, construction workers, outdoor enthusiasts, house plant lovers, and environmental advocates. This audience is excited to find accessible information about science topics they enjoy to seek useful information to improve their practice or hobby, including growing a better garden or more food or living more sustainably. Potential barriers to reaching this audience is the elite academic feel in the CSSS name and website design, the difficulty in engaging specialist and non-specialist audiences in the same platform, unsure sustainability in the production of non-specialist content, and the difficulty in reaching an audience that may not be actively seeking out information.

The communication objectives for this audience overcome these barriers by providing accessible outreach that has direct applications for hobbyists and enthusiasts. These barriers can also be overcome by fostering connections and relationships between scientists and the public building off of their value in curiosity

Audience Communication Objectives

- Provide accessible, evidence-based information on soil-related topics for helping gardeners, small-scale farmers, and environmental stewards to pursue their interests
- 2. Communicate the practical applications of soil science
- 3. Encourage the "wise use" of soil to ensure practices are sustainable
- 4. Foster a connection between scientists and the public through curiosity

Key Messages

- 1. Soil science is accessible to non-scientists
- 2. Understanding soil science can help improve your practice and make your practice more sustainable
- 3. Soil science is a part of many aspects of our life and acknowledging its impacts can benefit your day-to-day activities

F. Undergraduate Students

To support the organization's longevity, fostering the integration of students into the professional soil science community and reaching a great number of students in soil science-related programs is vital. Engaging the students already familiar with the CSSS more regularly allows for more professional networking connections and access to upto-date information, as the students are looking for. Undergraduate students are curious



about future careers and anxious about getting jobs and deciding upon next steps. They skim articles of interest, but are overwhelmed by their own class assigned research articles.

Audience Communication Objectives

- 1. Foster the integration of students into the professional soil science community
- 2. Reach a greater number of students in soil science-related programs

Key Messages

- 1. Soil science is a field critical to issues of sustainability and environmentalism in our society and has a wealth of career paths
- The CSSS is a reliable source of up-to-date information on soil science and soil science research in Canada, and provides valuable academic and professional networking opportunities

G. International Organizations

International organizations have an invested interest in the dissemination of quality scientific research, but may not be actively turning to Canada for these findings. The key organizations for consideration are the International Union of Soil Sciences, the Global Soil Partnership, and the Global Research Alliance. National organizations that are often collaborated with include the Soil Science Society of America and the British Soil Society. It is important to note that communications with individual members should acknowledge the broader organization to raise joint awareness; for example, a tweet should mention the member and the society.

Audience Communication Objectives

- 1. Foster collaboration between CSSS and international scientists
- 2. Increase the relevancy of the CSSS and Canadian researchers by raising awareness of the value of the CSSS and the impact CSSS science has within the international scientific community

Key Messages

 The CSSS, CSSS members, and Canadian soil science is a relevant, essential part of the international scientific community

H. Youth Educators

Youth educators include Kindergarten to Grade 12 educators as well as informal educators, including camp counsellors and day care leaders. This audience seeks information that is relevant and engaging to both them and the secondary audience of their students. The broad age range in this secondary audience requires clear identification of intended audience for each unique piece of communication; this can occur through a label of "Grade 8 reading level" or through related activity sheets. This audience values curriculum connections and breadth in the topics and activities discussed to ease lesson planning. Communications with youth educators will be led by the CSSS Soil Education and Outreach Committee.

Audience Communication Objectives

- 1. Provide accessible, evidence-based information to enhance soil science education to youth, including in formal K-12 levels
- 2. Encourage the "wise use" of soil to ensure practices are sustainable

Key Messages

1. Soil science is an important scientific field that is essential to the understanding of environmental health and sustainability

I. Media

The media includes journalists associated with media outlets, freelance writers, and associations that distill science for journalists. The media serves as an important conduit for reaching other priority audiences. As a newly proposed strategy the current CSSS Communications Plan does not focus on media outreach. Instead, we recommend future event specific communication plans include written guidelines for releasing high-impact research results to the media and a strategy for forming science journalism partnerships.

Audience Communication Objectives

- 1. Increase reach to previously identified priority audiences by using preestablished platforms and channels
- 2. Promote key accomplishments and events of the CSSS

Key Messages

- 1. The CSSS is a relevant part of the Canadian scientific society
- 2. CSSS member research makes meaningful impacts on Canadian lives



V. Major Recommendations Explanation

New and adapted communication channels and tactics are proposed to best engage with the audiences listed in this report.

A. Build communications capacity

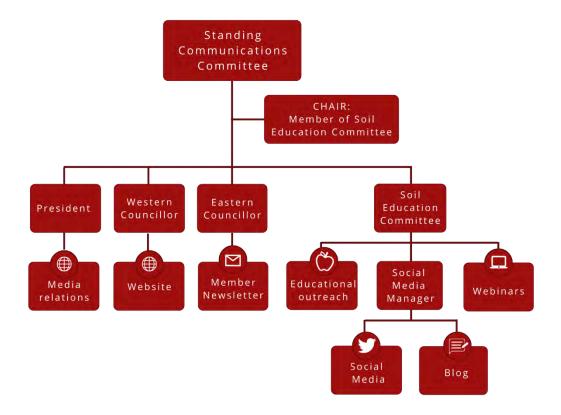
Communications Committee

We recommend that a standing committee is created to ensure long-term, sustainable implementation of the communications plan. We propose a standing Communications Committee that will oversee implementation, monitoring, and updates of the CSSS Communications Plan. This committee will provide a platform for positions that are already responsible for different communications channels to share best practices and collaborate. The Committee will make communications a share priority that is a formal part of the CSSS Rules.

We recommend that the CSSS Communications Committee meet annually, chaired by a member of the Soil Education Committee. The Chair will be responsible for creating agendas and assigning roles.

Figure 1 Proposed CSSS Communications Committee Structure with Listed Responsibilities





Duties of Communication Committee:

- Annual review of CSSS Communications Plan including:
 - Evaluate progress towards key performance indicators and goals
 - Evaluate audience list and priorities to ensure suitability in relation to organizational goals
 - Decide upon new key performance indicators and goals
 - Host annual conference session about CSSS Communications, goals, and skill building
- Implementation of CSSS Communications Plan through respective responsibilities
- Development of annual communications calendars focusing on key events and trends
 - Ex. Deciding to run a collaboration with SSSA for World Soil's Day, deciding that CSSS will aim for three webinars this year, highlighting an upcoming Enviro-thon for promotion to all audiences

Summary of recommendations for the Communications Committee:

Create a standing CSSS Communications Committee



 Develop an official mandate of the CSSS Communications Committee that ensures long-term success of the communications plan

Social Media and Blog Manager

We recommend hiring a contract freelance Social Media and Blog Manager to oversee implementation of the CSSS Social Media Strategy and blog for non-specialists. Hiring a Social Media and Blog Manager would advance the CSSS mission and achieve the CSSS Communications Plan objectives. Social media is a crucial channel for widely promoting the wise use of soil, especially with non-specialists. Engaging new audiences and increasing outreach to non-specialists ensures the continued relevancy of CSSS and soil science in Canada. As well, internal communications would benefit from social media where members are already highly engaged, as shown by the CSSS Member Communications Survey. The expertise of a Social Media and Blog Manager would ensure consistent posting and effective engagement on these social media platforms.

The Social Media and Blog Manager will coordinate the implementation of the CSSS Social Media Strategy and blog for non-specialists. They will set key performance indicators and curate campaign ideas to best engage key audiences. They will create and curate content, as well as evaluating and reporting on key performance indicators.

Summary of recommendations for the Social Media Manager:

 Create, market, and hire a volunteer position of Social Media and Blog Manager to maintain the future social media strategy

Communications Funding

In order to ensure effective implementation of the CSSS Communications Plan, financial resources will be required. A full cost breakdown of required resources can be found in *VI. Required Resources*.

B. Advance current communications channels

Email Newsletters

The email newsletters are effective tools with which to engage CSSS members that are personal and take advantage of daily engagement with emails. We recommend that they are continued to be used with the following considerations. To better engage soil practitioners, industry workers, and post-secondary students who seek specific, relevant information, newsletter templates with separate colored headings should be used for information relevant to academics as compared to professionals. These design

templates will allow members to quickly see what information is relevant to them without reading the entire newsletter. These templates will also create a more engaging design that is accessible to a less academic audience. Next, based on conversations about past email newsletter formats, we recommend that the *From the Field* member spotlight is added back in to the templates. This is an opportunity to show appreciation for members, build new connections and relationships, and showcase engaged members who are contributing content to motivate others to act similarly.

Summary of recommendations for email newsletters:

- Create design templates
- Emphasize academic or professional information through colored headings
- Showcase members in a From the Field spotlight

Articles on Communication Best Practices

Members currently contribute communications content, including article and conference suggestions to be included in the newsletter. As the CSSS communications channels grow, opportunities for members to contribute content will similarly increase. Members will have opportunities to write blogs and social media posts, host webinars, and share photography. To support member content contribution, we recommend developing an easily accessible set of articles on communications best practices. These articles can be prepared and posted on the CSSS website. They will act as constant resources that can be used for member professional development. If there is an expectation of members contributing to communications, we recommend making support and training available.

Summary of recommendations for articles on communication best practices

 Support member communications contributions by writing science communication articles for the CSSS website for members to reference while producing communications content

Photography Competitions

In the spring 2020 CSSS Newsletter, the first photography competition was launched. This provides an opportunity for members to share beautiful imagery that can be used in future communications initiatives. We recommend establishing the photography competition as an annual event with monetary prizes to incentivize participation. For example, prizes could be \$300 for first prize, \$200 for second prize, and \$100 for third prize. There could also be two categories for photograph entry to create more opportunities for participation: high resolution photographs and photographs taken on smartphones. Social media, blogs, and the Canadian Journal of Soil Science all require beautiful imagery. A photograph competition will increase participation and content contributions.



Summary of recommendations for photography competitions:

 Host an annual photography competition with two categories (high resolution and smartphone) with monetary prizes

C. Implement new communications channels

Social Media

Social media is an effective tool to promote brand awareness with high levels of engagement from public, non-specialist audiences (Saffer et al., 2013). This tool can effectively be used for outreach, which is a key objective of the CSSS Communications Plan. Social media can engage diverse audiences and foster the connections that the communications plan seeks. In particular, increased Twitter interactivity can be used to enhance organization-public relationships (Saffer et al., 2013).

We recommend that a social media strategy focus on Twitter, LinkedIn, and Facebook. Twitter is a popular platform for academics and scientists that increases reach, encourages public engagement, and successfully disseminates information (Greenhow & Robelia, 2009; Shah & Cox, 2017). LinkedIn is a platform that promotes communication between organizations, solidifying CSSS's relevancy. As well, it is used by almost half of members for professional communication, as shown by the CSSS Member Communications Survey. LinkedIn provides a platform to celebrate member accomplishments and build professional networks. Facebook is the platform with the greatest reach and number of users (Rival IQ, 2020) and can be used to build awareness of CSSS and the CSSS community.

We recommend that the core of the social media strategy focuses on Twitter. If a Social Media and Blog Manager is hired, we recommend launching LinkedIn and Facebook accounts simultaneously to increase overall reach with guaranteed sustainability. However, if this position is not hired, we recommend a staged roll-out focusing on Twitter. Considerations can be made for launching a LinkedIn and Facebook pages at a later time. These considerations would be based upon the success and sustainability of the Twitter account and social media management structure.

Twitter is beneficial because it engages audiences rather than simply disseminating information. Research shows that Twitter is a successful tool for having professional and scientific conversations (Shah & Cox, 2017), supporting communication at conferences (Ross et al., 2011), enhancing learning and teaching (Greenhow & Robelia, 2009), and creating globally connected networks of practitioners and researchers (Trust et al., 2017). Furthermore, Twitter allows academics to share information and resources and reach wider audiences (Shah & Cox, 2017). Academic



papers that were tweeted accumulate four times more citations when compared over one year to papers that were not tweeted (Luc et al., 2020).

Twitter will further benefit CSSS because it will create engagement with new audiences, including students, hobbyists, and enthusiasts. Twitter promotes more accessible academic communication and more positive views of academic researchers (Shah & Cox, 2017).

We recommend that the strategy for the Twitter account consider diverse audiences and focus different content and campaigns on reaching each distinct audience equally. For example, within a week, one tweet will focus each on soil scientists (ex. latest research article from the Canadian Journal of Soil Science), practitioners and industry (ex. blog post from the Soil Science Society of America focused on farming improvements), hobbyists and enthusiasts (ex. CSSS non-specialist blog post), and post-secondary students (ex. promoting student membership). The strategy can also include recommendations for the types of hashtags to use to create a cohesive community between soil scientists (ex. similar hashtags to other counties' soil societies), reach non-specialists (ex. popular hashtags used by gardeners), and create a distinct Canadian soil science community (ex. novel hashtags). Social media can also be used for *From the Field* scientist, practitioner, and student spotlights.

The most common obstacles faced by organizations in the implementation of social media is a lack of time, manpower, and money (NASDAQ OMX Corporate Solutions, 2020). We recommend securing sufficient resources before launching social media to ensure success.

Summary of recommendations for social media:

- Develop a social media strategy focused on Twitter, with long term considerations for adding a LinkedIn and Facebook page
- Consider diverse audiences and focus different weekly content and campaigns on reaching different audiences (ex. promoting student membership, link to specialist and non-specialist articles)
- Showcase From the Field scientists, practitioners, and students

Blog for Non-Specialists

In order to engage non-specialists, including hobbyists and enthusiasts, it is important to create content that would directly engage them. The internal activities of the CSSS and scientific journals may not be relevant to the daily activities of the general public. We commend shifting the focus to the creation of new content. Based on the success of the SSSA *Soils Matter* blog, we recommend that the CSSS implement a new

non-specialist blog on a separate website with cross promotion of blogs to other social media platforms.

Based off of the strengths of similar blogs (*Soils Matter* from SSSA, *Soils At Guelph* from the University of Guelph, *Yaffle* from Memorial University), an ideal platform for CSSS would be a separate website that allows for clear acknowledgment of the blog's author, tagging articles by topic for organization, and review of past blog articles. These features allow for a more personal feel to the blog and easier searching of past articles. We recommend creating a separate website for the blog, hosted on WordPress. The strength of the current CSSS website is the professional design and focus on member content. These strengths appeal to member audiences but will disengage non-specialist audiences. A separate website, clearly linked to the main CSSS website, can be designed with non-specialist audiences in mind.

Blog content would be written by members and consist of one to three articles written each month, dependent on member contributions. The articles would be written for non-specialist audiences with a focus on clear applications. Article writing opportunities will be equally promoted to all members of the CSSS, with the goal of providing a platform for students, scientists, practitioners, industry, and government workers alike. This will achieve the broader objective of building connections within the CSSS, engaging diverse members, and connecting these diverse members with the public. A Social Media and Blog Manager would be responsible for maintaining the blog, posting articles, ensuring efficient search engine optimization, completing evaluation reports, and working with members to edit articles and ensure best practices and accessible language are used.

Summary of recommendations for a blog for non-specialists:

- Implement a blog focused on non-specialist content, hosted by WordPress
- Include science spotlights and public-facing, accessible posts
- Write blogs as a collaboration between members and a Social Media and Blog Manager

Webinars

Webinars have the potential to successfully engage diverse audiences. Webinars are cost-effective when compared to in-person seminars, allow for increased collaboration between multiple speakers, and achieve greater audience reach (Verma & Singh, 2010). There are three distinct audiences that could be engaged by CSSS webinars. Firstly, hobbyists and enthusiasts could be uniquely engaged through the creation of specialized content, similar to the non-specialist blog. Content could include gardening best practices or community impacts of climate change or soil erosion.



Secondly, post-secondary students could be engaged in evidence based research that enriches their studies and connects them to current researchers and research. Thirdly, members could be engaged with other members, fostering collaboration and connection, by participating in soil science webinars on new topics.

To decrease the required resources and further connect the CSSS with national and international partners, collaborative webinars could be run. For example, a collaborative webinar could be run with the SSSA. The SSSA currently runs webinars, promoting the content on their website as both live and recorded material. Collaborative webinars with the SSSA would increase reach and promotion of the CSSS. Furthermore, collaborative webinars could be held with museums and science centers to engage with unique audiences.

Summary of recommendations for webinars:

- Host 1-3 annual webinars focused each on hobbyists and enthusiasts, postsecondary students, and CSSS members
- Collaborate with the SSSA on webinars to increase reach.

Undergraduate Student Outreach

Part of the mission of CSSS is to foster integration of new students into the society. An obstacle in reaching undergraduate students is the small percentage of the large population of total students that is actively engaged in soil science. To overcome this obstacle, professors of undergraduate soil science courses can be targeted. We recommend providing resource packages to undergraduate professors that include assignments (ex. reviewing latest Canadian Journal of Soil Science publication), competitions (ex. photography competition), and student opportunities (ex. write a blog for CSSS). We recommend preparing these packages over the Spring semester and sending them to targeted professors at the beginning of the Fall semester.

Summary of recommendations for undergraduate student outreach:

 Target undergraduate professors with resource packages at the beginning of the Fall semester that promote student opportunities, CSSS competitions, and sample assignments

VI. Required Resources

In order to successfully implement this communications plan, the following resources will be required.



Table 6 Proposed communications budget

Social Media and Blog Manager \$30-\$35/hr for low level managers 10-20 hr/month for social media 10-20 hr/month for blog Blog for non-specialists Platform: WordPress Type of account: Premium Key features: Unlimited premium themes (allows for responsive designs from computer to mobile devices) Advanced design customization and complete control over website CSS Remove WordPress.com Ads Advanced social media to schedule social media updates and promote posts VideoPress support (upload videos to website and display them with rich statistics beyond just YouTube) Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: Manage 3 social profiles Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	Item	Cost
10-20 hr/month for social media 10-20 hr/month for blog Blog for non-specialists Platform: WordPress Type of account: Premium Key features: • Unlimited premium themes (allows for responsive designs from computer to mobile devices) • Advanced design customization and complete control over website CSS • Remove WordPress.com Ads • Advanced social media to schedule social media updates and promote posts • VideoPress support (upload videos to website and display them with rich statistics beyond just YouTube) • Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: • Manage 3 social profiles • Schedule posts • Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest • Create and collect content to be used for social media, blog, website, and journal • 3 prizes for graduate students (\$300, \$200, \$100) • Two categories (phone and high resolution photos) Social Media Advertising • This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	Social Media and Blog Manager	\$12,600/year
10-20 hr/month for blog recommended	\$30-\$35/hr for low level managers	(\$35/hr, 30
Blog for non-specialists Platform: WordPress Type of account: Premium Key features: • Unlimited premium themes (allows for responsive designs from computer to mobile devices) • Advanced design customization and complete control over website CSS • Remove WordPress.com Ads • Advanced social media to schedule social media updates and promote posts • VideoPress support (upload videos to website and display them with rich statistics beyond just YouTube) • Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: • Manage 3 social profiles • Schedule posts • Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest • Create and collect content to be used for social media, blog, website, and journal • 3 prizes for graduate students (\$300, \$200, \$100) • Two categories (phone and high resolution photos) Social Media Advertising • This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	10-20 hr/month for social media	hr/month
Platform: WordPress Type of account: Premium Key features: • Unlimited premium themes (allows for responsive designs from computer to mobile devices) • Advanced design customization and complete control over website CSS • Remove WordPress.com Ads • Advanced social media to schedule social media updates and promote posts • VideoPress support (upload videos to website and display them with rich statistics beyond just YouTube) • Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: • Manage 3 social profiles • Schedule posts • Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest • Create and collect content to be used for social media, blog, website, and journal • 3 prizes for graduate students (\$300, \$200, \$100) • Two categories (phone and high resolution photos) Social Media Advertising • This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	10-20 hr/month for blog	recommended)
Type of account: Premium Key features: Unlimited premium themes (allows for responsive designs from computer to mobile devices) Advanced design customization and complete control over website CSS Remove WordPress.com Ads Advanced social media to schedule social media updates and promote posts VideoPress support (upload videos to website and display them with rich statistics beyond just YouTube) Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: Manage 3 social profiles Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	Blog for non-specialists	\$120/year
Unlimited premium themes (allows for responsive designs from computer to mobile devices) Advanced design customization and complete control over website CSS Remove WordPress.com Ads Advanced social media to schedule social media updates and promote posts VideoPress support (upload videos to website and display them with rich statistics beyond just YouTube) Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: Manage 3 social profiles Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	Platform: WordPress	= \$10/month billed
 Unlimited premium themes (allows for responsive designs from computer to mobile devices) Advanced design customization and complete control over website CSS Remove WordPress.com Ads Advanced social media to schedule social media updates and promote posts VideoPress support (upload videos to website and display them with rich statistics beyond just YouTube) Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: Manage 3 social profiles Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	Type of account: Premium	annually
designs from computer to mobile devices) Advanced design customization and complete control over website CSS Remove WordPress.com Ads Advanced social media to schedule social media updates and promote posts VideoPress support (upload videos to website and display them with rich statistics beyond just YouTube) Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: Manage 3 social profiles Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	Key features:	
 Advanced design customization and complete control over website CSS Remove WordPress.com Ads Advanced social media to schedule social media updates and promote posts VideoPress support (upload videos to website and display them with rich statistics beyond just YouTube) Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: Manage 3 social profiles Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	 Unlimited premium themes (allows for responsive 	
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 Remove WordPress.com Ads Advanced social media to schedule social media updates and promote posts VideoPress support (upload videos to website and display them with rich statistics beyond just YouTube) Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: Manage 3 social profiles Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	 Advanced design customization and complete control 	
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 VideoPress support (upload videos to website and display them with rich statistics beyond just YouTube) Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: Manage 3 social profiles Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. Total cost will vary depending world soils Day. 	 Advanced social media to schedule social media 	
display them with rich statistics beyond just YouTube) Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: Manage 3 social profiles Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	updates and promote posts	
Google Analytics Integration (track website statistics for understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: Manage 3 social profiles Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	 VideoPress support (upload videos to website and 	
understanding of website visitors) Social Media Management Platform: Hootsuite Type of account: Free Key features: • Manage 3 social profiles • Schedule posts • Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest • Create and collect content to be used for social media, blog, website, and journal • 3 prizes for graduate students (\$300, \$200, \$100) • Two categories (phone and high resolution photos) Social Media Advertising • This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	display them with rich statistics beyond just YouTube)	
Social Media Management Platform: Hootsuite Type of account: Free Key features: • Manage 3 social profiles • Schedule posts • Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest • Create and collect content to be used for social media, blog, website, and journal • 3 prizes for graduate students (\$300, \$200, \$100) • Two categories (phone and high resolution photos) Social Media Advertising • This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	Google Analytics Integration (track website statistics for	
Platform: Hootsuite Type of account: Free Key features: • Manage 3 social profiles • Schedule posts • Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest • Create and collect content to be used for social media, blog, website, and journal • 3 prizes for graduate students (\$300, \$200, \$100) • Two categories (phone and high resolution photos) Social Media Advertising • This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	understanding of website visitors)	
Type of account: Free Key features: • Manage 3 social profiles • Schedule posts • Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest • Create and collect content to be used for social media, blog, website, and journal • 3 prizes for graduate students (\$300, \$200, \$100) • Two categories (phone and high resolution photos) Social Media Advertising • This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.		Free
 Key features: Manage 3 social profiles Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	Platform: Hootsuite	
 Manage 3 social profiles Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	Type of account: Free	
 Schedule posts Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	Key features:	
 Manages Twitter, Facebook, LinkedIn, and WordPress Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	Manage 3 social profiles	
 Annual Photography Contest Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	Schedule posts	
 Create and collect content to be used for social media, blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	 Manages Twitter, Facebook, LinkedIn, and WordPress 	
blog, website, and journal 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day.	Annual Photography Contest	\$600-\$1200
 3 prizes for graduate students (\$300, \$200, \$100) Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	 Create and collect content to be used for social media, 	
 Two categories (phone and high resolution photos) Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	blog, website, and journal	
 Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	 3 prizes for graduate students (\$300, \$200, \$100) 	
 Social Media Advertising This cost will vary depending on budget and goals. We recommend budgeting for social media advertising for major events, including World Soils Day. 	 Two categories (phone and high resolution photos) 	
recommend budgeting for social media advertising for major events, including World Soils Day.		\$500
recommend budgeting for social media advertising for major events, including World Soils Day.	This cost will vary depending on budget and goals. We	
TOTAL COST \$14,420	major events, including World Soils Day.	
	TOTAL COST	\$14,420

Social Media Manager Cost References

• \$15-\$50/hour for 0-3 years' experience (https://blog.socialmediastrategiessummit.com/how-much-charge-social-media-management/)



- \$25-\$35/hour for 10-20 hours per month (https://mavsocial.com/how-much-charge-social-media-management/)
- \$30/hour (https://neuvoo.ca/salary/?job=Social%20Media%20Manager)
- \$26/hour (https://www.glassdoor.ca/Salaries/social-media-manager-salary-SRCH_KO0,20.htm)
- Reference: Social Media Manager, Carleton University Neuroscience Department \$50/hour
- Reference: SSSA spends 10-20 hours/month on blog management
- Reference: PRSSS, 2 unpaid social media volunteers
- Reference: CGU struggled with volunteer Social Media Managers



VII. Recommended Next Steps

Table 7 Summarized Implementation Schedule

ROLLOUT SCHEDULE	Jun. 2020	Jul. 2020	Aug. 2020	Sept. 2020	May 2021	Jun. 2021	Sept. 2021	May 20222	Jun. 2022
Communications	Approve	LULU	1020	LULU		2021	2021	LULL	Review
Plan	at AGM								11011011
Communications		Meeting				Meeting			Meeting
Committee									
Social Media		Hire							Review
Manager									position
Redesign	Comm.								
newsletter	Intern								
templates	proposes								
Science	Comm.								
Communication	Intern								
articles	writes								
Photography	Contest				Contest			Contest	
Contest									
Twitter	Relaunch	Posting TBD	Posting by	Social Med	dia Manage	er →			
LinkedIn			Launch	Posting b	y Social Me	edia Manag	er →		
Facebook						Launch	Posting b Manager	y Social Me →	edia
Blog		Begin article writing		Launch	Posting by Social Media Manager →				
Webinar series							Launch		
Undergraduate					Begin to		Launch		
student					develop				
assignments									
and									
competitions									



Table 8 Detailed Implementation Schedule

	CHEDULE projected time	
Date	Key step	Description of planning and production activities
June 2020	Relaunch Twitter account Redesign newsletter Develop science	 CSSS Communications Intern to relaunch Twitter account with new branding and a plan for consistent posting CSSS Communications Intern to propose new template for newsletter Develop resources to distribute to members that provide blog and social
	communication tools for members First annual photography competition	media tips when producing or suggesting content Launched by Gazali Isaah in the May 2020 newsletter, the first graduate student photography competition is to be held
June 23, 2020	CSSS AGM	Members vote for approval on Communications Plan and Social Media Strategy
July 2020	Hire Social Media Manager	Advertise, interview, and hire Social Media Manager to oversee Twitter and continue with implementing the Social Media Strategy
	Communications Committee meeting	First meeting of the Communications Committee to review new plan and discuss implementation
August 2020	Launch LinkedIn page	Social Media Manager to launch LinkedIn organization page
September 2020	Launch blog	Social Media Manager to launch blog with consistent posting every month, using articles and content calendar developed in advance
May 2021	Second annual photography competition	•
	Develop undergraduate professor outreach	Soil Education Committee to begin development of resources and select competitions to undergraduate professors that promote student engagement with the CSSS (ex. students compete to write soil science blog with winner posted on CSSS blog; class assignment to review and report on CSSS social media)
June 2021	Communications Committee meeting	 Set communication objectives for upcoming year Evaluate Communications Plan and Social Media Strategy for necessary changes



		 Decide on 2021 webinar schedule Decide on major events that require media release packages and delegate roles to expert members
	Launch Facebook page	Social Media Manager to launch Facebook page, dependent on success of Twitter and LinkedIn
September 2021	Launch first set of webinars	 Launch first set of webinars for with each webinar aimed at a specific audience: members, hobbyists and enthusiasts, undergraduate students, youth educators
	Launch undergraduate student/professor outreach	Soil Education Committee to launch and promote resources and select competitions to undergraduate professors that promote student engagement with the CSSS (ex. students compete to write soil science blog with winner posted on CSSS blog; class assignment to review and report on CSSS social media)
May 2022	Third annual photography competition	•
June 2022	Social Media Manager position evaluation	 Reflect on accomplishments and advancement of social media objectives Reflect on whether the CSSS can sustain a long term Social Media Manager
	Communications Committee Meeting	•



VIII. Communications Plan Evaluation

We recommend that the CSSS Communications Committee strive to track its impact using a set of concrete metrics for each tactic. The following metrics are recommended for the two year trial period (2020-2022). All goals are to be achieved by June 2022. As the CSSS Communications plan is updated, these metrics should be revised.

Recommendation 1: Build communications capacity Metrics for Recommendation 1:

- The formation of a CSSS Communications Committee by 8/2020 with clear mandate and robust participation, as measured by attendance at meetings and follow-up on committee assignments
- Creation of Social Media Manager position with staff hired by end of 2020

Recommendation 2: Advance current communications channels Metrics for Recommendation 2:

- As compared to the 2020 CSSS Member Communications Survey, the 2022 survey should show an increase in positive sentiment towards the newsletter (higher than 61.4%), as well as consistent number of total members reading the newsletter PDF attachments (98.1%) and more members "often" reading them (higher than 71.9%) as compared to "sometimes"
 - Goal: 75% of members like the PDF attachment newsletters, 98.1%
 "often" (80%) or "sometimes" (18.1%) open the newsletter attachments

Recommendation 3: Implement new communications channels Metrics for Recommendation 3:

- Increase in total number of members registered with CSSS (in 2019, 284 members registered)
 - Goal: 10% increase in total membership (312 members)
- Increase in number of students registered as members (in 2019, 45 members registered as an undergraduate or graduate student)
 - o **Goal:** 10% increase in student members (50 student members)
- Social media and blog evaluation is further outlined in the CSSS Social Media Strategy
 - Number of followers on social media (June 15, 2020 Twitter = 162 followers)
 - **Goal:** June 2022 Twitter = 450 followers, LinkedIn = 100 followers, Facebook = 100 followers
 - Engagement rate on social media platforms (link clicks, likes, shares, comments, mentions)
 - Goal: June 2022 engagement rate Twitter = 0.5%, LinkedIn = 0.5%, Facebook = 1%
 - Total website traffic



- **Goal:** 10% increase in CSSS website traffic, representing an increase in member interest and engagement
- o Total blog traffic
 - Goal: 1000 views a month with average engagement rate of 2%
- Number of webinars hosted and number of attendees at each webinar
 - Goal: 3 total webinars hosted from June 2020 June 2022 with 20-30 attendees at each webinar



IX. Communication Plan Spreadsheet

Key Audience	Communications Objectives	Key Messages	Tactics	Timeline	Priority Level
CSSS members – soil scientists	Increase awareness and interaction between CSSS and non-specialist audiences by (1) raising awareness of the value of the CSSS and the impact CSSS science has within the broader scientific	 Your contributions are valuable and make an impact on society. Collaboration between scientists, practitioners, 	Email newsletters	 One member email newsletter sent out to all members 3 times per year (once per semester) Send out member email 2 weeks in advance requesting content submissions From the Field scientist spotlight once per year Every newsletter should include a section on "Calls for Content" 	HIGH
	community and (2) promoting opportunities for scientists to contribute and impact society • Facilitate beneficial collaboration and interactions by (1) facilitating collaboration, learning,	promoting opportunities for scientists to contribute and impact society Facilitate beneficial collaboration and interactions by (1) facilitating collaboration, learning,	scientists Share journal articles 1-2 per week Share journal articles published by CSSS members as soon as	HIGH	
	and information sharing between CSSS scientists and the broader scientific community and (2) promoting a shared mission and sense of community in the soil		Social media (LinkedIn) – share information about prize winners and scientist spotlights	 Post once every 2 weeks Share posts with focus on scientist accomplishments, including showcasing blog authors, award winners, or From the Field science spotlights 	MEDIUM



	science field by strengthening communication channels Contribute to scientist's research through the dissemination of research and academic opportunities		Articles on communication best practices to support member content sharing Webinar to showcase member research	Posted once by the Communications Intern, May-June 2020 Once per year	LOW
CSSS members – practitioners and industry	 Promote practical implications of soil science on their work Strengthen the connections between practitioners and soil scientists as a means to integrate practical knowledge with research and ensure relevancy Acquaint them with contacts in the field Strengthen their sense of community in the Canadian soil science field 	 Collaboration with soil researchers can lead to solutions that can help you in your practice Real world experience can better inform practical soil science research The soil science network in Canada is a valuable community that can benefit your work. 	Email newsletters	 Develop email templates to emphasize information relevant to academics vs professionals (June 2020) One member email newsletter sent out to all members 3 times per year (once per semester) Send out member email 2 weeks in advance requesting content submissions From the Field practitioner spotlight once per year 	HIGH
			Social Media (Twitter) – share links to blog resources, showcase practitioners and their impact on soil science Social media	 Tweets once per week focused on practitioners From the Field showcase on practitioners once per year, cross promoting with newsletter 	HIGH
			(LinkedIn) – share information about prize	 Post once every 2 weeks Share posts with focus on scientist accomplishments, including showcasing blog 	MEDIUM



			winners and scientist spotlights Articles on communication best practices to support member content sharing	 authors, award winners, or From the Field science spotlights Posted once by the Communications Intern, May-June 2020 	LOW
			Webinar to showcase member collaboration or impact on research	Once per year	LOW
Graduate students	 Foster the integration of students into the professional soil science community Support student academic and professional development 	 Your contributions are valuable and make an impact on society. Collaboration and interaction with the CSSS will benefit your short-term career and long-term impacts. 	Email newsletters	 Develop email templates to emphasize information relevant to students (June 2020) One member email newsletter sent out to all members 3 times per year (once per semester) Send out member email 2 weeks in advance requesting content submissions From the Field spotlight on one student once per year, cross promoted with social media Promote opportunities for graduate students to write blog posts, with a focus on transferrable professional skills 	HIGH
			Social media (Twitter) (promote awards, jobs,	 Tweets once per week focused on students From the Field showcase on a student, once per year, cross promoting with newsletter and LinkedIn 	HIGH



			and opportunities) Social media (LinkedIn)	 Promotion of student award winners From the Field showcase on a student, once per year, cross promoting with newsletter and Twitter Promotion of student award winners 	MEDIUM
			Photography contest	 winners Once a year, 1-2 months before annual conference with promotion of winners at conference 3 awards of \$300, \$200, and \$100 	MEDIUM
			Webinars	1-2 webinars per year, cross promoted for graduate students, about professional development of skills and how to gain relevant experiences	LOW
Canadian scientific societies and organizations	 Disseminate research and practical application of findings in soil science Foster collaboration between scientists in diverse disciplines 	 The CSSS is a relevant, essential part of the Canadian scientific community. Soil science is a critically relevant field that impacts many other scientific disciplines. 	Social media (Twitter)	Develop meaningful, purposeful event-specific communications plans surrounding relevant holidays, conferences, and related events with tweet mentions and tweet sharing ahead of time for cross-platform promotion	HIGH
			Blog for non- specialists	Share meaningful blog articles with relevant societies and organizations through social media or direct sharing through email and contacts	MEDIUM
	 Provide accessible, evidence-based 		Blog for non- specialists	2-3 articles per semester (5-10 per year)	MEDIUM



Hobbyists and enthusiasts	information on soil- related topics for helping gardeners, small-scale farmers, and environmental stewards to pursue their interests Communicate the practical applications of soil science Encourage the "wise use" of soil to ensure	 Soil science is accessible to non-scientists Understandin g soil science can help improve your practice and make your practice more sustainable Soil science is CSSS Website 	 Promote new topics of interest and calls for blogs in every member email newsletter Promote content as blog posts are released Promote past blog posts around key dates (ex. International Soils Day) Retweet accessible resources (ex. Blogs from SSSA) 1-2 times per week Updates proposed by
	practices are sustainable Foster a connection between scientists and the public through curiosity	a part of many aspects of our life and acknowledgin g its impacts can benefit you day-to-day activities Webinars (Conversations with Soil Experts) (collaboration with SSSA)	Communications Intern in June 2020 Updates made to website by September 2020 2 times per year LOW
Undergradua te students	 Foster the integration of students into the professional soil science community Reach a greater number of students in soil science-related programs 	 Soil science is a field critical to issues of sustainability and environmental ism in our society and has a wealth of career paths The CSSS is a reliable source of up- 	 Promote student memberships in Nov-Feb, to ensure maximum benefit to students to enroll in one year membership Promote student membership and poster opportunities before conference Promote student blog writing opportunities, with focus on transferable professional skill development Mention relevant universities in all social media posts and push for retweeting by host



		to-date information on soil science and soil science research in Canada, and provides valuable academic and professional	Webinars	organizations to increase reach to where undergraduate students are already engaged Engage with university student chapters on social media through mentions and tweets 1-2 webinars per year, cross promoted for graduate students, about professional development of skills and how to gain relevant experiences	LOW
		networking opportunities	Professor Outreach	Develop resources and select competitions to undergraduate professors that promote student engagement with the CSSS (ex. students compete to write soil science blog with winner posted on CSSS blog; class assignment to review and report on CSSS social media)	LOW
International organizations	 Foster collaboration between CSSS and international scientists Increase the relevancy of the CSSS and Canadian researchers by raising awareness of the value of the CSSS and the impact 	The CSSS, CSSS members, and Canadian soil science is a relevant, essential part of the international	Social media (Twitter)	 Consistent posting on social media and engagement with Canadian audiences will increase the authority of the CSSS Promote collaborative research or key international research findings as they become available 	LOW
	CSSS science has within the international scientific community	scientific community	Newsletter	 Promote international events in newsletter to encourage engagement by members 	LOW
Youth educators	Provide accessible, evidence-based	Soil science is an important	Social media (Twitter)	Promote Soil Education Committee resources and blog	LOW



	information to enhance soil science education to youth, including in formal K- 12 levels	scientific field that is essential to the understanding		posts using relevant, popular education hashtags 1-2 tweets per month aimed at supporting youth educators and providing accessible resources	
	 Encourage the "wise use" of soil to ensure practices are sustainable 	of environmental health and sustainability	Webinars	 Host teacher specific webinars, marketed through popular channels, to discuss soil education and accessible resources 	LOW
Media	 Increase reach to previously identified priority audiences by using pre-established platforms and channels Promote key accomplishments and events of the CSSS 		Media release packages	Create event specific media release packages to achieve event specific communications objectives	LOW



X. References

- Canadian Society of Soil Science. (March 2020). "CSSS Newsletter". Retrieved from https://csss.ca/wp-content/uploads/CSSS-March-2020-3.pdf
- Canadian Society of Soil Science. (2019). "About CSSS". Retrieved from https://csss.ca/about/
- Greenhow, C. & Robelia, B. (2009). Informal learning and identify formation in online social networks. *Learning, Media, and Technology, 34*(2), 119-140. http://doi.org/10.1080/17439880902923580
- Luc, J.G.Y., Archer, M.A., Arora, R.C., Bender, E.M., Blitz, A.,..Antonoff, M.B. (2020). Does tweeting improve citations? One-year results from the TSSMN prospective randomized trial. *Ann Thorac Surg.* S0003-4975(20)30860-2. doi: 10.1016/j.athoracsur.2020.04.065. Online ahead of print.
- NASDAQ OMX Corporate Solutions. (2020). *Structuring a social media team* [PDF file]. Retrieved from
 - https://web.ragan.com/raganforms/Structuring_A_Social_Media_Team.pdf
- Rival IQ. (2020). 2020 Social Media Industry Benchmark Report [Web]. Retrieved from https://www.rivaliq.com/blog/social-media-industry-benchmark-report/
- Ross, C., Terra, M., Warwick, C., & Welsh, A.. (2011). Enabled backchannel: conference Twitter use by digital humanists. *Journal of Documentation*, *67*(2), 214-237.
- Saffer, A.J., Sommerfeldt, E.J., & Taylor, M. (2013). The effects of organizational Twitter interactivity on organization-public relationships. *Public Relations Review,* 39(3), 213-215. https://doi.org/10.1016/j.pubrev.2013.02.005
- Shah, N. & Cox., A.. (2017). Uncovering the scholarly use of Twitter in the academia: experiences in a British university. *Malaysian Journal of Library & Information Science*, *22*(3). https://doi.org/10.22452/mjlis.vol22no3.6
- Trust, T., Krutka, D.G., & Carpenter, J.P.. (2016). Together we are better: Professional learning networks for teachers. *Computers & Education*, 2012, 15-34.
- Verma, A. & Singh, A.. (2010). Webinar Education through digital collaboration. *Journal of Emerging Technologies in Web Intelligence*, 2(2). doi:10.4304/jetwi.2.2.131-136

Appendix A - CSSS Member Communication Survey

Thank you for taking the time to share your thoughts and opinions on communications with the Canadian Society of Soil Science. The goal of this survey is to assess present and proposed future communications to determine the best, most efficient manner in which to share information, facilitate collaboration within the society, and reach new audiences.

This survey data is being assessed by a team of Science Communication Masters students from Laurentian University, as well as the CSSS Communications Intern. If you have any questions about the survey and its evaluation, please contact the CSSS Communications Intern Samantha Fowler at sfowler@laurentian.ca

- 1. Are you on social media?
 - a. Yes
 - b. No
- 2. If you are on social media, what social media platforms do you use most often for professional communications and networking? (Select all that you commonly use)
 - a. Facebook
 - b. Twitter
 - c. Instagram
 - d. Linkedin
 - e. I am not on social media
 - f. Other:
- 3. Do you read the emails sent to CSSS members?
 - a. Never
 - b. Sometimes
 - c. Often
- 4. Do you open the newsletter PDF attachments on emails sent to CSSS members?
 - a. Never
 - b. Sometimes
 - c. Often
- 5. Do you access the CSSS newsletter PDF through the CSSS website?
 - a. Never
 - b. Sometimes



- c. Often
- 6. Do you like the newsletters in the form of a PDF attachment?
 - a. Yes
 - b. No
 - c. Neutral
- 7. Would you be interested in contributing to or creating content for CSSS communications?
 - a. Yes
 - b. No
- 8. If yes, what type of content would you be willing to contribute to? (Select all that apply.)
 - a. Writing blog posts
 - b. Creating social media content
 - c. Sharing photography or imagery
 - d. Sharing conference suggestions
 - e. Sharing research article suggestions
 - f. Collaborating on webinar sessions
 - g. Participating in a question and answer session
 - h. Being filmed for a video
 - i. I would not be interested in contributing to any communications initiatives.
 - i. Other:
- 9. Would you be interested in being contacted to further discuss CSSS communications? If so, please provide your email here:
- 10. How would you like to see CSSS communications improved?
- 11. CSSS Communications seeks to engage with new audiences (including undergraduate students, industry, and non-specialists hobbyists and science enthusiasts). If you have any ideas on how to connect with these new audiences, please share them here or contact the CSSS Communications Intern at sfowler@laurentian.ca.

Appendix B – CSSS Member Communication Survey Response Summary

May 26, 2020

A. Survey Response Statistics

Responses = 54 non-students + 5 graduate students = 59 total responses Response Rate = 19.8% of total membership

B. Summary of Responses by Category

Part I: Social Media

<u>Goal:</u> To understand how CSSS members are currently using social media to best match new initiatives to current engagement levels.

<u>Summary:</u> The survey results suggest that social media is a potentially successful platform for engaging members due to current high usage. However, one-quarter of members do not use social media; therefore, cross-promotion of content across other platforms will be important to ensure effective communication to all members. Results were consistent across professional and student members.

75.0% of CSSS members are on social media, with the most popular platforms used for professional communications and networking being Facebook (49.1%), LinkedIn (49.1%), and Twitter (43.6%).

Other social media platforms that were suggested include: Research Gate, YouTube, WeChat, Sina Weibo, Tencent, and QQ.

Part II: Member Emails and Email Newsletters

<u>Goal:</u> To understand the current engagement rates and success of member emails and email newsletters, which do not currently track these metrics.

<u>Summary:</u> The survey results suggest that member emails and email newsletters are a successful communications channel with high engagement rates. Although not a common way of accessing the newsletter, as significant portion of members also access the newsletter PDF through the website.

100% of CSSS members often (84.2%) or sometimes (15.8%) read emails sent to them, while 98.2% often (71.9%) or sometimes (26.3%) open the newsletter PDF attachments. 49.1% of members access the CSSS newsletter PDF through the CSSS website. 61.4% of members like the newsletters in the form of a PDF attachment. Engagement with emails and newsletters was slightly lower with graduate students, but results are not significant due to a small sample size.



Part III: Member Content Contribution

<u>Goal:</u> To explore the possibility of members contributing to the sustainability of novel communications channels by creating and contributing content.

<u>Summary:</u> 49.1% of survey respondents are willing to contribute to or create content for CSSS communications. The most popular types of content members are willing to contribute are photography or imagery, conference and research article suggestions, or collaborating on webinar or question and answer sessions. The question asking about specific contributions had a low completion rate at only 64.4%.

The least number of members are willing to create social media content. This emphasizes the importance of hiring specialized Social Media Team volunteers to take on this work load, to ensure focused sustainability and to optimize the volunteers interested in contributing to social media.

Other ideas for content contributions included:

- Contributing plain language summaries
- Promoting CSSS activities (including Master's and PhD projects and other high impact activities)
- Commenting on educational materials

Part IV: Improvement of CSSS Communications

<u>Goal:</u> To explore the ideas of CSSS members on how to improve CSSS Communications and engage with new audiences, including undergraduate students, industry, and non-specialist hobbyists and science enthusiasts.

<u>Summary:</u> In general, survey respondents would like to see a more dynamic CSSS communications presence that engages with an increased diversity of audiences, beyond just members.

Novel ideas for communication goals include:

- Develop a social media strategy that focuses on YouTube with videos promoting soil science
- Increase member engagement with issues of broader societal interest and engagement with society overall

C. Summary of Ideas Generated by CSSS Member Survey Respondents

Who	What	How
	1	1.0.0



CSSS communications strategy	Ensure effectiveness of CSSS Communications strategy	ensure CSSS council approval of messages, especially those political in nature
		I see the CSSS communications helpful but bored and less attractive, make it more attractive?
	Effectively engage with current and new CSSS members	include a French version of all communications
		engage with the Alberta Institute of Argrologist members
CSSS Members	Facilitate beneficial collaboration and	More LinkedIn activity to share with CSSS members' networks
	interactions within CSSS members and with the broader	Connect with other non-profit soil science societies in Canada, e.g., Regeneration Canada
	scientific community	engage with local and regional organizations (ex. PRSSS)
	Celebrate accomplishments and provide recognition to	occasionally list long time members and noteworthy contributions or activity
	members	highlight work, accomplishments, and awards
	Ensure engagement of	More regularity/consistency
	all members	Continue capturing information via emails and newsletters and ensure
		overlap with social media content
		Regular seminar events
		Diversity of types of communication to
		appeal to the wide diversity of
		members (both in terms of their interests and how they engage with
		online communication/social media)
	Promote opportunities	
	for scientists to	
	contribute to and impact society	
	(engagement with	
	broad societal issues)	
Undergraduate	Engage with new	more active student chapters
students	audiences, including	targeted information sharing/effort to
	undergraduate students	connect via university student groups, regional soil societies, etc.



Industry	Engage with new audiences, including industry members	selectively send information to industry members partner with industry associations focus on timely and issue based information		
Non-specialist	Engage with new	Articles		
audiences	audiences, including	Books		
/la a la la criata a mal	non-specialist	local field trips		
(hobbyists and	hobbyists and	Videos about Soil Science		
science	enthusiasts	YouTube channel where members		
enthusiasts)		submit videos		
		Soil art projects		
		focus on timely and issue based		
		information		
		emphasize various aspects of soil		
		science, such as the relationship		
		between soils and health		
		Focus on non-specialist website		
		content (soil interpretation,		
		information, management)		
		online webinars		
		Develop soil portal ie a soil archive		

Additional Notes from Email Follow-Up

Additional email follow-up was conducted to share the summary of responses with survey respondents who indicated an interest in continuing to contribute to communications plan development.

Particular consideration

- Celebrate accomplishments and provide recognition to members
- Ensure engagement of all members
- Highlight work and awards
- Ensure engagement of all members diversity of types of communication to appeal to the wide diversity of members (both in terms of their interest and how they engage with online communication/social media)
- Undergrad students targeted information sharing/effort to connect via university student groups, regional soil societies, etc.

Audiences

- Non-specialist audiences should be our last priority (engage members FIRST)
- Broaden K-12 teachers to just "educators" to include daycare, camp counsellors, university instructors, etc.

Feasibility of non-specialist reach



• "In terms of the 3 communications strategies it really depends on how we can go about it. If we can have a paid position to do this I think all three are feasible and realistic. If it is done voluntarily all three are not realistic or feasible."

Appendix C Social Media and Blog Manager Position Description

We recommend that CSSS seeks a Social Media Manager to engage the CSSS membership and the broader Canadian community in soil science through social media and a blog.

Time Commitment: 20-30 hours per month

Reference: 10-20 hours/month for social media and 10-20 hours/month for blog

Benefit:

By hiring a Social Media Manager, CSSS would advance the CSSS mission and achieve the CSSS Communications Plan objectives. Social media is a crucial channel for widely promoting the wise use of soil, especially within the general public. Engaging new audiences and increasing outreach to the general public ensures the continued relevancy of CSSS and soil science in Canada. As well, internal communications would benefit from social media where members are already highly engaged, as shown by the CSSS Member Communication Survey. The expertise of a Social Media Manager would ensure consistent posting and effective engagement on these social media platforms.

Purpose:

The Social Media Manager will coordinate the implementation of the CSSS Social Media Strategy and the CSSS Blog Strategy. You will set key performance indicators and curate campaign ideas to best engage key audiences, as outlined in the CSSS Communications Plan. You will contribute to content creation and the evaluation and reporting on the key performance indicators.

During a regular week, you will promote the CSSS by creating content, scheduling, posting, and tracking social media posts 4-7 days a week on our platforms, including Facebook, Twitter, and LinkedIn, and WordPress blog.

You will sit on the CSSS Communications Committee and report on marketing metrics and contribute to the development of big picture goals.

You will manage two Social Media Content Creators in the creation and curation of social media content. You will collaborate with diverse members of the CSSS to develop and edit blog posts.

Social Media Responsibilities:



- Oversee creation of monthly content calendars in collaboration with two, volunteer Social Media Content Creators
- Execute the results-driven CSSS Social Media Strategy
- Ensure that communication reaches a wide range of stakeholders and key audiences outlined in the CSSS Communications Plan
- Review analytics and create reports on key performance indicators
- Take part in annual teleconference meetings with CSSS Communications
 Committee members where you will report on metrics and key campaigns
- Grow social media base of followers by following best practices in social media

Blog Responsibilities:

- Oversee creation of annual blog calendars in collaboration with the CSSS Communications Committee
- Write various types of articles, blogs, and other online resources
- Edit articles, blogs, and other online resources produced by CSSS members
- Research and ensure coverage of representative industry topics
- Conduct analytical projects to improve blog strategies and tactics
- Optimize content for search engines (SEO) and lead generation
- Grow blog subscribers and expand the overall blog's reach

Social Media Platform	Daily Responsibilities	Weekly Responsibilities	Monthly Responsibilities
Facebook		 Create or curate 2-4 relevant posts Find and like 5 new pages Comment on 3 community posts 	
Twitter	Create or curate 0-4 engaging Twitter posts	 Find and follow 5 new accounts Retweet 3 new pieces of content Experiment with 1 trending hashtag 	
LinkedIn		 Create or curate 1 new post or article Connect with 1-3 people through endorsements, recommendations, or connections Monitor LinkedIn Groups 	



Blog		Collaborate with blog authors to ensure best practices in blog posts	-	Post 1-2 new articles per month
All platforms	Respond to any/all engagements from follower base	Share at least two relevant articles within the industry to demonstrate further credibility		Communication Evaluation reports Develop monthly content calendar Social sharing of CSSS blog posts as posted

Appendix D Competitor Environmental Scan

Organization	Platforms	Content found on the platform	Followers*	Engagement	What's Working	Opportunities
Soil Science Society of America (SSSA) Overall: very active with diverse content aimed at specialist and non- specialist audiences	Twitter (@SSSA_Soils)	- Key words: business, analysis, research, growing, landscape, soil, soils, team, plants - Mostly sharing articles (95/100 tweets had links) - All articles accompanied by related image - Posts approximately once per day	16,300 followers	- 2-3 retweets and 3-20 likes per post - Top 3 posts were recent review paper (7RT, 22L), research on microbes and soil (13RT, 22L), and research on salt in freshwater affecting irrigation (2R, 8RT, 26L)	- consistent use of brand hashtags (ex. #soils, #research, #food) - maintains engaging images from research - videos from CEO diversify content - a mix of current research and blog posts - mix of theoretical and applications	- few retweets or sharing of related organization's content - often passive voice ("findings suggest" or "research shows") which may not be accessible to non-specialists
	Instagram (@iheartsoil)	- people in action - focus on applications of soil research (food, plants)	1275 followers	- 20-60 likes, 0-1 comment - Top 3 posts were researchers measuring soil from Deepwater	- Gorgeous photos - clean, short captions - relevant hashtags -linktr.ee in bio for articles	- few standalone Instagram content without links and replication from other platforms



Facebook (@SSSA.soils Website (https://www.	- article sharing (mix of research and blog posts) with related image - webinar promotion	26,584 N/A	Horizon oil spill (60 likes), gorgeous farming photo (61 likes, 1 comment), microbes on plant roots (61 likes) - 15-25 likes per Facebook post (consistent engagement rates peak at 75) N/A	- always give credit to photographer or researcher - use related hashtags and mentions - strong resource for	- identical content across all platforms - link social media for
YouTube (Soil Science Socie of America)	- Soils Matter blog for non-specialist audiences (1-3 per month) - non-specialist videos - Learn More section about application based information - webinar content	1660 subscribers	- range of 2- 20K views - Most popular video was July: Soils are	non-specialist audiences - great integration of content from diverse platforms (webinars, podcasts, videos) - diversity of content for non-specialist audiences	- no video posted in 2 years



				Living! With 47K views	- content aimed at different levels and ages within non- specialist audience	
British Society of Soil Science Overall: does a great job of showcasing the people and engaging non-specialists through human connections	Website (https://soils. org.uk/)	- different content geared towards policymakers, professionals, students, teachers, and young soil enthusiasts - active content includes news updates, promotion of events, and promotion of society accomplishments	N/A	N/A	- actively curate and label content for different audiences (website content is organized by audience type, equal emphasis placed on all audiences) - Soil in Action is a strong heading - easy to navigate website	- organization and design of website is slightly out of date
	Twitter (@Soil_Science)	- content retweeted from relevant scientists - event promotion	5,900 followers	5-20 retweets, 5-20 likes	- retweeting frequently - strong "researcher" or "scientist" voice	- not replying to other tweets - content is heavily event promotion - not very active

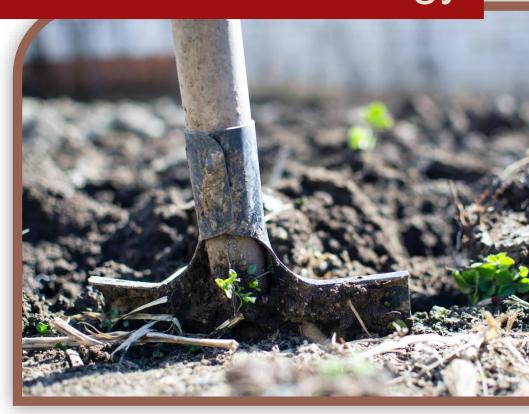


YouTube (Br Society of So		370 subscribers	50-300 views on average video	- focuses on the people and researchers	
Facebook (@BritishSoi Science)	- article and journal sharing - sharing of YouTube videos	2,500 followers	- not highly liked posts (5- 30 likes, 1-10 shares on well- performing posts) - no comments from followers	- diverse content sharing (images, articles, videos)	- focus on direct link and title sharing without brief abstracts - posts do not always include images





CSSS Social Media Strategy



Developed by Samantha Fowler CSSS Communications Intern samantha.anne.fowler@gmail.com June 2020

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I. Executive Summary

Overview

The CSSS Social Media Strategy aims to engage its audiences in soil science conversations and create a community of experts and enthusiasts, members and non-members. We recommend a plan that provides a face and voice to Canadian soil science to ensure the continued relevance of the field and the wise use of soil by all.

Dissemination of research is not public engagement.

Dissemination is a one-way, passive process of transmitting information to those who are already engaged. Instead, this plan aims to engage audiences through a process of listening and starting conversations. It seeks to educate and empower the audience by continually analyzing what they want to hear and how they want to hear it.



Public engagement requires constant evaluation and reflection. A key to the success of the CSSS Social Media Strategy is setting key performance indicators in advance, followed by on-going tracking of what's working and what's not.

The CSSS Social Media Strategy should be reviewed and updated by the CSSS Communications Committee annually. The next review date is June 2021.

The Social Media Strategy will be implemented by the Social Media Manager, overseen by the Soil Education Committee.

Existing Online Presence

- 1. Twitter
 - Established account "Can Soc Soil Sci" (@CSSS_Soils), 164 followers
 - Inactive since June 11, 2017
- 2. LinkedIn
 - Established group "Canadian Society of Soil Science", 182 members
 - Group admin: Dr. David Burton, Dalhousie University
 - 3 total posts, inactive since February 2020
 - No company page
- 3. Facebook
 - No presence



Voice

Our social media voice is **evidence-based** while remaining **approachable** and **educational**. Posts are **clear** and **direct**. We want to be seen as **enthusiastic** about science and **curious** about the world around us.

All posts maintain a positive and respectful tone. CSSS posts about science and scientists. CSSS does not make political statements or take sides on governmental issues.

June 2020 Implementation Strategy

In early June 2020, it is recommended that the Communications Intern relaunch the CSSS twitter account in order to showcase potential activity of the new Social Media Strategy before members vote to officially approve the strategy and Communications Plan on June 23, 2020. The goal of this Twitter activity is to showcase potential posts and create baseline follower and engagement metrics for future evaluation.

Twitter Account Information

Proposed Name: Canadian Society of Soil Science

Proposed Handle: @CSSS_Soils (current handle and consistent with SSSA

branding)

Proposed Biography: We are dedicated to starting conversations about #soil #science and creating a Canadian community of experts and enthusiasts.

Website Link: csss.ca

Key Performance Indicators: # followers, # tweets, # engagements

ROLLOU'	ROLLOUT SCHEDULE			
Date	Key step	Description of planning and production activities		
June 1-5	Create June content calendar	Create June content calendar and begin curating content		
June 8	Approval of relaunch	Approve temporary Twitter relaunch and June content calendar at CSSS Council meeting		
June 9	Relaunch Twitter account	Rebrand account as "Canadian Society of Soil Science" with new profile picture, header, and bio		
June 9 – June 21	Post June content	Continuous production and posting of Twitter content		
June 22	Write June report	Collect metrics on key performance indicators from previous two weeks		
June 23	CSSS AGM	 Report on June metrics and Social Media Strategy Members to vote on approval of Communications Plan and Social Media Strategy 		



Social Media Strategy Overview

	Purpose		Editorial plan		
Platform	Who we will reach	Goals and Benefits	Featured content pillars	Ideal posting rate	Key performance indicators
Twitter	 CSSS members Graduate students Canadian societies and organizations Hobbyists and enthusiasts Undergraduate students International organizations Youth educators 	build new relationships and connect with target audiences through the sharing of ideas, stories, and research	 Knowledge sharing Member showcases CSSS logistics Member PD Science is cool 	3-5 tweets per week 3 retweets per week	# followers # tweets engagement rate (likes, replies, mentions)
LinkedIn	CSSS membersGraduate studentsUndergraduate students	promote the organization's scientific influence and provide networking opportunities for members	- Member showcases - Member PD	1 post per week	# connections # posts engagement rate (reactions, shares, comments)
Faceboo k	CSSS membersHobbyists and enthusiasts	create a long-term soil science community and increase recognition and reach of CSSS	Knowledge sharingMember showcasesScience is cool	1-2 posts per week	# page likes # posts engagement rate (reactions, shares, comments)
Blog	Hobbyists and enthusiastsUndergraduate students	strengthen relationships with new audiences and increase CSSS awareness by boosting	Knowledge sharingMember showcases	1 post per month	# posts traffic source # page views # comments

- Youth educators	search engine	# social shares
	optimization	# email subscribers



II. About CSSS

Elevator Pitch

Canadian Society of Soil Science is a non-governmental, non-profit organization that supports those involved in professional soil science and connects with non-specialists to achieve mutual stewardship of Earth's soils through evidence-based research.

About CSSS

Canadian Society of Soil Science (CSSS) is a non-governmental, non-profit organization for scientists, engineers, technologists, administrators and students involved in professional soil science (CSSS, 2020).

In 2019, CSSS hosted a membership of almost 300 members and strong relationships with relevant Canadian and international organizations, including the Agricultural Institute of Canada (AIC), the International Union of Soil Science (IUSS), The Canadian Societies for the Geophysical Sciences (CSGS), and the Global Soil Partnership of the Food and Agriculture Organization of the United Nations. The Canadian Journal of Soil Science is the official journal of CSSS.

Mission Statement

The goal of CSSS is to nurture the discipline of soil science in Canada and ensure its relevance in the future. It works to achieve this goal by:

- 1. promoting the wise use of soil for the benefit of all society,
- 2. promoting information and technology exchange among people in the professional soil science community,
- 3. fostering the integration of students into the professional soil science community,
- 4. providing a link between soil scientists in the private, public, and university sectors.
- 5. disseminating research and the practical application of findings in soil science,
- representing the Canadian soil science community in international organizations and meetings, and
- celebrating the accomplishments of Canadian soil scientists (CSSS, 2020).

Needs

CSSS aims to further its mission statement by "working towards a society communications plan" (CSSS, 2020). In particular, the use of social media as an engagement tool and outreach to non-specialist audiences were identified as important goals for the organization. In order to achieve these goals, we recommend creating new communications channels and the resources to support them.

Furthermore, during the changing times and societal stress of the 2020 COVID-19 pandemic, the cancellation of conferences and in-person events places an increased importance on having effective online communications. It is recommended that an increase in resources to support online channels will help maintain engagement within membership and create engagement with the general public.

Current strengths of the CSSS communications include: personal nature of newsletters and the effective promotion of member specific information in newsletters and on the CSSS website.

The current weaknesses of the CSSS communications that the proposed social media strategy will work to improve are as follows: lack of consistent social media presence, absence of non-specialist specific content, and the lack of reporting on analytics to demonstrate effective communications.

Unique Value Propositions

- Scientific support, connections, and knowledge that can enhance the wise use of soils
- Canadian organization with national pride and a unique view and impact

Social Media Naming

It is recommended that this section is updated as new accounts are created.

Website: csss.ca

Twitter Handle: @CSSS_Soils (158 followers)

Twitter Name: Canadian Society of Soil Science



Big Picture Goals

Organizational:

- Increase membership
- Increase brand awareness within the Canadian society
- Continue to foster the field of soil science and soil scientists

Online:

- Recruit new CSSS members
- Increase brand awareness and audience, measured by the number of followers and reach on all platforms (MAY 2020 STARTING NUMBERS: Twitter (158), Facebook (0), LinkedIn (0))
- Increase community engagement, measured by clicks, likes, shares, comments, and mentions
- Drive social media traffic to blog and website, measured by total traffic, link clicks, and email sign-ups

Social Media Objective: CSSS social media seeks to nurture the field of soil science and ensure its continued relevance by creating an online community where soil science experts and enthusiasts can connect and share their interests. CSSS seeks to engage, educate, and empower followers.



III. Our Voice

A. Target Audiences

The CSSS Communications Plan identifies eight key audiences, seven of which are to be addressed using social media channels:

- 1. CSSS members, including scientists and practitioners
- 2. Graduate students
- 3. Canadian scientific societies and organizations
- 4. Hobbyists and enthusiasts
- 5. Undergraduate students
- 6. International organizations
- 7. Youth educators

The following table outlines some personality traits of each audience. These traits inform what content we promote and how we promote it.

Audience	Personality Traits
CSSS members	 A little nerdy and gets excited about science and new research Wants research that is relevant to their specific field or work Highly engaged with academic journals Constantly flooded with emails and requests Midcareer scientist or practitioner Want to ensure that their work is making an impact and heard by people who can make changes
Graduate students	 Hard-working with a life that is mostly dedicated to their work Constantly saving journals and articles to read later, but may never get to some Wants opportunities to further their career, network, and develop professionally Want to be heard and respected in the field
Canadian scientific societies and organizations	 Made up of unique members that are very similar to CSSS members, but with different scientific interests Leaders seek opportunities to connect and support their members by offering them new opportunities to further disseminate their research and connect within the academic community
Hobbyists and enthusiasts	 Urban gardeners, small scale farmers, landscapers, construction workers, outdoor enthusiasts, house plant lovers, environmental advocates May be intimidated by "scientific organizations" and "research papers" Wants credible but easy to read information that is directly relevant to them



	- Most likely doesn't have a science post-secondary degree
	- Reading at grade 8-10 level
	- Curious about the world around them and
	- Likes to listen to podcasts while taking walks and read
	articles with their morning coffee
Undergraduate	- Curious about future careers and anxious about getting jobs
students	and academic acceptances
	- Many assigned class readings of research articles, will
	procrastinate by browsing the internet and skimming other
	articles
	- Looking for things to add to their resume to make them
	appear unique or appear knowledgeable in their field
International	- Made up of unique members that are very similar to CSSS
organizations	members, but with different scientific interests
	- Leaders seek opportunities to connect and support their
	members by offering them new opportunities to further
	disseminate their research and connect within the academic
	community
	- Curious about international topics that are directly relevant to
	their own country or researchers
Youth educators	- Want resources that come clearly labeled with reading level,
	curriculum connections, and classroom activities
	- Want to engage their students in interesting, relevant science
	to prove its importance
	- Looking for quick shares that they can send to their students
	"as is"
	as is

B. Voice Keywords

The rationale and description of how to use each voice keyword is described in detail in the charts below.

- Evidence-based
- Approachable and educational
- Clear and direct
- Enthusiastic about science
- Curious about the world around us

As well, social media posts should always maintain a positive, respectful tone.

Our voice is...

Evidence-based

Write like this...

"Crop scientists are desperate to find ways to stop Russian wheat aphids in their tracks.

Learn why: link
Photo credit: Rahulkamar Patel"

Tweet from @SSSA soils

Not like this...

"Russian wheat aphids destroy 60% of wheat crops."

Why?

All posts should reflect the current, best scientific knowledge. Posts should include credible references, resources, or cite qualified individuals.

(Template from: https://gathercontent.com/blog/a-simple-tool-to-guide-tone-of-voice)

Our voice is...

Approachable and educational

Write like this...

"What is causing the cranberry decline in the #LowerFraserValley? The culprit may be oxygen-free environments in different types of soil. #SoilOurSilentAlly #CSSS2016"

Suggested text

Not like this...

"Cranberry decline in the #lowerfraservalley – anaerobic conditions from soil variability a culprit? #soiloursilentally #csss2016"

 Excerpt from Twitter

Why?

On social media, text should be engaging and aimed at a grade 10 reading level. This will help to quickly engage current members and attract non-members.



Our voice is...

Clear and direct

Write like this...

"The release of nitrogen from different #organic fertilizers affects communities of bacteria in #greenhouses #CJSS"

Sample text*

Not like this...

"#CJSS publishes article by Dr. Pierre-Paul Dion: Nitrogen release from five organic fertilizers commonly used in greenhouse organic horticulture with contrasting effects on bacterial communities"

- Sample text

Why?

On social media, text should be brief, clear, and compelling. This will help to quickly engage members and attract non-members. Always use an active voice.

*Sample text should be approved by authors for accuracy before tweeting

Our voice is...

Enthusiastic

Write like this...

"The next generation of #soil scientists is going to be amazing – Congrats to the 2016 student travel award winners! #CSSS2016 "

Suggested text

Not like this...

"2016 Student travel award winner of @CSSS_Soils #csss2016"

> Excerpt from Twitter

Why?

Our audiences are a little nerdy and looking for information to get excited about. Posts should feel inviting and exciting.



Our voice is...

Curious

Write like this...

"Does fertilizer build healthy soils!? Fertilizer applications have shown greater enzyme activity and microbial biomass indicators of good soil health. Learn more: link"

Tweet from @SSSA_soils

Not like this...

"Fertilizer applications result in greater enzyme activity and microbial biomass."

Why?

Scientists and CSSS are led by curiosity and genuine interest in the world around us.
Curiosity unites us and humanizes CSSS.



IV. Social Media Plan Details

Focus Channels

1. Twitter

Purpose: CSSS is on Twitter to build relationships and connect with target audiences through the sharing of ideas, stories, and research.

Metrics for success: Followers, engagements (likes, replies, mentions)

2. LinkedIn

Purpose: CSSS is on LinkedIn to promote the organization's scientific influence and provide networking opportunities for members.

Metrics for success: Connections, interactions (reactions, shares, comments)

3. Facebook

Purpose: CSSS is on Facebook to create a long-term soil science community and increase recognition of CSSS.

Metrics for success: Page likes, interactions (reactions, shares, comments)

What type of content does CSSS share?

The following are the content pillars for CSSS social media that highlight what content we will share. These are guidelines to help organize content calendars, ensure that we are effectively targeting audiences, and help with content brainstorming. Content can be produced outside of these pillars; ensure that relevancy to the CSSS social media objective and goals are considered.

- 1. Knowledge sharing: engaging audiences in interesting, relevant science
 - Canadian Journal of Soil Science publications, historical scientific milestones, webinars, blogs, question and answer periods, educational resources, how-to's
- 2. Member showcases: celebrate members and humanize CSSS and soil science
 - Career bios, From the Field spotlights, lab and field tours
- 3. CSSS logistics: what's going on and how to get involved
 - Meetings, conferences, newsletters, award winners
- **4. Member professional development**: supporting members and their careers
 - External grant opportunities, job postings, partner events, award applications, competitors, local events
- Science is cool: increase engagement and the accessibility of CSSS and soil science



 Beautiful photography, holidays and scientific events, fun facts, jokes and puns, this or that polls

Different events will have different objectives and content pillars. Use the following chart to develop specific event content pillars.

CONTENT PILLARs what are the types of content we will share			
Content Theme Name	Overview:		
	Detail:		
	Reference:		

Reposting and Sharing Content

Reposting and sharing content, such as retweeting on Twitter, can increase brand awareness and online engagement. Reposting can show support for an organization, further promote a message, and create new content for CSSS. This is an essential part of creating a two-way conversation between CSSS and its audiences.

When reposting or sharing content someone else has created, make sure that it follows our rules of engagement and has been fact checked.

Examples of who to repost: members (research, labs, universities), partners (Canadian Geophysical Union, Soil Science Society of America, British Soil Society), scientific organizations (Science North science center)

Examples of who not to repost: politicians

Annual Social Media Tasks:

- Update Social Media Strategy:
 - The CSSS Social Media Strategy should be updated on an annual basis to reflect analytics and new communications objectives.
- Report to CSSS Communications Committee:
 - Provide an overview of current analytics and platform successes or obstacles to the CSSS Communications Committee, including a plan for the next year
- Plan high level calendar for the year:
 - High level calendars will highlight key dates, events, and content themes



Monthly Social Media Tasks:

Content calendar:

The Social Media Manager will work with the Social Media Content Creators to create monthly content calendars for all platforms. Monthly dates of importance will be highlighted and new campaigns will be proposed. This calendar is to be used internally for planning only.

• Monthly report:

Measure and report on monthly key performance indicators

• Set key performance indicators:

 Establish key performance indicators for the next month that are representative of current analytics

Adjust posting schedule:

 Review and adjust the hashtags and publishing times currently being used based on engagement

• Review audience engagement:

 Review the list of target audiences and the return on investment from these relationships

• Create and schedule pre-determined content

• Graphic design

Design new graphics and photography to be used on social networks

Monitor budget

 Determine if paid campaigns are appropriate and monitor social media budget

Weekly Social Media Tasks:

- Create and schedule content timely content
- Follow/unfollow accounts
- Proactively engage and comment on other people's content

TWITTER	LINKEDIN	FACEBOOK	
 3-5 relevant Tweets Find & follow 5 new accounts Retweet 3 new pieces of content Experiment with 1 trending hashtag 	 1 new post or article Connect with 1-3 people Comment on 1-2 posts 	 1-2 relevant posts Find and like 5 new pages Comment on 3 community posts 	

Daily Social Media Tasks:

- Monitor for notifications and mentions
- Interact with your audience and reply to comments
- Share timely, immediate content from members



V. Rules of Engagement

Each post should be curated purposefully with the goal of engaging a specific audience and achieving a broader communication objective. For every post, ask: "What is it for?" or "What do I want people to do when they see this?".

Posts can be experimental. Try out new engagement techniques and track post analytics to see what is working and what is not.

General DO's and DON'T's:

- DO: Engage in conversations around science that are not directly associated with soil science as a way to celebrate the scientific field and accomplishments
- DO: Engage in conversational and fun ways
- DO: Share only beautiful images
- DO: Jump on social trending topics that could result in increased impressions
- DON'T: Exclusively share CSSS organizational activities. Talk about our members, community, and subjects that interest our community.
- DON'T: Share low-quality images
- DON'T: Respond negatively or politically to statements
- DON'T: Speak poorly of anyone
- DON'T: Use tragedy as a way to gain attention. Avoid discussing tragic events with anything more than offering condolences, thoughts, or scientific opinions.
- DON'T: Use inappropriate hashtags

Subjects to Avoid:

CSSS is a non-governmental, non-profit organization that prides itself on being a professional leader in the scientific community. Maintaining professionalism and impartiality at all times is critical.

CSSS advocates for good science, nothing else. Effective but prudent posting is necessary.



In case of negative comments targeted at CSSS, CSSS members, or CSSS social media, we ask you to follow the following procedure:

- 1. Do not delete the negative comment or reply.
- 2. Respond immediately, publicly, and appropriately. Acknowledge the issue, display empathy, and let them know how and when they can expect a response.
 - ex. We're really sorry to hear this. Would you be able to DM us your email so that our CSSS President can reach out to help?
- 3. Contact CSSS President and share the message with contact information for follow up offline.

Twitter Notes

Twitter is the primary social platform of CSSS.

Remember: CSSS is on **Twitter** to build relationships and connect with target audiences through the sharing of ideas, stories, and research.

- If you are mentioning a member or organization, always attempt to tag them in your post
- Include on brand photos, images, videos, or GIFs with at least 50% of posts
- Include 1-3 popular hashtags
- Always use shortened links
- Ask questions, run polls, and try out unique engagement techniques

LinkedIn Notes

Remember: CSSS is on **LinkedIn** to promote the organization's scientific influence and provide networking opportunities for members.

- If you are mentioning a member or organization, always attempt to tag them in your post
- Always use shortened links
- Customize the CSSS vanity URL

Facebook Notes

Remember: CSSS is on Facebook to create a long-term soil science community.

- If you are mentioning a member or organization, always attempt to tag them in your post
- Avoid hashtags on Facebook, unless they are important or tied to a campaign
- Include an image, video, or GIF in the majority of posts
- Always use shortened links
- Telling stories is a good thing
- Post no more than twice per day



VI. Social Media Evaluation

Current metrics do not exist due to inactivity on social media.

Goal	Key Performance Indicators	Current Metrics (June 2020)	Goal Metrics (2022)
Recruit new CSSS	Number of CSSS	284 members	Increase in 10%
members	members		(312 members)
Increase brand	Number followers	Twitter: 159	Twitter: 450
awareness and		LinkedIn: N/A	LinkedIn: 100
audience		Facebook: N/A	Facebook: 100
	Twitter reach	N/A	N/A
Increase	Link clicks	N/A	Engagement rate of
community	Likes		0.5%-1% across all
engagement	Shares		platforms
	Comments		
	Mentions		
Drive social media	Total website traffic	N/A	10% increase in
traffic to blog and	Total blog traffic		website traffic
website	Link clicks		
	Email sign-ups		1000 views a
			month with average
			engagement rate of
			2% on blog



VII. Suggested Content Framework

The day of the Week and Monthly frameworks provide a sample guideline for content. This is considered an addition to creative monthly campaigns or key messaging decided upon by the Social Media Manager. It is important that we also join in subjects and conversations that are topical or relevant online. This is to be used as a guideline and content opportunities, not a specific plan.

Content Opportunities

Day of the Week	Suggestions for Posting
Sunday	#LazySunday
Monday	 #MondayMotivation
	#MondayMood
Tuesday	 #TuesdayTakeover by a CSSS member, tagging their personal account (if permission granted) to share insight about their work or research #TuesdayThoughts #TravelTuesday #TuesdayTips
Wednesday	#WednesdayWisdom
Thursday	#tbt or #throwback
	#ThursdayThoughts
Friday	#FridayFeeling
Saturday	#WeekendVibes

Month	Suggestions for Posting
January	•
February	 February 11 - International Day of Women and Girls in Science National Engineers Work Introduce a Girl to Engineering Day
March	 2nd full week– Groundwater Awareness Week March 14 – Pi Day March 22 – World Water Day Mid-March – Earth Hour
April	 Citizen Science Month Mathematics and Statistics Awareness Month April 7 – World Health Day 2nd week – National Robotics Week April 22 – Earth Day
May	May 4 – Star Wards Day



	May 8 – Science Rendezvous
	Science Odyssey
	National Children's Book Week
	May 11-17 - National Week of Making
	May 18 – Museum Day
	World Science Festival
June	 June 5 – World Environment Day
	 June 8 – World Ocenas Day
	 June 23 – International Women in Engineering Day
July	Plastic Free July
August	Summer reading
September	Back to school
	 Sept 3 – Protect Your Groundwater Day
	 3rd week – National Pollution Prevention Week
October	 2nd full week – Earth Science Week
	 3rd full week – National Chemistry Week
	Oct 23 – Mole Day
November	•
Decemeber	 December 5 – World Soil Day

Popular Science Hashtags (2020)

#ScienceFacts #ScienceMemes #ScienceJokes #LabLife #LabChat #SciComm #ActualLivingScientist #SciArt #WomeninScience #PHDChat #AcademicTwitter #AcademicLife

VIII. Social Media Implementation Schedule

ROLLOUT SCHEDULE projected timeline & milestones				
Date Key step		Description of planning and production		
		activities		
June 8, 2020				
	account	Twitter account with new branding and a plan for consistent posting		
June 9 – 22, 2020	Twitter posting	CSSS Communications Intern to consistently post on Twitter to determine baseline metrics and example tweets		
June 23, 2020	CSSS AGM	 Members vote for approval on Communications Plan and Social Media Strategy Promote following the Twitter account at the AGM 		
June 26, 2020	Last day of CSSS Communications Intern	 Finalize Communications Plan and Social Media Strategy based off of changes proposed at AGM Ensure Twitter transition plan is in place before Social Media Manager is hired 		
July 2020	Hire Social Media Manager Consistent Twitter posting	Advertise, interview, and hire Social Media Manager Posting by volunteer transition team until Social Media Manager is hired		
August 2020	Write blog posts	 Promote blog opportunities to CSSS members Social Media Manager to collaboratively write and edit blogs with volunteer CSSS members Develop content calendar of blog posts for next year 		
	Launch LinkedIn page Consistent Twitter posting	Launch LinkedIn account, promoting to members to connect Social Media Manger		
September 2020	Launch blog	Launch blog with consistent posting every month, using articles developed in August		
June 2021	Evaluate Social Media Strategy	Evaluate accomplishment of objectives and edit Social Media Strategy to best reflect new objectives		
June 2022	Social Media Manger position evaluation	Reflect on accomplishments and advancement of objectives and whether the CSSS can sustain a long term Social Media Manager		

Appendix A. Environmental Scan

A. Main Competitor Numbers

Social media metrics are listed as of May 4, 2020.

Competitor	Twitter	Facebook	Instagram	LinkedIn
Soil Science	@SSSA_soils	@SSSA.soils	@iheartsoil	Soil Science
Society of	16.5K	26,584 followers	1340	Society of
America	followers		followers	America
(SSSA)			(single	8097 followers
			campaign)	
British Society	@Soil_Scienc	@BritishSoil	N/A	British Society of
of Soil Science	е	Science		Soil Science
	6,014	2,577 followers		285 followers
	followers			(inactive)
Canadian	@CSM_SCM	@CanadianSociet	N/A	N/A
Society of	1,536	y ofMicrobiologists		
Microbiologists	followers	951 followers		
Canadian	@CGU_UGC	N/A	N/A	N/A
Geophysical	1,718			
Union	followers			
American	@theAGU	@American	@american	American
Geophysical	64.2K	GeophysicalUnion	geophysical	Geophysical
Union	followers	156,668 followers	union	Union
			29.2K	6,600 followers
			followers	
Pacific	@thePRSSS	@thePRSSS	@the_prss	Pacific Regional
Regional	218 followers	520 followers	S	Society of Soil
Society of Soil			63 followers	Science
Science				27 ollowers

B. Online Activity

Soil Science Society of America (SSSA)

Overview: SSSA is very active across all social media platforms with diverse content curated for both specialist and non-specialist audiences.

What's Working:

- Consistent use of brand relevant hashtags (ex. #soils, #research, #food) and mentions
- Consistently uses engaging, beautiful images from research
- Uses a mix of content sharing (research links, blog posts, videos)



- Emphasizes both theoretical work and practical applications
- Always gives credit to photographer or researcher

Opportunities:

- Few retweets or sharing of related organization's content
- Few standalone Instagram posts that aren't replications of other platforms

British Society of Soil Science

Overview: BSSS does a great job of showcasing the people of the society and engaging non-specialists through human connections.

What's Working:

- Actively curates and labels content for different audience
- Retweeting other organizations and members frequently
- Strong human voice that showcase researchers and scientists
- Diverse content sharing (images, articles, videos)

Opportunities:

- There is a focus on direct link and exact title sharing without any brief abstracts or summaries of the article
- Posts do not always include images
- Content is heavily event promotion

Canadian Society of Microbiology

Overview: CSM does a great job of engaging with the community and retweeting relevant members and labs.

What's Working:

Many retweets of members and member labs gives human feel to the organizational account

Opportunities:

- Twitter page not very active
- Unique posts are mostly focused on event promotion
- Focus is on current members, with content including career opportunities, awards, and conferences



Canadian Geophysical Union

Overview: CGU engages with the community and retweets relevant people and groups, with few organizational tweets.

What's Working:

 Many retweets of relevant people and groups creates connected, personal feel of account

Opportunities:

Few original tweets or quoted retweets decreases followers brand awareness

American Geophysical Union

Overview: The AGU is very active across all popular platforms, and focuses on beautiful, unique content to engage non-specialist audiences in the world around them.

What's Working:

- Beautiful design and layout of accounts and posts
- Unique content ideas, including #VirtualFieldTrip blog posts showcasing earth science around the globe
- Promotion of specialist and non-specialist content
- Tagging of researcher and #AGUblogs in each blog post
- Tweet captions include powerful quotes from blog and research articles, as opposed to technical summaries
- Beautiful, unique imagery on Instagram

Opportunities:

 Not many researchers and scientists in action showcased, which can add human element and increase engagement

Pacific Regional Society of Soil Science

Overview: The PRSSS uses a broad range of platforms to engage with non-specialists in educational material.



What's Working:

- Emphasizes unique regional connections in British Columbia, Canada
- Promotes unique, in-person ways of engaging with organization, including through workshops and educational materials

Opportunities:

- Focus on event promotion over standalone engagement
- Not all posts are accompanied by engaging images
- No noticeable connection with the CSSS (a similar, regional organization)
- · Repetitive Instagram photos makes the feed very similar

Appendix B. Social Media Team Descriptions

CSSS Social Media Team

We recommend that a CSSS Social Media Team is established, consisting of:

- 1. Paid Social Media and Blog Manager (20-30 hours/month)
- 2. 1-2 volunteer Social Media Content Creators (1-2 hours/week)

This team will combine expertise in communications (from the Social Media and Blog Manager) and soil science (Social Media Content Creators) to ensure effective social media engagement.

Position Description: CSSS Social Media and Blog Manager

We recommend that CSSS seeks a Social Media Manager to engage the CSSS membership and the broader Canadian community in soil science through social media and a blog.

Time Commitment: 20-30 hours per month

Reference: 10-20 hours/month for social media and 10-20 hours/month for blog

Benefit:

By hiring a Social Media Manager, CSSS would advance the CSSS mission and achieve the CSSS Communications Plan objectives. Social media is a crucial channel for widely promoting the wise use of soil, especially within the general public. Engaging new audiences and increasing outreach to the general public ensures the continued relevancy of CSSS and soil science in Canada. As well, internal communications would benefit from social media where members are already highly engaged, as shown by the CSSS Member Communication Survey. The expertise of a Social Media Manager would ensure consistent posting and effective engagement on these social media platforms.

Purpose:

The Social Media Manager will coordinate the implementation of the CSSS Social Media Strategy and the CSSS Blog Strategy. You will set key performance indicators and curate campaign ideas to best engage key audiences, as outlined in the CSSS Communications Plan. You will contribute to content creation and the evaluation and reporting on the key performance indicators.

During a regular week, you will promote the CSSS by creating content, scheduling, posting, and tracking social media posts 4-7 days a week on our platforms, including Facebook, Twitter, and LinkedIn, and WordPress blog.



You will sit on the CSSS Communications Committee and report on marketing metrics and contribute to the development of big picture goals.

You will manage two Social Media Content Creators in the creation and curation of social media content. You will collaborate with diverse members of the CSSS to develop and edit blog posts.

Social Media Responsibilities:

- Oversee creation of monthly content calendars in collaboration with two, volunteer Social Media Content Creators
- Execute the results-driven CSSS Social Media Strategy
- Ensure that communication reaches a wide range of stakeholders and key audiences outlined in the CSSS Communications Plan
- Review analytics and create reports on key performance indicators
- Take part in annual teleconference meetings with CSSS Communications
 Committee members where you will report on metrics and key campaigns
- Grow social media base of followers by following best practices in social media

Blog Responsibilities:

- Oversee creation of annual blog calendars in collaboration with the CSSS Communications Committee
- Write various types of articles, blogs, and other online resources
- Edit articles, blogs, and other online resources produced by CSSS members
- Research and ensure coverage of representative industry topics
- Conduct analytical projects to improve blog strategies and tactics
- Optimize content for search engines (SEO) and lead generation
- Grow blog subscribers and expand the overall blog's reach

Social Media Platform	Daily Responsibilities	Weekly Responsibilities	Monthly Responsibilities
Facebook		 Create or curate 2-4 relevant posts Find and like 5 new pages Comment on 3 community posts 	
Twitter	Create or curate 0-4 engaging Twitter posts	Find and follow 5 new accountsRetweet 3 new pieces of content	



		- Experiment with 1 trending hashtag	
LinkedIn		 Create or curate 1 new post or article Connect with 1-3 people through endorsements, recommendations, or connections Monitor LinkedIn Groups 	
Blog		 Collaborate with blog authors to ensure best practices in blog posts 	- Post 1-2 new articles per month
All platforms	Respond to any/all engagements from follower base	Share at least two relevant articles within the industry to demonstrate further credibility	 Communication Evaluation reports Develop monthly content calendar Social sharing of CSSS blog posts as posted

Position Description: CSSS Social Media Content Creator

Volunteer as a Social Media Volunteer to engage the CSSS membership and broader Canadian community in soil science.

Time Commitment:

1-2 hours per week, flexible schedule, minimum 1 year commitment

Purpose:

The Social Media Content Creator will work within a team to create engaging content for the CSSS's social media presence, including keeping social media channels updated and brand-focused, and seeking out new ways of connecting with audiences.

During a regular week, you will promote the CSSS by creating content, scheduling, posting, and tracking social media posts 4-7 days a week on our platforms, including Facebook, Twitter, and LinkedIn.

All tasks are remote and can be completed from anywhere with your personal computer.

Responsibilities:

Develop and curate engaging content for Twitter, Facebook, and LinkedIn



- Prepare social media posts highlighting the CSSS newsletter, partner events, Soil Education and Outreach activities, CSSS blog, and other CSSS activities and achievements
- Research and curate other posts related to soil science to engage the Canadian society
- Assist in the creation and editing of written, video, and photo content
- Contribute to the creation of monthly social media content calendars
- Engage with followers through conversations in comments, commenting on relevant posts, and sharing and retweeting of relevant content
- Maintain unified brand voice across different social media channels, maintaining professionalism and scientific accuracy
- Test content and review its impact
- Track the effectiveness of our social media work and recommend ways forward
- Research and experiment with new industry trends and competitor best practices

Benefits:

- Develop science communication skills
- Showcase marketing and creative talents
- Engage with social media development and strategy maintenance skills
- Practice data handling skills in a unique environment

