The Royal Astronomical Society of Canada, Winnipeg Centre



Strategic Plan 2021-2025

Version 1.0 - 09/01/2021

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Introduction by the President

This strategic plan was undertaken by The RASC Winnipeg Centre Council to determine what the membership wanted in the way of programs and services. What has been developed if you like, is a road map of what the future *could* look like. The proposals that follow are not written in stone. In fact, if volunteers from the membership do not step up to help, the full slate of these potential programs will not exist.

This is a bold plan that captures what has been done in the past and what we, as a Centre, can be in the future. I would like to thank all the members who participated in the information gathering by either completing surveys or attending virtual focus-group and planning meetings. Your input is what we have captured in the strategic plan.

The strength of the Centre is its membership. I hope as you read the strategic plan you will see a role for yourself, and at the very least, an engaged member of the Centre.

Introduction by the Strategic Planning Committee

This plan was developed over the spring of 2021 by an ad hoc Strategic Planning Committee, comprised of five members of the current Council of the Royal Astronomical Society of Canada Winnipeg Centre:

- Dennis Lyons, President (ex officio)
- Bryan Stach, Past-President
- Gord Tulloch, Vice-President
- Edward Wright, Secretary
- Judy Anderson, Councillor

The work is aimed to benefit the work of the Council and the programs and activities of the Centre.

This document is provided in good faith and is intended for use in planning purposes. It is a living document and should be reviewed at least annually at Council to determine how the Centre is progressing with the plan, and how the plan may need to be adjusted to reflect emerging conditions and opportunities.

Executive Summary

History of the organization

The Royal Astronomical Society of Canada (RASC) is a nation-wide group of over 5000 members who share an interest in the sky, night and day. RASC is a non-profit, charitable organization devoted to the advancement of astronomy and related sciences. The Winnipeg Centre of RASC has been helping Manitobans enjoy our beautiful prairie skies since 1911.

The history of the Royal Astronomical Society of Canada goes back to the late nineteenth century. The first chapter of the Society was incorporated within the Province of Ontario in 1890, received its Royal Charter in 1903, and was federally incorporated in 1968.

The Society is devoted to the advancement of astronomy and related sciences in the community and among its members. In its first century the RASC has grown to 30 chapters stretching from Newfoundland to Vancouver Island. The Winnipeg Centre was formed in 1911 and has 230 current members.

The RASC holds an annual General Assembly in June or July at one of the member chapters. This assembly brings together amateur astronomers from across North America for a celebration of both the serious and fun sides of astronomy.

The Winnipeg Centre meets monthly, usually at St. John's College at the University of Manitoba (by Zoom during the pandemic). Centre meetings feature a guest speaker, a beginners' session, presentations on What's Up in the sky this month, and What's New in astronomy, a coffee break for socializing, and announcements from members of council or coordinators, and a discussion of club activities. In some years, there has been a time scheduled (often during the break) for observing the night sky, weather permitting, and other presentations of photographs or construction projects by club members.

Outside the club we organize public star parties during notable celestial events such as eclipses, comet visits, meteor showers, or interesting planetary alignments. Winnipeg Centre also meets annually for the Spruce Woods Star Party, held each September in Spruce Woods Provincial Park, where members gather and camp under the stars, observing and socializing in the new Dark Sky Preserve established in 2020 at the park.

Many members are active observers, eager to meet others to share tips and techniques for observing with telescopes, binoculars, cameras, or just their eyes. Observing is fun (with the right clothing and preparation) and a great opportunity to meet others with similar interests and share tips and experiences.

The Strategic Planning Process

Council struck a Strategic Planning Committee (SPC) to develop a plan for goals and operations that would map directions for the Centre over the next 5 years.

Members of the SPC met weekly, guided by input to surveys by members and Council, and process documents that were developed by modifying resources available for strategic planning by non-profit organizations.

During the work of the SPC, the committee codified a Mission, Vision, and the Values of the Centre.

Mission, Vision, and Values of RASC Winnipeg Centre

- Our mission is to share our learning, expertise, and enjoyment of astronomy with each other and
 the public to build lasting relationships and to stimulate interest in astronomy and related
 sciences.
- Our vision is to create a community that shares astronomy as a common experience of everyday life and learning.
- Our values are:
 - We value integrity, honesty, and transparency in all our activities to create an atmosphere of trust and fairness.
 - We endeavour to communicate meaningful information to our members and the public in a respectful, effective, and timely manner.
 - We value and recognize the contribution of our volunteers.
 - We value diversity and strive to create an inclusive environment for anyone with an interest in astronomy.
 - We strive to remove barriers for our community so it can access our services.
 - We accept a wide range of experience levels in astronomy from beginner to advanced.

Areas of need

There are three areas of need that the Centre and Council should address, as they directly affect capacity to deliver programs and serve as an effective organization. These areas of need guided the planning discussion and recommendations for future action.

- RASC Winnipeg Centre needs to improve its organizational maturity to include overall planning and metrics to determine whether goals are being accomplished.
- Amateur astronomers need a place to share learning, expertise, and enjoyment of astronomy
- The public needs a better appreciation and understanding of astronomy

Key Assumptions

The SPC made some key assumptions and noted the resources that are needed to make change in each of the three areas of need.

Winnipeg Centre achieves organizational maturity:

- Volunteers are willing to take responsibility to take on tasks
- Funding can be found
- Centre needs additional expertise in key skill sets, including experience for training new members of Council (stewardship), evaluating program success, and giving feedback to Council members.
- If volunteers are not found to fulfill all goals, then some programs will be discontinued or abbreviated so we are able to sustain the most essential services and organizational tasks with a current contingent of Council and members (all volunteers).

Amateur astronomers have a place to share

- Volunteers are willing to take responsibility to take on tasks
- Funding can be found
- The University of Manitoba will renew its agreement and commitment to support the Centre's Glenlea facility
- Centre needs additional expertise in providing and developing astronomy content, social media skills, providing training and maintenance for loaner scope program, volunteer management and recognition, Glenlea upgrades, SWSP support.

The public can garner a better appreciation and understanding of astronomy:

- There is a demand by the public for outreach from the Centre
- Members are interested in doing outreach on behalf of RASC
- It is sufficient to use Facebook and Website for communication
- There are multiple venues for outreach, indoors and outside, and by Zoom
- Through outreach we build future members
- We will use National's volunteer management module and Google Forms tools

Demographics

As the SPC began the process of creating this Strategic Plan, there was discussion about the demographics of the group and the target audience we wish to engage as members. Conceptually the Council has recently focussed on increasing the engagement of youths toward membership. This was based on an assumption that with an aging base of members in the Centre, a membership renewal was needed to avoid the Centre, essentially "aging out" of members. However, based on the member survey (~23% response rate), the core demographics of the club are generally in the 50+ age group (with a sprinkling of keen youth and families) adults who are leaving the "kid years" and newly able to indulge in lifetime interests like astronomy. Therefore, the SPC suggests that the Centre should focus on the members in that age group, and on prospective members in that demographic, rather than on youth to build the Centre.

While youth programs are important to our mission, they should not be at the expense of services for and engagement of our Centre's core demographic.

Summary of Program Evaluation

The Centre provides nine programs or services, all in a strongly competitive position in the community as there are few alternatives for these programs, and with different ease of offering to members and the public.

The SPC recommends that none of the current programs should be discontinued, with two provisos: the telescope loaner and mentorship programs need to be re-activated, and the loaner program may be discontinued if it doesn't see better use in future.

Some programs need to compete strongly with available alternative programs on:

- Public Outreach
- Social Media

Other programs need to grow to better serve our members:

- Monthly public membership meetings
- Spruce Woods Star Party
- Mentorship Program

A number of programs were considered "Soul of the agency" programs, with few, if any alternatives available in the community, yet an implicit part of the mission of the Centre. These programs need to be better supported, better utilized or improved/upgraded

- Winnicentrics Newsletter
- Glenlea observatory dome, warm room and pad
- Telescope loaner program
- Website

One new program that was suggested in the membership survey seemed very appropriate to the SPC so is included in this plan

• Centre Store / Merchandise

Core Strategies for Achieving Change

During the Strategic Planning process, the SPC determined the following core strategies would be required to achieve changes deemed desirable by the stakeholders.

- Council will continue the process of drafting bylaws by getting feedback from National and members of the Centre for input, revise as appropriate, and bring to Council then the Centre for ratification.
- Council will submit an application for incorporation of The Royal Astronomical Society of Canada Winnipeg Centre, Incorporated to the Province of Manitoba.
- Council will form three standing committees: Nominating, Finance, and Executive to develop organizational maturity.
- Develop an annual budget process
- Develop more effective financial practices and asset management to support broader business model
- Educate Council to use effective policies and procedures
- Plan routinely for succession of Council members using a detailed operating manual of procedures
- Develop a more effective communication plan to reach members and the public
- Develop a more effective process for volunteer management
- Implement processes for longer-term planning for great meetings with excellent and diverse speakers that engages the membership
- An active Mentorship Program that synergizes with a high demand (through marketing using all the channels available) Loaner Telescope program and is integrated with the Beginner Sessions at monthly meetings
- Consider opening SWSP to all RASC members in Canada and further enhance programming
- Improve volunteer recognition to foster better engagement
- Upgrade Glenlea (dome, washroom, pad, warm room, internet) and enable remote access by fundraising among members, the broader community, and grants
- Enhance the community of contributors for newsletter, website, social media feed
- Expand marketing of membership meetings
- Integrate communication plans across platforms
- Enhance mentorship for outreach activities
- Coordinate outreach programming through a calendar of regular events (post covid) and record of activities by members
- Distribute Winnicentrics more widely to the public and University of Manitoba for broader exposure of our activities in the community
- Recruit the new resources identified in the Program Plans, that will be required to realize our strategic goals – volunteer coordinator, membership coordinator, and fundraising coordinator (tentative) (see Organization Structure in the Human Resources section)

Requirements for implementing these strategies, arising in relation to assumptions

- Need high-level engagement by members of Council, so necessary work is distributed among all members of Council
- Need to recruit members with appropriate expertise to standing committees and as future coordinators of functions for IT/website/social media communications, finance and nominating committees, and coordinators for observatory/Glenlea, loaner scope program, membership program, outreach program, and mentorship program, plus volunteer management and recognition.
- Particularly needed is a group to form an Observatory Committee to enable the work required toward Glenlea upgrades (design, construction, and maintenance.)
- Need additional volunteers from the membership to step up and contribute to Council and programs

Strategic Plan - 2021-2025

Goals for the process

Council took opportunity from a large turnover in council members in January 2021 and the pandemic-based lapse in regular operations and meetings, specifically in recognition of needs:

- to know what members, want from their participation in the Centre,
- to establish guiding statements of the Centre's mission, vision, and values that would align with those of the National Royal Astronomical Society of Canada (National),
- to have the capability to meet expectations of the planned Incorporation of the Centre,
- to address current deficiencies and inefficiencies in operations and activities that would best satisfy members,
- to engage volunteers in a way that would be satisfying and most effective in program delivery and operations, and
- to be able to sustain operations while renewing or revising the way the Centre functions solely through the dedication and work of its volunteers.

SWOT Analysis

Based on the information gleaned from various sources the SPC conducted an analysis of the Strengths, Weaknesses, Opportunities and Threats faced by the Centre. They are:

Strengths

- Existing loyal long-term knowledgeable community of support, including members of Council who are willing to develop and deliver programs, etc. to meet membership needs.
- Existing strong outreach (e.g., Spruce Woods public event, Oak Hammock Marsh, Astronomy Day
- Good reputation but not a household name
- Multiple channels of communication that we can leverage, such as Facebook (pulling in Aurora people), email, website, forums, etc.
- Spruce Woods Star Party builds community and enthusiasm
- Infrastructure assets such as the dome, pad, scopes, warm room
- Financial assets in the bank

Weaknesses

- Volunteer management and volunteer outreach are largely ad hoc by individual members rather
 than Centre-sponsored activities (e.g., no inventory of volunteers). Events, interest groups and
 outreach are not publicized or coordinated sufficiently, nor are people able to volunteer easily. It
 is hard for some members to feel welcome.
- We need members to be more involved. Some members feel that the Council does all the work.
- The Centre can be seen as only for certain groups of people.
- The membership demographic skews to older people with very few young people, thereby not conforming to our STEM-education mission.
- People prefer and are using different communications channels, which requires duplicating information across channels to reach the membership.
- We are not transparent to members, e.g., financial statements, council minutes, and by-laws on the website.
- Socializing is considered important but is unsatisfactory at the present time.
- Reliant on the ambitions and personalities of the Council members, which changes frequently, and therefore can cause conflict between initiatives and among people.
- People feel they need training to be able to use the resources we have (e.g., the observatory and loaner scope). Resources are not being utilized for this training.
- Poor record keeping and simple financial management (e.g., no annual budget and uncertain ability to handle various revenue sources).

Opportunities

- Opportunity to increase outreach to develop new connections with like-minded organizations (schools, Scouting, Manitoba Naturalists, Nature Conservancy, University, Canadian Space Agency, Planetarium. Need to find a way to take full advantage of the "bump" in membership due to COVID and retain those members.
- Increasing profile/visibility using social media and the website
- Renewed opportunities to seek grants from provincial and municipal organizations, as a result of
 the pandemic and incorporation, and the need for people to have outdoor and educationally
 enriching activities. Successful astronomy initiatives to leverage, e.g., Dave Lane BGO
 (twitter-enabled scope) to build enthusiasm.

Threats

- COVID restrictions continue to restrict our ability to deliver services. Interest could wane rapidly
 once "new-normal life" resumes. (Mitigate and move to a small-group model of service delivery
 to the membership, based on survey results.)
- The University of Manitoba may change dramatically and jeopardize use of resources including St John's College lecture theatre for regular meetings.
- Membership may not be as active with volunteering as needed to effect change.
- Lack of intake from younger members leading to an aging-out of membership.
- Social / digital media is supplanting observation and experience, and becoming the source of
 information as well as the source of misinformation. Hobbyists are expecting to be entertained
 rather than participating contributing to a shallower pool of volunteers.
- Expectation does not match reality (eyepiece does not match what is in the pictures)
- Potential decreased membership/interest in the sciences.
- The National website might not measure up to our expectations.
- Diversity of external funding sources may not be available post COVID. Mitigate by incorporating
 quickly to take advantage of the funding that is available, and apply for it, according to the
 membership survey. Also, conduct a brainstorming session on fundraising to identify other means
 to meet items identified in the membership survey.
- Light pollution will make Glenlea more unattractive for observing.
- Floods and infrastructure threats due to global warming affecting Glenlea.
- Disinterest in aging observatory infrastructure.

Summary of Core Strategies

The SPC reviewed each of the program areas and activities of the Centre and categorized them in areas of strategic action as follows:

Invest in

- Long term dedicated members and strong outreach (e.g., SWSP) coupled with opportunities for more outreach (e.g., marketing collateral) and renewal of council / membership
- Increasing profile/visibility using social media and the website coupled with multiple channels of communication that we can leverage such as Facebook and good reputation
- Infrastructure and financial assets but need to address the weak management / membership priorities

Defend and sustain

- Long-term dedicated members and strong outreach (e.g., SWSP) coupled with opportunities for more outreach (e.g., marketing collateral) and renewal of council / membership
- Increasing profile/visibility using social media and the website coupled with multiple channels of communication that we can leverage such as Facebook and good reputation
- Infrastructure and financial assets but need to address the weak management / membership priorities

Decide to

- Consolidate and improve the channels of communications, since channels of communication are not consistent.
- Improve outreach by taking up opportunities (and use as evidence of Centre's value to broader community) by renewing engagement of volunteers on Council and in general membership in order to undertake a more active outreach program by volunteers

Fix

- Implement better processes to do a better job of volunteer management / resource development / infrastructure development
- Improve transparency of council for members

Environmental Scan and Needs Assessment

The SPC conducted an Environmental Scan. Specific problems are:

- a need for bylaws,
- Council rules of operation,
- better organization of meetings, and
- mechanisms for organizing and distributing the work of Council and the Centre.

Therefore, the Council, the beginner, intermediate and experienced members of the Centre, and the public in general are audience segments "in need". Many trends in the internal and external environment, do and will affect these needs, in that Council changes all the time, membership is reasonable stable but aging, the market for astronomy is increasing, there is support for STEM in the broader community, and we need to better promote our activities to community groups so they can find useful information.

Overall value RASC Winnipeg Centre can bring to members and to the public are: fellowship, training, recognition, events and activities, and learning, mentorship and training in astronomy.

Evaluation of Current Programs

The SPC conducted an evaluation of the programs currently offered by the Centre as below. Where appropriate input and suggestions have been noted.

Monthly public membership meetings

The Winnipeg Centre holds 10 monthly meetings per year that are open to the public, typically with 100 in person and 40 by Zoom. This year only 3 of the meetings were held at St. John's College at the Fort Garry Campus of the University of Manitoba. The last meeting was held March 2020 at the U of M Campus. Since April, meetings have been held via Zoom. The meetings are designed to accommodate a wide range of knowledge and experience in the audience.

Programs start with a beginner's session, followed by "What's up" which is a review of upcoming astronomical events and viewing opportunities for the month, and "What's new" which is an update of current astronomical topics and events in the astronomical news. Following a break the meeting continues with sessions on other topics of interest including RASC programs and certificates, imaging, astrophotography, and computer applications. Meetings are currently conducted via Zoom due to public health restrictions and are streamed real-time on Facebook and YouTube.

Meetings meet needs for learning and fellowship, perhaps with an imbalance of topics with more diversity required. We measure attendance in the main meeting, attendance at the Boston Pizza after-event (or virtual meeting), member engagement (estimated), question and answer period, and follow-on discussions. We could also assess whether: speakers want to come back (how easy is it to get a speaker), audience members are willing to connect potential speakers for future meetings, poll the audience at meetings, survey attendees after each meeting, and continue with the biannual member surveys for feedback. The Zoom meetings now have 2 breakout rooms.

Strengths of the program include social aspects and fellowship, topics, speakers, the audience learns a lot, delivery of presentations (could vary the stimulus to sustain interest at meetings), and there is a motivated group on council that makes it easier to get good speakers. However, the success of meetings is very dependent on individual effort to get good results.

Overall, for the ongoing success of regular meetings, now planned quite well in advance, and by Zoom utilizing two breakout rooms to increase social interactions, we should take opportunities from advances in technology to enable remote systems and improve communications, the social context that encourages more marketing to those interested in astronomy, current support available for STEM experiences and education, and encouragement from pandemic for people to undertake outdoor activities (distancing).

Recommendations for Meetings

The growth strategy for the program of regular meetings is to expand programming and attract more remote users (non-members). The SPC recommends that in future, the Centre should aim to have more engagement, marketing and recruitment of attendees. Post-covid meetings will resume as in-person at the University of Manitoba, but we should maintain livestreaming and the capability for remote participation (for distant attendees and speakers). We don't have a way to

track our progress in planning the agenda of regular meetings, something that we could post as a planning chart in Google Docs (now used for Council communications and archiving of working and historical documents), one for each monthly meeting. This would assist Council being able to know the content of each meeting and whether speakers and presenters are confirmed. All Council members should be engaged to enlist presenters at the meetings.

Specific suggestions on meeting content include:

- Have a wider variety of high-quality main speakers (technical, beginners, general interest, academic)
- Use technology to invite speakers from remote locations
- Include more demonstrations in the meeting (or pre-meeting workshops when in-person) for beginner sessions and link these to activities of the mentorship program
- Develop a mix of 'What's New' speakers and topics
- Develop a succession plan for a 'What's Up' speaker
- Return to interactive in-person meetings in conjunction with Zoom/FB/YouTube streaming in real time.

Winnicentrics Newsletter

Winnicentrics is currently a bimonthly newsletter publication (6 issues/year.) It features content produced within the Centre as well as reference materials. It contains a list of local RASC upcoming events, astronomical upcoming events, an astrophotography gallery featuring members' astronomy images and links, and articles on a variety of topics of interest to members. Also included are official communications of the Centre including notices of elections and Annual General Meetings. The newsletter provides an important reference for meeting arrangements, schedule, and upcoming events.

The newsletter builds fellowship through discussion and promoting attendance at meetings and events, recognizes contributions by volunteers and members, provides education, training, and mentorship through content on astronomy, continues discussions about outreach, astronomy topics, and relevant issues, and is a key part of our due processes in conducting business (e.g., by providing notifications about Winnipeg Centre Annual General Meetings, nominations, and elections.) The newsletter editor and Council receive positive feedback about the articles. Members read the newsletter, and submit nominations at the call for elections, and some also provide content and images. Council utilizes the newsletter to post information. The current editor actively provides a content-rich, timely newsletter. At present the newsletter is hosted on our website electronically and each issue is sent as a link in an email.

The Newsletter Editor, an appointed non-voting position on Council, is responsible for collecting and publishing the content of the newsletter, generally completed a month before publication date. A volunteer editorial assistant proof reads the draft issue, and a draft is provided to Council to confirm details and solicit feedback before a new issue is released to the members on the first day of the publication month. There is no budget for the newsletter as the Centre incurs no costs in it's production.

Overall, the newsletter has returned to having regular issues that contain an engaging, and good mix of articles, photos, and news items of interest to the amateur astronomy members, and members read it cover to cover. However, the success of Winnicentrics is highly reliant on the ability of the editor to successfully solicit submissions and package them into a newsletter that can be vetted for language (proofed) and sent out to members in a timely manner on a pre-set schedule.

Recommendations for the Newsletter

The SPC considered whether broader dissemination might be useful in communicating opportunities for learning, fellowship, or outreach presentations that could be available through the Centre. For instance, we could send the newsletter to a network of Science Teachers Association of Manitoba, or ask STAM to post a link to our website for use by teachers. Our website now includes a link to the previous issue of Winnicentrics for broader dissemination to the non-member community.

SPC identified that we could include links to resources available on Centre or National websites, and to external resources, provide a heads-up notice of upcoming events in astronomy, for Centre, outreach, and mentorship, include regular columns from the Centre executive on a rotating basis, and add *What's Up* content from past meetings. As well, Council members could provide content that communicates information to members about Council discussions and activities. The newsletter could also include content that would engage a remote audience (including teachers and non-members interested in astronomy) including "contact us" links to our website.

SPC recommends that we take advantage of opportunities arising in technology and better market the newsletter to those interested in astronomy. We should do this by expanding support to the editor, including a better distribution method as available, expanding the input of contributions (articles, photos with captions, notifications, etc.), encouraging discussion by members in follow-up responses, updates, or additions to earlier articles, and increasing circulation (current website includes an open link for all website users (including non-members) to access the previous issue of Winnicentrics. Specific suggestions include:

- expanding base of support to editor, possibly by an assistant editor (also useful for mentorship and succession)
- consider posts on Facebook, Twitter, etc. about the Newsletter
- succession planning for editor
- consider providing a shorter edition of the Newsletter-in-Brief format, in non-issue months, for meeting announcements and follow-up information to plan and coordinate upcoming events (e.g., Spruce Woods Star Party) and meetings (this will not be possible if the editor is the only one doing this additional work)
- providing links to GoogleDocs in the newsletter, so members can access documents of special interest and importance. Links to YouTube of previous meetings would also be useful for those members who miss a meeting, and for non-members to experience meetings, even after the fact
- consider providing special issues of Winnicentrics on such items as elections (slate and short biographies of candidates and statement about why they are running), AGM agenda

- and background discussion in advance of meeting, SWSP in review with images, special topics such as the solstice, comets, Perseids, Milky Way, eclipses, conjunctions, "what's up" news flashes, and news from other Centres and their star parties.
- Consider inviting guest editorships to particularly expert or experienced members, or to winners of awards from the Centre (this could be a collection of images by one or a few individuals, or discussion about beginner session programming)
- Provide the "current minus one issue" posted to remote non-members and organizations to promote opportunities and provide information on Winnipeg Centre as a resource (now implemented)

Glenlea observatory - Dome, Warm Room and Pad

The Centre operates an astronomical observatory at a previously dark-sky site, to enable members to easily observe using equipment they may not otherwise be able to access. A large Ash Dome holds an LX200 telescope that is infrequently used and sits on a pier that requires remediation. The site also offers a concrete pad where members can set up portable telescopes for impromptu or planned observing sessions and a warm room building that requires remediation, and where members can warm up and gather socially while on site. A 14" dobsonian and 8" Ultima 2000 SCT are also housed at Glenlea but are very lightly used, particularly the dobsonian because it is heavy and challenging to set up.

There is no remote access or internet access at the Glenlea site although a Mifi portable access point was recently obtained by the Centre but has not been effectively deployed. The observatory building and warm room also store other equipment used while observing on site.

The goal of this program is to provide a "clubhouse" facility to build fellowship, provide education and training, and allow members to enjoy astronomy and share information. Ten or more members per year use the observatory while 50-100 members per year use the pad and warm room. The Centre allocates \$500 per year to maintain the Observatory program.

The heavy use of the warm room and pad are valuable in fostering social interactions, and for many members, this is their main attraction to the service. Members observing nights were typically held each month, but have been suspended during the pandemic. The observatory also provides multiple opportunities for peer-to-peer learning on the pad, and for instructor-led training in the dome. The observatory venue allows easily accessible facilities for astronomical events, and has facilities lacking in other outdoor venues (e.g., washroom).

Overall, the observatory facility creates a gathering space where members can interact socially while learning about astronomy from other members, and using equipment that they own or more elaborate/different equipment owned by the Centre.

The SPC identified that the current metrics on the success of this program are the number of uses per year and member satisfaction, both unacceptably low.

Recommendations for Glenlea

The observatory should be used for additional programs, both manual and remote observing. Access to non-members (e.g., by outreach events with schools and other youth groups) is also an area of potential growth. The pad could also be used to provide outreach and member and mentorship programs (member observing nights were organized pre-COVID), rather than at alternative venues.

Member surveys indicate there is a desire to enable internet access to the telescope, have additional telescopes and cameras available, and to have training programs to use the dome as well as mentoring experiences more easily accessible. The pad could be expanded in size, power provided, and additional/new picnic tables could be available. The washrooms facility could be improved and provided a separate more accessible entrance that is not through the door to the observatory.

There is strong potential to improve the quality and delivery of the observatory program. We need access to good quality, easy to use equipment for observing and photography, and access to comfortable facilities that will help members use their own equipment, the washroom and warm-up facilities. The observatory could be improved by automating the telescope, adding software that simplifies access while retaining complex set-ups required for use by experienced users. The observatory could be made to allow visual observing on-site as well as automated use (with easy switching between the two). Wireless internet in the warm room, on the pad, and in the observatory would be an attractive way to improve the programming for members and interested third parties.

However, we have difficulty maintaining operations with aging infrastructure, and foresee two major needs: to increase maintenance (with additional costs) on the facility, and to find a darker site for observations. In multiple surveys members have requested an upgrade to Glenlea that would allow the Centre to take advantage of current technologies, including advances in remote systems and communications, market our activities in astronomy and astronomical events, and take advantage of encouragement to engage in outdoor activities (distancing). Remote systems are getting cheaper, as are new telescopes and camera sensitivity, and the ability to filter out light pollution when observing and doing astrophotography. Demographics suggest that members have time for more mentoring activities, time for learning, and even ability to help fundraise and donate toward the observatory program.

The natural environment at Glenlea can be considered a long- and short-term threat. Dark skies are increasingly hard to access, and although current imaging systems can overcome the problem to some degree, public events may be more restricted as to location. As well, there is periodic, irregular threat from flooding from the Red River, which in the past caused serious damage to the infrastructure and took time and effort by volunteers to rebuild.

The Centre needs to remember that the trend to remote imaging and astrophotography, however strong and exciting, will not be attractive to all members. A new option has recently arisen, in that one member has offered to sell a 1-acre site at Vivian (for \$1) to the Centre. This would allow the Centre to develop a second location, either with a warm room and pad for member observing sessions, or an entirely new observatory (for remote or on-site use), or a compound where advanced members can build observatories that share resources on a cost-recovery basis with the club.

Members have indicated interest in automating the dome and making the observatory more easily accessible and modern, including the ability to use the scope by remote access. SPC recommends that the Centre should replace the mount on the existing telescope and add an additional (via a dual dovetail system) a small APO for wide-angle viewing, provide internet access to operate the observatory remotely, have an online booking system for online and in-person observing, and increase training resources.

Specifically, SPC suggests that:

 the observatory director position (currently appointed) be replaced by an Observatory Committee. This would increase the human resources available to train members on

- using the observatory, and help with building upkeep and grounds maintenance (through organizing work parties).
- increase opportunities for training members who wish to use the observatory
- The Centre takes steps toward the goal of seeing the Observatory as a facility that is fully subscribed on any clear night, including automated observing bookings as with the *itelescope.net* observatory.
- Glenlea should frequently be used for in-person observing, with the switch between manual and automated observing achievable with minimal training
- use of the facilities should be integrated actively with the Mentorship program for hands-on instruction on loaner and user scopes and equipment
- the Centre should also consider making Glenlea into a remote observatory, available to schools for STEM education programs and Science Fair projects
- Potentially, retain Glenlea as an education and outreach facility and invest in a heavily automated facility at Vivian as the foundation of a shared compound where members can build observatories and use shared resources such as power and internet.
- Build an enclosure on or alongside the pad for the 14" dobsonian that can be rolled back to enable rapid and easy use of this telescope with a minimum of training.

For the pad and warm room facility, the SPC recommends expanding these facilities through addition of space on the pad, additional seating, and wireless internet on the pad, updating computer equipment and improving remote access to the dome from the pad and warm room, and improving toilet facilities. Specifically, SPC suggests that:

- the Centre hold additional events during the month (post-COVID), aside from member observing nights
- use of the pad and warm room be integrated with the Mentorship program
- The Centre should hold frequent group sessions for mentorship, training on use of the observatory, and for socialization and fellowship.

Public Outreach

Outreach happens at multiple venues including the Spruce Woods Public Observing event, Oak Hammock Marsh, Astronomy Day, Meteor showers, Birds Hill Star night, appearances on Zoom meetings, in-person appearances at many venues (e.g., Scouts, Guides, Nature Conservancy, Parks After Dark), newspaper articles, and talks by members at the Lockhart Planetarium at the University of Manitoba. There is also an informal network of SkyNews distributions bimonthly, which promotes astronomy as a hobby and encourages people to look at the sky. The Centre estimates that 500-2000 people are reached through the program, which is completely voluntary on the part of individual members and the Centre.

The programming promotes learning about astronomy, and engages the non-member communities while providing some mentoring, education and training to teachers, scout leaders, staff, and community members so they might pass on information to others. Only a brief survey of only 12 of our members found they had contributed to 39 separate outreach activities over the past year, so there is clearly a fairly substantial level of outreach activity in the Centre. There is also considerable interest in hosting outreach events at various venues (photography clubs, Manitoba Naturalists, parks including Bird's Hill Provincial Park, the Whiteshell, at scouting events, schools, the Planetariums at Museum and University of Manitoba, etc.).

A recent telescope giveaway to award a pair of donated telescopes generated good interest, and there is noticeable attendance at some of our regular meetings, by members of the public including youth and their parents.

Members of the public are provided learning, fellowship, training, and a social event through the outreach program. To improve the quality/impact of the program for the public, we could consider providing graduated programs of outreach for true beginners, and those with intermediate or more advanced knowledge, or mature interest. We should also promote the Centre as a resource, and coordinate more events (after the pandemic) of general scope rather than keeping them confined to particular small groups (i.e., advertise city-wide, or park-wide), and promote through press releases, being sure to distinguish our outreach from Planetarium-based opportunities to learn about astronomy.

Recommendations for Outreach

There is potential for growth, for example if the Centre could facilitate RASC-sponsored outreach by promoting public opportunity to engage with our outreach on the website and in newsletter or fliers directed to those likely to have interest (currently often one-off presentations by an individual, made through word of mouth by various agencies and personal connections). As well, we could better promote the Centre as a resource available for public interest and learning, schools, youth groups, nature-interest groups (e.g., Aurora), educators, photographers, and STEM-related interest groups. If we could better recognize/reward contributions by our volunteers, that might incent them to promote their *ad hoc* activities in outreach into RASC-sponsored events.

The high level of expertise and willingness to present to the public are matched by a high demand for speakers and for demonstration sessions with telescopes. However, the program is almost ad

hoc, with the exception of the long-standing venues at the Spruce Woods Public event, Oak Hammock Marsh, and Astronomy Day, and essentially lacks coordination from Winnipeg Centre. The program is highly reliant on our volunteer members, even though they are quite dedicated to doing this type of activity. The events thus lack branding as an RASC-sponsored event, even if affiliation of the presenter with RASC Winnipeg Centre is included as part of their many presentations. The success of demonstration and viewing through telescopes is subject to the availability of darkness, supervision of youth by parents and teachers, scheduling in the year (darkness), and the weather (e.g., cloud, cold).

We should continue to poll members, and should consider tracking these volunteer contributions (and the size of various audiences they reach) so we can use the data to evidence a need by the community and be able to justify why/how the Centre can deliver such activities on a volunteer basis. It will be important to utilize opportunities of technology for easily assembled viewing equipment, and for communications (including remote access via Zoom as has occurred during the pandemic). As well, it will be important to have a consistent, clear response to requests to do outreach, considering the market for this service has grown.

The SPC recommends that this program be modified so the Centre can identify the events and coordinate them as being sponsored by RASC Winnipeg Centre. This will enable the Centre to promote the opportunity for the public to utilize our outreach program to foster a better appreciation for astronomy and STEM and to enjoy the experience of observing with like-minded people. It will also enable the Centre to track the magnitude and type of outreach that our members provide, in support of applications for relevant funding opportunities. Public organizations should also be contacted about our outreach program, especially for important astronomical events that can be seen together by a group or crowd. We also need to recognize and support volunteer members who contribute to outreach, and remember that the program should only be expanded within the capacity of our volunteer base. Specifically, SPC suggests we:

- coordinate more public events after pandemic restrictions lift
- market the outreach opportunity to the City of Winnipeg, that they can utilize the resource of Centre members for public outreach (e.g., at libraries)
- consider establishing an outreach coordinator position
- develop a simple mechanism on the website that will help coordinate and also compile a roster of the outreach activities by members
- improve recognition and support for volunteer base (also enabled by tracking these contributions)
- discuss at a regular monthly meeting, whether members are willing to have the website promote our Centre as resource to the public, schools, and organizations
- develop some training or familiarization for volunteers, as a type of mentorship directed at public speaking or using a scope to demonstrate astronomical objects to a group
- provide a "toolkit" of resources (e.g., pre-made RASC-labelled PowerPoint presentations and slide template) that can be used by members for outreach
- use technology to provide outreach opportunities (one-off and repeating activities) by Zoom and links from YouTube streaming
- expand marketing of outreach opportunities, but only within the capacity of volunteer base

Social Media

Our Centre's social media presence is currently focused on Facebook and is provided for the members to engage social media users and provide an area where members can interact and share information with others and the broader community. This information sharing and social interaction are the benefits of the program, which currently runs at zero cost. Centre meetings and events are posted there and on YouTube, along with announcements from Council. However, as there is a low rate of participation by Council members, more active use of Facebook is certainly a potential means of attracting new members, and promoting our programs and the enjoyment of astronomy as a hobby. Currently, the content on Facebook is specific to that channel which does not cross-feed to the email list or the website forums.

Social media is one of the primary mechanisms for communication to members of the Centre, and has a large population of people who are not yet members yet have an interest in astronomy. The RASC Winnipeg Facebook site group now has nearly 250 members, composed of both Centre members and local members of the public. Continued growth of the group will be the best indication that content is of interest.

Recommendations for Social Media

The Centre could increase our reach on social media through Instagram (e.g., for astronomy photos) and Twitter. Use of software can enable telescope control from these platforms (Dave Lane) which would also provide a way to pique interest from the public and increase engagement. We will need more content, and pay more attention to ensuring the content is cross-posted to all platforms. The content should also be more engaging to the public, and we can leverage paid advertising to attract new eyes and future members of the public to join the Centre.

Overall, this program is a free way to share our hobby with the outside world in a very populous environment. However, the Centre currently lacks resources to post content, and lacks discipline required to ensure that all important information is cross-posted. The Centre should definitely take the opportunity to use technology to reach more people than ever before in history, and to market interest in astronomy and support STEM-education. Baby boomers make heavy use of social media and our target market for members (45-50-plus in age) are using Facebook and Twitter especially heavily. However, younger generations are gravitating to platforms that are not popular with our demographic.

The SPC discussions focused on ways to encourage participation on social media and forums that could be joint to both platforms, and to consider the balance of the partnership participation by the Planetarium. Specific recommendations are that:

- the Centre could expand to Twitter and Instagram by cross-posting tools especially for images
- we create special content from the Centre in addition to member postings
- we need to ensure that all content should be posted to all channels to avoid members having to check all platforms to get announcements from Council, event itineraries and schedules, and discussion content.

Spruce Woods Star Party (SWSP)

Members gather annually at Spruce Woods Provincial Park, a new dark-sky preserve, for a long weekend near the new moon of September for sky tours, bino tours, swap meets, lectures, daytime and nighttime observing, banquet, Sunday morning breakfast, and socializing.

The SWSP provides fellowship, training, socializing, and learning and mentorship in astronomy. The event also stimulates interest in astronomy, equipment, technology, the night sky, and one another as individuals (in addition to attendees being members of the Centre). Typically, SWSP attracts 60-70 registrants. Annually, the program costs \$2,200, most covered by registration to attend SWSP and \$500 per year from the Centre, plus some door prizes are donated by companies or members. In 2020, the event was cancelled due to pandemic restrictions.

The SWSP is successful, according to the attendance, sometimes in rain or with a dismal forecast. There is relative ease to find keynote speakers with some planning, and a fairly good cadre of volunteers with experience in planning the event and coordinating activities (about 10/year volunteer). There is also a good assortment of door prizes meaning the planners are able to garner donations. The date of the event is discussed and communicated to members well in advance, and there is little complaint about the cost of registration. The event generates a "buzz" at meetings and among members generally, and registrants are interested and engaged in supporting the speakers and coming to the smaller venues and group activities at SWSP. The Centre should encourage members to submit ideas for guest keynote speaker, and ensure with the planning group that registrants know about the schedule of events (bino tour, swap meeting, tour of equipment set-ups at the event, dinner and breakfast gatherings, hikes, etc.).

Recommendations for the Spruce Woods Star Party

SWSP could grow in registration from members, and the Centre could support the planners by helping to improve food offerings, possibly by purchase of portable grilling surface to make large numbers of pancakes and breakfast items (eggs, bacon) for Sunday breakfast event post-pandemic. Also, we might consider opening SWSP to all members of the RASC across Canada, to raise the profile of the event, along the lines of the SSSP at Cypress Hills in August. Of course more volunteer resources will be required.

Ideally, the SWSP could provide better bathroom facilities (more and especially cleaner biffies), larger shelter area(s) for shade or dry areas, more electrical plug-ins for charging devices, a water truck on-site to avoid the need for campers to go fill up water containers in the adjoining campground, and a portable shower on-site. As well, we should attempt to recruit speakers from outside our local membership or area, for talks on topics of particular interest. We might consider a prize registration for a telescope winner (plus parent) and a teacher, and then solicit articles from those attendees for Winnicentrics. If we were able to provide a mobile internet hub, we could bring in speakers from remote locations, and/or provide streamed content for members who are unable to attend the whole event.

Overall, the event is highly attractive to members interested in learning and sharing fellowship while doing and talking about astronomy outdoors. However, the success of each star party event is highly subject to the strength of volunteers who organize and schedule and provide the event,

vagaries in the weather, food availability and quality, and toilet facilities that are not always sufficient or acceptable. SWSP organizers and Council should coordinate planning and better support delivery of this important event, take advantage of technology to provide services, and could consider marketing merchandise with an SWSP logo to members and registrants, to help support costs of providing services at the event.

The SPC recommends that the Centre expand this program, and modify the planning of SWSP by integrating it with Council so planners are better supported and can seek direct input when needed, for e.g., to suggest speakers and changes in the itinerary of the event. Specific suggestions are to:

- consider marketing to other RASC members from away (currently under-promoted by National)
- market the major benefit of observing in a dark-sky preserve
- market a link to members about participating in the Public SWPP Event, 2 weeks earlier
- increase and improve infrastructure so the outdoors experience is more comfortable for members, including purchase of a grill (for breakfast preparations), larger or more shelter areas for activities in heat or rain, more biffies, more and better charging stations on site, portable showers and hand-washing stations outside biffies, having a water truck on-site, recruiting additional volunteers from Council and the membership to help out on-site, and better coordinate with park staff so we can have more picnic tables closer to camp sites.
- regularly bring the SWSP coordinator(s) into one or more Council meetings for advance planning, especially discussions on choice of speakers and to help SWSP planning committee meet the need for logistical support and volunteers
- find internet service on-site so we can use technologies like Zoom to be able to consider speakers from a remote location
- Consider a Spring Star Party or other similar events

Mentorship Program

The mentorship program has just been relaunched after a hiatus during the pandemic, and is considered in a period of renewal. Terms of Reference were recently developed and an Education Coordinator appointed to manage the program. Online signup for Mentors and Learners have been developed and posted, however uptake over the summer has currently been minimal. More efforts will be expended to engage the membership for this program.

The RASC Mentorship program helps club members get the right start in astronomy by pairing them up, one-on-one or in a group, with a more experienced club member. Members can learn about particular topics in astronomy or practical activities with observing and equipment. New members can expect assistance with choosing, setting up and using new equipment, learning to navigate the night sky, as well as practical outings throughout the year to get hands-on experience at the eyepiece. The program provides training, learning, mentorship and fellowship with fellow members of the Centre. There may be as many as 50 or more members reached annually by this program, which uses Centre infrastructure, equipment and spaces at Glenlea (dome, pad, warm room) as well as other venues (e.g., Birds Hill and other parks, backyards). The program also utilizes voluntary use of mentor and learner equipment (scopes, binoculars, general gear). The program was previously highly reliant on a few dedicated volunteer members. Costs of the program are zero, not including costs of the purchase or maintenance of the infrastructure.

At present we have very little information on the uptake of this program by mentors or learners in the past, excepting anecdotal recall of particular events, or particular mentors. The program is intended to benefit member learning, training, and mentorship and also to further increase the prospects for fellowship among Centre members. However, we do know there is ongoing use of the Glenlea facilities (particularly warm room and pad) and interest in using the dome and other venues, as indicated in biannual surveys. Future measures of success should include bookings with mentors and learners, tracking interest in being a mentor, tracking interest in receiving mentorship, and expressions of the benefit of interactions at SWSP (could include in a survey from registrants at SWSP).

Recommendations for the Mentorship Program

There are many dimensions related to the use of individual setups of astronomy and technology, and we should be encouraging one-on-one interaction (post-pandemic), providing continuity with a potential set of Zoom beginner sessions (real-time or pre-recorded) that could be streamed with a mentor-mentee pair or for a group of people wishing mentorship (learners) on a particular topic of interest or necessity, in advance of any hands-on session with a mentor, programing mentoring sessions into schedule of Centre activities at Glenlea or other venues in different parts of the local region, establishing a spreadsheet of members interested in being a mentor (in identified topics or with broad experience), establishing a simple way to sign up for mentoring through website registration that generates a notification to coordinator of mentorship program, and continue providing beginner sessions at meetings, so the mentorship program can build on those topics and beginner expressions of interest. It will be important to bring members from being a learner to being a mentor and even participating in public outreach and demonstrations, as one aspect of succession planning for this program.

During planning, the SPC really encouraged Council to launch this program, recruit members, establish two spreadsheets (names, contact info, topics, experience, and availability): one for mentors and one for learners, and in early July 2021, relaunched this program.

The program should build fellowship as well as train those who are interested in using Centre infrastructure and equipment, and their own equipment. However, even with this launch, we need to sustain the engagement of a program coordinator who can match potential mentors with potential learners based on topics of interest and compatibility, and take this program seriously after it was suspended by COVID.

The opportunity to take advantage of technology for remote systems and communications, and of local area parks plus dark-sky venues, is not to be missed. Our members are interested in astronomy, and really want to use their own equipment and learn how to assess, operate, align, and maintain it. The SPC is pleased that the program is now becoming operational, and strongly recommends that the program be expanded to meet member demand for training on equipment owned by members and by the Centre. Specific suggestions are that:

- we recruit mentors and learners under the new terms of reference for the program
- find additional dark-sky sites for training that can reach more members
- promote the program to Centre members as an opportunity to learn, and also to learn to teach others about what they love to do
- support the President by involving the mentorship coordinator in recruitment and announcements of opportunities
- better recognize volunteer contributions
- establish a certificate to recognize mentors as volunteers, for example, after giving 4-5 sessions, a mentor gets a certificate and their name posted on the website, as well as mention in Winnicentrics
- establish certificates for learner to recognize they have some training in particular topics
- integrate the program with the Observatory Committee to ensure the Glenlea observatory, pad, and warm room are used and maintained
- better connect this program with the Loaner-Scope program, so members learn more about our Centre's equipment and the equipment is better utilized
- foster the succession of Learners to become involved in outreach and then mentoring the next cohort of learner members

Telescope Loaner Program

We offer a "free" loaner telescope program with a variety of telescopes available for club members. Previously, this program was very active, and members took advantage of the opportunity to borrow equipment including several dobsonians, a small EQ mounted astrophotography rig, and a solar telescope on a tracking mount. We generally lend them out for a period of a month (or longer if the demand is low). Due to the COVID-19, this program was closed for the most part of the year. It was open for a short time when the restrictions were lifted but closed again in November 2020.

The program uses simple to operate telescopes making it easy for beginners to trial them before purchasing. The PST has the addition of a small equatorial mount, which members can also use to try astrophotography as well. For those who want a more complicated scope, a Meade ETX scope on a fork mount is available. The club also has a Celestron 8" Ultima 2000 SCT with wedge and tripod housed at the Observatory however, we have not added this to our loaner inventory.

Members who do not have equipment or limited equipment get the opportunity to try out quality gear and decide if they like it. This allows new members to try a scope before they decide to buy one. We offer scopes that senior members may recommend to new members who wish to buy a first scope.

On average, there have only been 5 users (loans) per year from this program. This should be much higher. In 2020, we spent \$200 doing maintenance/repairs on the program; since there is no budget line for this poor-uptake program, the purchase of newer instruments has not been considered. A number of new members have purchased their first scopes as a result of borrowing and learning on a scope from this program. As well, the loaner scopes have been used in our outreach programs, to show potential members the benefits of joining. The solar scope (PST) is used at public events (e.g., Astronomy Day and the University of Manitoba Science and Engineering Day).

Recommendations for the Telescope Loaner Program

There is potential for major growth in this program. Specific loaner scopes could be provided to City of Winnipeg libraries for the public to borrow. Consideration for a small wide-field refractor on a GOTO mount, which might also be used for basic imaging. We could purchase imaging equipment such as a DSLR or older version CCD camera, and possibly an eye-piece loaner program so members could try using some higher quality eyepieces (e.g., 80-degree FOV); however, these ideas could generate significant risk by loss or damage. Ideally, this program would be coupled with the mentorship (educational) program, so that learner members could try out scopes and learn the gear while discussing its use with a more experienced member.

We know senior members are occasionally willing to contribute gear to this program, as it is seen as an opportunity for enhancing the value of membership in the Centre. However, the scope loaner program is not well promoted to membership and hence, is under-utilized. As well, it can be difficult for one person to administer, considering equipment maintenance is often needed when inexperienced members are using the scopes. We might consider having mentor assistance provided as part of the loaner scope program, offered one-on-one to a user.

The Centre should consider that funding agencies might be interested in helping the Centre buy equipment that could be used for STEM purposes in outreach activities. This avenue of funding will only be accessible if and when we can show that our current equipment is fully utilized. The SPC recommends that we Improve the synergy between the loaner program and the mentorship program (e.g., mentors know and promote use of loaner equipment to learners), and that we improve our promotion of the loaner program. This might take the form of someone reviewing one instrument in each membership meeting, and better promote the equipment use in various media such as Winnicentrics, Facebook, and in outreach events. Council members could additionally promote the opportunity to use loaner equipment in discussions during membership meetings. Specifically, SPC suggests that:

Council should better coordinate that there can be a synergy between the mentorship and loaner programs that would ensure that the equipment is fully subscribed and there is a waiting list for upcoming use

Council should not approve new equipment for the program until efforts are made to promote it heavily, integrate it with the Mentor program, and determine what uptake is. If minimal, cancel the program or replace it with an outreach program like Library Telescopes.

Website

The Centre maintains a web presence, including both external functions to promote the site and the hobby, as well as internal functions to support members of the club and the Council. The program aims to provide opportunities for fellowship while it disseminates information, and archives historical information. In May 2021, there were 2450 unique users of the web site, with 15,866 page views averaging up to 46 pages per visit. Customers provide positive feedback on the website through biannual surveys, which annually costs ~\$500.

The website is a primary means of informing the public about the Centre and its activities, and in May 2021 saw approximately 400 users who are referred to the site via search engine, and approximately 100 direct links from other sites. Ninety percent (90%) of user accesses are from Canada with 5% from the United States. Success can be measured by counts of accesses, referrals, and links in addition to customer satisfaction surveys.

Recommendations for the Website

The website has potential to grow, given there have been requests to add more media to the site and also additional features. Currently, member services via the website include delivery of newsletters, forums for social communication, learning, and disseminating information. This can improve by increasing the content and services of the site, as requested. The public and other interested parties can also access information on astronomy and garner assistance in engaging members of the Centre in external outreach opportunities. The impact of public-service aspects of the website could be raised by increasing information available on the site, and offering timely information that engages users and keeps them returning for new information.

Overall, the website program is a major asset as it is modern, attractive, and well organized, in promoting the Centre to external users and providing engaging and useful resources for members

of the Centre. However, currently the lack of resources available to create content is a deficiency; although there are many ideas for new content and new functional areas, there are few volunteers with the dedication, determination or expertise to make that happen.

Current trends that affect the impact of website and content it delivers include technological advances such as WordPress that makes it very easy to add complex functions to the website, a social environment that makes astronomy attractive so the number of users is increasing, support for STEM education, and the higher savings available to spend during the pandemic which means people are looking for new hobbies through web searches. However, although there are great numbers of baby boomers (newly retired) going online, younger generations seem to have less interest in traditional websites to access information and find a social community of like-minded individuals.

The SPC recommends that the Centre take steps to rapidly increase the number of content creators for website material, and publish selected newsletter articles within our knowledge base so there is a closer integration between newsletter and website, Increase the level of private content on the site by adding picture archives, astrophoto repository, etc., and encourage members to utilize the website forums to communicate discussion of issues and provide tips and feedback to one another and Council. Specifically, the SPC suggests that:

- The Centre needs to recruit additional webmasters as the current incumbent is fulfilling multiple significant roles in the Club that preclude doing more than basic maintenance on the website. A succession policy is critical to replace the present incumbent soon.
- we need to develop content that has more vitality to better engage members and non-members
- there should be less static content so the site is more actively refreshed, dynamic, and thus interesting and attractive for viewers including members
- the forums need to be better marketed and also hold more active discussion by members, since the email RASC_list includes non-members and does not include all our members

Suggested New Program for Winnipeg Centre

While reviewing current programs and activities one new area of programming was identified.

Centre Store / Merchandising

From its wide-ranging discussions relevant to current and future needs, the SPC also recommends that the Centre consider establishing a merchandise shop to better promote our presence and activities, and also to help build fellowship among an identifiable community during our interactions. This would be a new program that could be considered as part of fundraising and public marketing of the Centre. We could plan to make sales to members and to non-members.

To implement such a program, the Centre should connect its offerings with those of the National Society. We could also implement a paid pre-order system for SWSP T-shirts each year, to raise some funds to support SWSP activities and equipment and/or provide some shirts for on-site purchase by registrants. Prepaid orders (made with advance registration) would allow us to use electronic financial systems (rather than collecting payment by cheques and cash for deposit) and to make orders that we know are sold.

Recommended Strategies

Human Resources

Goal

 to develop a sustainable process to attract, motivate, and retain a capable organization of volunteers

Long-term objectives

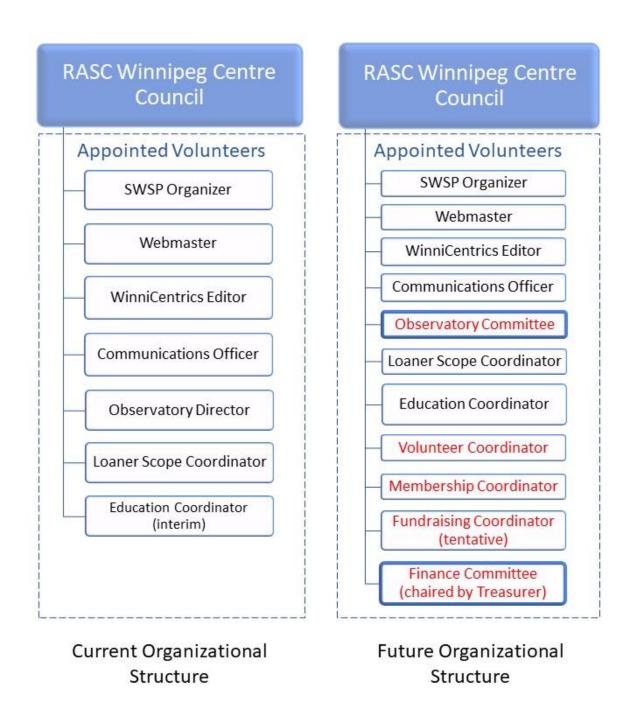
- Recruit sufficient volunteers who have or can develop key skill sets to support our strategies for growth
- Motivate current volunteers to continue volunteering and new members to step up
- Volunteers feel appreciated and are loyal to the organization
 Carefully manage workload so as not to over-burden particular individuals
 Coordinate people interested in doing outreach on behalf of RASC

Required resources

- Volunteer Coordinator, ideally someone on Council, who will organize and track planned requirements and recruitment of volunteers, and organize recognition awards for volunteers
- Membership Coordinator, ideally someone on Council, who will organize and track memberships (new, renewals, lapsed), and communicate with Council on membership matters
- Qualified people to volunteer there are currently people who are and wish to contribute, but often we don't call for volunteers soon enough or have a solid plan for what they will do
- Volunteer management tool
- Membership management tool
- Job descriptions of new positions in the operations manual

Organization Structure

• The following diagram sets out the target organizational structure required to achieve the long-term goals of the strategic plan:



Short-term objectives

- Recruit a Volunteer Coordinator, ideally a member of Council who is outgoing and well engaged with members in Centre activities. That individual will develop a job description of the position, and develop a Google Forms management tool (spreadsheet) that can facilitate recruitment to a plan, month by month, and also be used to track the activities of the members who volunteer. The coordinator will also then consult with Council about a volunteer award-recognition program, possibly awarding certificates of individual levels of contributions to the Centre's activities and programs, (e.g., 2, 5, 10, 25 times in a year, etc).
- Communicate with Council and members about the state of member participation and their engagement in Centre programming. Many problems occur when an organization that is solely run by volunteers, cannot count on a fairly even distribution of activity across Council and by its members. Council cannot accomplish everything that members wish for the Centre, without help from members.
- Recruit a Membership Coordinator, ideally a member of Council who will track
 membership (new, renewals, lapsed), communicate monthly with Council and
 members on changes and matters arising from the changes, provide a regular report in
 Winnicentrics about changes in the membership tally, and communicate with
 individuals at meetings and through other channels (Winnicentrics, email, forums) on
 the state of membership.

Financial Management

Goals

• to achieve a level of financial management that is adequate for revised programs and will satisfy the reporting requirements after incorporation, and to promote transparency and accountability through open reporting to members on the website and Winnicentrics.

Long-term objectives

- Produce and maintain electronic accounting records that are sufficient for a small retailer and potentially able to handle e-commerce transactions
- Satisfy a future audit, if/when necessary
- Have a budget process that supports contingency planning (with membership gain or loss, project under/over budget, etc.) and train members of financial committee to conduct same in developing the budget

Required resources

- Treasurer or an assistant with suitable accounting knowledge
- Small business accounting software
- Finance committee

- Strike a Finance committee by recruiting from membership (2) and Council (1) to join with Treasurer (President in addition, as ex officio voting member)
- Review Finance Committee Terms of Reference in the Bylaws, and revise as needed
- Train Treasurer and members of Finance committee in accounting and use of small business accounting software (e.g., by recruiting a knowledgeable person to Council who knows or can learn software such as WAVE)

Resource and Business Development

Goals

 budget process and asset and financial management are effective and sustainable from project development and to project completion

Long-term objectives

- Identify project(s) for focus on annual and longer-term basis complete with financial goal and tracking mechanism
- Identify and pursue additional sources of funding to support programs with costs that are not self-funding. Potential sources include:
 - o Individual contributors including legacy
 - o Philanthropic foundations and corporations
 - o Government
 - o Fundraising events and activities (e.g., Boston Booster, Bud Spud Steak, etc.)
 - o Process for issuing tax receipts from National in place

Required resources

- Volunteers for fundraising on particular project(s)
- priority project(s) for targeted fundraising now
- possible new position of Fundraising Coordinator to facilitate and coordinate fundraising spanning the whole organization

- Identify first 2 projects for the Centre and ensure (by scheduling and selection) that they do not compete for contributions or grants
- Recruit fundraisers for each project
- Recruit either a Fundraising Coordinator or project-specific fundraisers
- Establish a timeline for each project
- All program projects are contingent upon funding and volunteers if there are insufficient
 volunteers engaged to see any project through to completion, or insufficient funding to
 achieve the project in full, then the project will be abandoned or tabled until such time as
 volunteers and funding allows.

Organizational Structure and Culture

Goals

- Be organizationally mature in operations and approach, both internally as a Centre and externally in broader interactions
- Have an engaged membership that is active as volunteers and Council members; this will build interest in and knowledge of astronomy and increase fellowship and learning
- Be seen as truly welcoming to a safe environment to all, including out late at night with members
- Members feel that the Centreenriches their "life in astronomy"
- Have streamlined operations so Council can effectively (more evenly) distribute the required tasks among council members
- Be efficient in managing requirements first (this year is an anomaly with strategic planning, new bylaws, and evaluating roles and needs) before details.
- Expect to review Bylaws and revise the strategic plan every 5-6 years (things change)
- Have a Council that makes decisions at meetings rather than ad hoc (and one at a time),
 to allow for updates and discussion at Council

Long-term objectives

- Regularly use a section of monthly meetings and Winnicentrics as platforms to convey the
 way we value volunteers, and promote the current need for volunteers for upcoming
 events
- Members appreciate that the Centre is completely run by volunteers, and that Council on
 its own, cannot accomplish all that may be "nice to have" as It is busy getting the
 "required" tasks completed
- A matrix of required tasks for each member of Council is available, so everyone can identify that current and planned activities (by position) are a balanced distribution of required tasks
- Communications from Council are positive, and encourage retention of members of Council and the Centre, often through regular reporting to Winnicentrics
- Announcements to the membership are not released without approval by Council or an executive empowered by the Bylaws
- Council participates in providing 360-degree feedback to the executive on their effectiveness in communication with and representation of Council
- Council will tackle major issues as they arise, and when complaints are received, complainants will be asked to help fix the deficiency of note

Required resources

- Council members and the executive members of Council are the conveyors of a healthy culture for the Centre
- Broader interactions of Council with the members of the Centre that model the culture and mode of governance that we aim to achieve
- A documentation tool or spreadsheet (e.g., shared in GoogleDocs) that tracks the balance (or imbalance) of tasks (regular as well as ad hoc to address particular needs) assigned to

each individual on Council and timelines for each, as an open representation of the distribution of volunteer activities by each member of Council.

- Develop consensus at Council of the need for balanced distribution of required and planned tasks among Council members or positions
- Develop tracking tool to show balance (or imbalance) of tasks that Council members agree will be open access to members of Council, and can be summarized (for regular reporting) by the President in an annual report to the membership
- Develop a mechanism by which the President (or willing designate of Council) will
 undertake regular one-on-one feedback with each member of Council. New members of
 Council will get two meetings to "feel their way" into the organization and tasks that
 require doing.

Internal and External Communications

Goals

- Centre has a sustainable mechanism for posting information and opportunities for those outside Centre
- Centre effectively collects and welcomes inquiries and information from the public and
 Centre members and uses and takes appropriate action, as required
- Centre has a sustainable mechanism for posting information necessary and relevant to members regarding Centre activities, events, opportunities, training, financial position, and ongoing projects

Long-term objectives

- Synchronized or integrated communications across platforms
- integration of communications with activities and needs
- Increase the official content on the social media feeds

Required resources

- Winnicentrics Editor and newsletter (currently fulfilled satisfactorily by Vice-President and should be spun off to another member)
- Contributions by members as content for newsletter (currently insufficient, unreliable in amount)
- Webmaster including management and development of content for website and social media platforms (needs cross-posting across platforms and with email list)
- Communications Coordinator (currently satisfactorily managed by position of Centre Secretary)
- Template for typical issue of Winnicentrics
- platform and volunteer assistants to synchronize social media, email, and newsletter communiques
- website
- social media (currently managed by Vice-President, could be spun off to another member)
- RASC-list, or equivalent, for emailing members
- Forums for discussion
- List of emails from membership list
- Links from other organizations and "influencer" individual websites to connect with Centre website (e.g., Faculty of Science, Department of Physics and Astronomy)

- Recruit additional volunteers/contributors, e.g., guest editor for special editions
- recruit people from Council and/or membership specifically to cross-post material (each member of Council should write at least one article per year for newsletter)
- approach other organizations and "influencer" individuals to provide links to Centre
 website (e.g., Science and Physics/Astronomy Department at Universities of Manitoba
 and Winnipeg, Canadian Mennonite University, Universitaire Saint Boniface plus Nature
 Conservancy of Canada, Spruce Woods Provincial Park, Birds Hill Provincial Park, Aurora
 FaceBook group, etc.

Information Technology and Systems

Goals

 The Centre uses technology effectively to manage operations, financial matters, and communications

Long-term objectives

- Information technology and systems support online sales of merchandise
- Information technology and systems support effective communications across platforms

Required Resources

- Accounting System
- Membership System
- Volunteer Management System
- Mentor/Learner Database
- Ecommerce functionality (e.g., Wave)
- Stable platform for communications across multiple modalities
- Accounting spot on National in secure area

- Stop current reliance on one individual, as it is neither sustainable or acceptable
- Recruit additional people to work on electronic communications functions

Facilities and Equipment

Goals

- The Centre effectively utilizes the full inventory of equipment and facilities
- The inventory of equipment and facilities is updated regularly with appropriate valuations and insurance coverage

Long-term objectives

- Improve the usage of Glenlea
- Integrate with Mentor Program for hands on instruction
- Integrate with Loaner program, at least so loaner scopes can be maintained by a group of volunteers

Required Resources

- Increased training resources replace Observatory Director appointed position with
 Observatory Committee whose services will expand the resources available for training
- Acquire funding sufficient to refurbish Glenlea dome and observatory, pad, warm room, and washroom facilities
- Acquire funding sufficient to install internet services and wifi at Glenlea
- integrate fundraising by communicating with Observatory Committee or have at least some members of the Observatory Committee who also serve on fundraising for the project to renew/upgrade Glenlea facilities, to ensure synchrony of funding and observatory planning/work
- renewed formal agreement with the University of Manitoba for access to and use of Glenlea site by members of the Centre

- Strike Observatory Committee from Council and membership
- Detailed review of current state
- take steps to maintain current observatory and grounds (including toilet)
- train members who wish to use the observatory
- Council to decide that if some piece of equipment doesn't work, it should be fixed, sold or discarded
- decide as a group (Centre and Council), that capability for a remote observing site is (or is not) a priority, and plan accordingly

Planning and Evaluation

Goals

- The Centre has a regularized schedule for reviewing bylaws, operations, the strategic plan and Council effectiveness
- There is an annual budget process that tracks expenditures against overall plan for the Centre rather than a regular review of actuals by Council.

Long-term objectives

- write into operations manual, a "how-to" of review process for strategic planning every
 5-6 years (approved by Council) that is not burdensome on future Councils
- Centre's progress on meeting goals and priorities are transparent and accessible to Centre
 members or the Centre is able to see Council taking action to meet them, through reports
 from Council executive at Annual General Meetings and in annual report by the Centre to
 RASC National

Required resources

- An experienced member of Council to serve as an auditor of details, on the basis of prior experience in tracking and reporting progress and evaluations
- The allocation of time in Council meetings for a regular review of progress on priority objectives, actions, and achievements
- Willingness by Council to engage in providing input and receiving feedback to and from others on Council, respectively

Short-term objectives

 Recruit a willing member of Council to "mentor" Council by offering tips as feedback on activities/processes so that Council keeps focused on its plans and priorities

Recommended Projects to achieve Short Term Goals (Year 1)

Bylaws, Regulations, Incorporation

- Purpose: Complete Bylaws, compile policies and procedures in an Operations Manual, and incorporate Centre
- Finance Plan: use existing Funding
- Communication Plan
 - o To Council
 - publish minutes of Council meetings as adopted
 - publish draft Bylaws and regulations for comment
 - o To National
 - submit draft bylaws and regulations for comment
 - o To Centre members
 - Publish draft Bylaws and Operations Manual (policies and procedures) for comment and input
 - Publish draft Bylaws and Operations Manual to Council then Centre members for ratification
 - o To Province of Manitoba
 - draft Articles of Incorporation and file
- Resource Plan volunteers from Council to be managed by Council via its regular meetings
- Alignment to Mission, Vision, and Values statements new Bylaws will better organize the regular operations of the Centre in program delivery, so it is better able to share its learning, expertise, and enjoyment of astronomy with one another and the public. Well-defined Council and committee structure will help guide processes and interactions among Council members and between Council and the general membership. The organizational structure and defined roles of Council members will better assist members in building lasting relationships and to stimulate interest in astronomy and related sciences through interactions in the broader community. Our values of respect, integrity, diversity, effective and timely communication, and recognizing volunteers will embody the Bylaws and regular operations as outlined in the Policies and Procedures manual.

Volunteer Management process implementation

- Purpose: Review and revise the way the Centre manages volunteers who contribute to various programs: Mentorship, Outreach, and the Beginner's session process. Leadership development process. Implement IT solution (National Volunteer Management software?)
- Finance Plan: Existing Funding
- Communication Plan
 - publish minutes of Volunteer Management Working Group meetings on website
 - publish Volunteer Management Plan after Council approval
- Resource Plan Recruit a volunteer coordinator, and strike a working group (approximately 5
 members), chaired by a Council member (President in addition, ex officio) and consisting of
 interested parties on Council and the Centre
- Alignment to Mission, Vision, and Values Statements: This planning will bring the importance of
 volunteer activities directly into focus for Council in particular, and also for members. Although
 essentially internal to the operations of Council in coordinating outreach and other
 Centre-sponsored activities, the broad reach of activities to do the tasks required of the Centre,
 and also achieve additional desired/planned activities to promote astronomy and facilitate
 member and public enjoyment of sharing astronomy activities, are completely aligned with our
 mission, vision and values.

Finance Process Review / Finance Committee implementation

- Purpose: Review and retool the finance system to be robust, accountable, and sustainable. Create
 a Finance Committee (President in addition, ex officio). Determine minimum operating funding.
 Allocate excess funds to projects. Review asset valuation and insurance coverage. Implement an
 IT solution.
- Finance Plan: Existing Funding
- Communication Plan
 - Publish minutes of Finance Committee Meetings on web site
 - Publish Centre Finance Plan after Council approval
- Resource Plan
 - o Strike a three-person Finance Committee from Council including the Treasurer as chair; membership on the committee will be renewed annually.
 - o Incorporate a fundraising aspect of budget planning, and assess whether that should be on a project-specific basis or through a new fundraising coordinator position

Alignment to Mission, Vision, and Values Statements: This plan will provide short and longer-term
capability to plan and monitor the Centre's finances in view of expenditures, projects in progress
or planned, emergencies, and fundraising. It will also allow the membership to see the plans in
context of current finances on an ongoing basis, rather than hearing a tally of expenditures
against assets and the annual financial statement.

Recommended Projects to achieve Medium Term Goals (Years 2-3)

Glenlea Pad/Warm Room Enhancement

- Purpose: Implement enhancements to the pad and warm room at Glenlea based on member input
- Finance Plan: Allocate existing funding
- Communication Plan
- Preliminary Plan to be approved by Council
- Final Plan to be approved by Council and published to the Centre
- Resource Plan Strike working group chaired by a Council member and consisting of interested parties on Council and the Centre
- Alignment to Mission, Vision, and Values Statements completely aligned!

Observatory Enhancement Phase 1: Planning

- Purpose: Review current situation and provide a comprehensive plan of action for moving Glenlea
 to a fully digitally connected Observatory. Allocate funding from existing pool for next phase or
 determine if fundraising required
- Finance Plan: Existing Funding
- Communication Plan:
- Resource Plan Strike working group chaired by a Council member consisting of interested parties on Council and the Centre
- Alignment to Mission, Vision, and Values Statements completely aligned!

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Observatory Enhancement Phase 2: Enhance Glenlea Observatory

- Purpose: Based on Phase 1 plan enhance Glenlea Observatory
- Finance Plan: Fundraising as defined in Phase 1
- Communication Plan
- Preliminary Analysis approved by Council, publish to Centre for comment
- Resource Plan Strike working group chaired by a Council member consisting of interested parties on Council and the Centre
- Alignment to Mission, Vision, and Values Statements completely aligned!

Long Term Goals (Years 4-5)

Observatory Enhancement Phase 3: Dark Site Planning

- Purpose: Locate and plan for dark sky site for new digital observatory or move existing to new site, determine required funding, initiate funding activities
- Finance Plan: Existing Funding
- Communication Plan:
- Resource Plan:
- Alignment to Mission, Vision, and Values Statements well aligned, as long as there is consensus among members to pursue a goal toward a private dark-sky site for the use of Centre members.

Observatory Enhancement Phase 3: Dark Site Implementation

- Purpose: Implement new dark site observatory
- Constraints: Fundraising goal achieved in Phase 2
- Resource Plan: Existing Funding, Fundraising Process
- Alignment to Mission, Vision, and Values Statements well aligned, particularly in view of increasing light pollution and need for a darker-sky site where members can gather to learn about and enjoy astronomy together.

Current / Expected Annual Costs

This spreadsheet was developed by SPC to provide Council with a preliminary idea of the cost of the changes recommended by the SPC. The SPC analyzed current costs and estimated both operational and capital costs for each of the recommendations.

	Current Annual	Expected Annual	Projected Capital	
Program	Expenses (\$)	Expenses (\$)	Cost (\$)	Notes
Monthly meetings	\$ 1,000	\$ 500	\$ -	Cost went down due to not needing Zoom webinars
Newsletter (Winnicentrics)	\$ 300	\$ 300	\$ -	Skynews
Glenlea Observatory	\$ 950	\$ 2,700	\$ 30,000	Upgrade to full automation
Glenlea Pad and Warm				
Room	\$ 250	\$ 250	\$ 10,000	Increase pad size and appointments
Telescope Loaner program	\$ 250	\$ 250	TBD	Subject to uptake - no expansion currently suggested
Spruce Woods Star Party	\$ 250	\$ 1,000	\$ 500	Grill and incidentals
Public Outreach	\$ 400	\$ 400	\$ -	Materials
Website	\$ 400	\$ 400	\$ -	Cost of forums and member software
Social Media (Facebook)	\$ -	\$ 500	\$ -	Pay for ads?
Mentorship program	\$ -	\$ -	\$ -	
Merchandise	\$ -	\$ -	\$ -	Print on demand should mean net zero costs
National GA Attendance	\$ 1,500	\$ 1,500		Assume 1 attendee
TOTALS	\$ 5,300	\$ 7,800	\$ 40,500	
Annual Revenue (2020)	\$ 4,300	\$ 4,300	\$ 19,933	Current liquid assets as of July 2021
Surplus	-\$ 1,000	-\$ 3,500	\$ 7,000	Reserve fund (rainy day fund - to be committed)
			\$ 27,567	< Fundraising required

Action Plan for achieving the Goals – Program portfolio and plans

Communication plan

- Promote plans and priorities of Council on each of the programs for Centre members at regular meetings (may require adjusting the typical schedule of meetings), and at the Annual General Meeting
- o Publish plans and priorities of Council on each of the programs for Centre members, on an annual basis
- o Track progress of Centre and Council and report on effectiveness in achieving goals and priorities, and report according to mission, vision and values statements.
- o Engage members and Council in planning for high-priority upgrade to Glenlea, and explore additional darker-sky sites (e.g., Vivian)

Financial plan

- o Establish finance committee
- o Find training resources and have finance committee members receive training
- Adopt an accounting tool
- Establish banking method/institution that allows online viewing of the account and regular management of current funds, including electronic banking and transfers (in and out)
- o Develop annual budget for the Centre, complete with to-date actuals in comparison to projections and the previous years' actuals, and identify needs for the upcoming 1-2 years, in view of program changes, new Bylaws, and anticipated Glenlea upgrades
- Organizational capacity development plans
 - Recruit members, ideally from Council, to serve in new coordinator positions for Membership
- Volunteer management
 - o Social media and information systems content
 - o Project-specific (or overall) fundraising
 - o Integrate SWSP coordinator into Council meetings for support in planning
 - o Establish Finance and Observatory Committees, and anticipate need to appoint a Nominating Committee each Fall
 - Consider making a standing Observatory Committee
 - Develop matrix of tasks distributed by (and balanced across) Council and appointed positions
 - o Develop calendar of Council and Centre activities, and a planning process to ensure there is timely communication, recruitment, and reporting to members
- Leadership development plans
 - President to speak with Council members about performance and encourage/mentor their engagement in Council/Centre activities and programs, and their effective contributions
 - o President to speak with Council members and recruit one of them to serve as an informal mentor-auditor of feedback and evaluation
 - Coordinate with nominating committee in finding a slate of members who will stand for election and have suitable expertise required to help Council accomplish the goals and objectives of this strategic plan

0	President and executive to oversee balance of contributions by Council members to required tasks and rebalance as needed

References

Notes from focus group with Senior members

Senior Members Archive - Google Drive

Objectives of the 2021 membership survey

https://drive.google.com/file/d/1ljsjFukeccX0aklDR0CUmtcc5lSu_QAn/view?usp=sharing

Responses to multiple-choice questions in 2021 Survey to members

https://drive.google.com/file/d/1wT1-L_jcDeCdVwJAH1z4NAdunWNdXfxW/view?usp=sharing

Interpretation of text responses in 2021 Survey to members

https://drive.google.com/file/d/1NHLy4jfDQkVhKcGFh3-AX2x2i9lDHJ7V/view?usp=sharing

Draft job description of Volunteer Coordinator

- Volunteer Coordinator, ideally someone on Council, who will organize and track planned requirements and recruitment of volunteers, and organize recognition awards for volunteers
- Finalize a job description for the position
- Work with IT expert(s) to develop a management tool (e.g., using Google Forms) that can facilitate recruitment of volunteers for various RASC-sponsored activities and events on a calendar
- Consult with Council to design a volunteer award-recognition program, possibly with annual certificates or lapel pins (for significant activity), for different levels of contributions to the Centre's activities and programs, and award at AGM or SWSP or high-profile event
- Use the management tool to track the activities of the members who volunteer
- Communicate to members about the state of membership engagement in volunteering
- Manage a database of engaged members

Draft job description of Membership Coordinator

- Work with database of members, either local, National RASC or a hybrid, that supports website integration and automatically creates emails to all members
- Contact members who are new to welcome them and make them aware of club programs
- Contact members who are on grace period of 60 days to encourage renewal
- Contact former members who have recently expired to encourage them to come back
- Contact former members periodically with news about the skies to keep RASC on their radar
- Reply/forward inquiries received on RASC web site
- Produce reports on changes in the membership base (e.g., in Winnicentrics).
- Foster a welcoming atmosphere that reduces or at least attenuates the potency of cliques
- Grow the membership

Report to Council on a monthly or bi-monthly basis, about overall membership and issues that lead to the loss of members

Draft job description of Fundraising Coordinator

- Report regularly to the Council which will monitor, mentor, and advise fundraising activities
- Submit quarterly reports to the Council
- Develop, plan, and coordinate fundraising events, including sponsorship for monetary and in-kind support, for the various projects and/or programs that require funding.
- Direct event timelines and work with the Volunteer Coordinator to ensure all elements of the event are delivered well and on time
- Track revenue, expenses, and budget for events
- Oversee event materials
- Organize event and program promotional messages
- Proactively pursue multiple sources of funding to support other programs that are not self-funding. Potential sources include: government, philanthropic organizations, and individuals including legacy contributions.
- Search for new business and community relationships
- Keep a list of contacts for ongoing reference
- Provide consistent messages to recruit new fiscal support
- Develop, coordinate, and follow an annual fundraising plan
- Maintain a fundraising events calendar for the various projects, as needed.

Appendix A - Summary of Survey Results – Interpretation of text comments

There were suggestions to improve training and workshops, help beginners and mentor new observers, organize discounts with suppliers of optical equipment including cameras and scopes, provide merchandise with Logo for sale to members, to improve the website, e.g., by adding "Ask an Astronomer" function and an Instagram feed.

Members appear to want to use the scope but have challenges getting training and feeling comfortable with the telescope. They also generally find accessing the facility difficult due to its location outside the city. As well, many users who would like to use the telescope both find their own equipment acceptable/superior, or that Glenlea is not usable due to deficiencies in design (shaky pier) or the location (bad road).

There was a clear consensus that enhancing the facilities would improve the usefulness of the Observatory's two primary components, the pad/warm room and the Dome with the LX200. Suggested enhancements to the pad include making it larger, adding power and Wi-Fi, adding seating and heaters, improving washroom facilities, and improving the road. On the Dome side automation and internet enablement are desirable, and remediation of issues with the existing LX200 and mount. For training and booking it appears members would like to have more opportunities for training, and make it easier to book time on the scope.

Most members enjoy using the pad and warm room with their own equipment due to its proximity to the city and relatively dark skies, some didn't have the chances yet due to the current COVID restriction, others prefer different location and/or their own equipment; members who do wish to use the dome and telescope indicate they need better orientation and/or training.

Those who only infrequently joined the monthly in-person meetings, find it inconvenient to travel to meetings and don't necessarily like meeting on a Friday night.

Members who have infrequently (twice or less) joined into the Zoom meetings since the pandemic, are getting tired of Zoom-only meetings, although they do see the advantage.

In response to a question about renewing membership next year, members had a strong feeling that there is value for the money, perks like sky news etc., are valuable to the members. The only negative had to do with political statements from National that one member considered unrelated to science. Many members made positive comments on the social aspect of being able to connect with like-minded people. The area suggested is for the Centre focus on clearly identifying, if possible, the things that are being done at a social level to make people feel included and their needs are being met. This should form a core of things that is promoted to the membership by anyone who has been a member for a few years. For instance, using Glenlea more, matching people's interest and being as welcoming as possible. I think the benefits help (sky news) but it is the social interaction, a vibe if you will that keeps people coming back.

The majority of responses about whether members would recommend the RASC Winnipeg Centre to others who are interested in astronomy as a good organization to join, feel that the Centre is the place to learn the basics of astronomy and more in-depth knowledge is available for those who want it. Again, the social aspect appeared to be very important to respondents, and many expressed that they find the

Centre welcoming and inclusive. The Centre needs to be focussed on its learning objectives for both the beginner and those wanting more knowledge. The Mentor program as part of a planned learning experience could be a cornerstone of this. In addition to this perhaps zoom groups need to be developed for special interests. A strong social aspect needs to be incorporated wherever possible. Perhaps planned "social events" with a learning aspect conducted at Glenlea. We need to try to identify why people feel the Centre is welcoming and try to bring that into everything the Centre does.

Many members indicated that they do volunteer or used to volunteer.

Many of those who responded are willing to consider doing some new or additional volunteering, especially at events with the public.

Appendix B - Results of Internal stakeholder focus group – Centre Council

Council members had suggestions regarding their vision of the Centre for the next 3-5 years, given the stated mission of the Centre. Comments included that: this place is a happening club that people want to be in, with lots of energy, broader profile in the community, we need more diversity in the group (gender, age, interests), there is enough equipment to accomplish our mission, that we need to promote dark sky preserves such as an urban dark sky venue, that we need to enhance relationships with like-minded organizations, and offer services to all levels of members.

Council also suggested there are specific programs and actions that we should accomplish in the next 3-5 years, including changes to Glenlea (pad, warm room and dome) so it is usable by any level of member (needs funding), should host a General Assembly (needs funding and early, effective organization), establish mentorship programs and public outreach programs, hold contests with awards and prizes to encourage people into the hobby (would raise our profile), increase awareness of the existing certificates (e.g., Messier, pins for acknowledgement), establish a light-abatement committee, develop an online reference library for books and resources, establish a youth group (would work in conjunction with the mentorship program), hold regularly scheduled member events (not the monthly public events) with a key goal being socializing (e.g., Wednesday night discussion group), and provide time during monthly meetings to have open discussion on one special topic a month.

Council provided the following suggestions on how the Centre could fund such additional programs, including: fundraising events (e.g., bingos, etc.), government grants, funding from philanthropic organizations, star parties as a billable service (requires insurance), shared fundraising events with like minded organizations, individual donations including legacy gifts, and innovative products and services (e.g., personalized license plates, apparel, etc.).

Council members suggested how the Centre could build an organizational capacity that would support their vision of the Centre. Suggestions included: modest financial rewards for critical volunteers (honoraria), better volunteer recognition for contributions (e.g., contributors to Winnicentrics), car pooling (e.g., for the SWSP), asking members and others to contribute to the organization, taking a sustainable approach to enlisting and retaining members into volunteering, having an established organizational structure that fills in the existing gaps, finding technology/systems functionality that provides the functions needed for the program vision (aggressive adoption of the National solution).

Council members expressed their vision of leadership for the Centre, and suggested some changes in governance, roles, and succession planning that might help that happen. Suggestions included that: we need leadership that helps the members get in the direction that they want, council and exec are not there to run it, rather to make it work; they empower members, and Council leads initiatives, but does not run them. Council should have more visibility and transparency so their work does as well. Council should formally determine how the executive is elected (councillors vs. membership) in new Bylaws, and develop specific standing or special committees. Succession planning is also important, and we should encourage a path but do not enforce a certain path, document the processes of each leadership position, require certain processes such as strategic planning on a regular basis, have the past-president be the means to some continuity by passing materials to the incoming president, have Council members commit to keeping documents in a common drive for sharing, and do planning for emergencies.

Council suggested some changes in programs and activities that would help the Centre reach their vision. Suggestions included establishing continuity in our processes, handoff, and knowledge transfer, talking more in dialogue with the membership at our meetings to get more feedback, beefing-up the volunteer bench strength, employing a solid, structured project approach for bringing in organizational change including charter and budget (perhaps with special fund raising), and having an overall fundraising plan to operate the Centre.

Council members suggested things or activities that should not be changed, including: the social aspect of our programs, Winnicentrics, regular meetings, Glenlea observatory (but needs to become user friendly), and the warm room and pad (but needs to get better).

Council members suggested what should really be changed in, for, or about the Centre, including: making the meeting format more open, more opportunity to socialize (e.g., open-forum segment to the meeting), and keeping topics more organized and not repeat content. (Not all speakers should be academics, not all presentations should be about astrophotography, etc.).

Council members suggested some external opportunities that they see the Centre could use to advantage in the next 3-5 years, including: communication with the Canadian Space Agency (e.g., paid speakers from the CSA, or other areas (e.g., Tim Russ from Voyageur series), and increasing the profile and visibility as a result of having to use Zoom and hopefully more activity on the RASC Facebook page which could increase membership especially among youth with interests in the sky that are still developing from curiosity. Members suggested that we renew opportunities to seek grants from provincial and municipal organizations, as a result of the pandemic and need for people to have outdoor and educationally enriching activities, and also fundraise through incorporation. There was discussion of renewing Council, as the "old guard" passes the baton to younger people with additional interests and energy to be involved at every level of the club's activities. We should take the opportunity to build outreach as schools and external organizations (Naturalists, Conservancy, University) find it opportune to take the value that RASC Winnipeg can offer in education, and work with like-minded organizations to expose more people to the RASC and what we do. We should find a way to take full advantage of the "bump" in membership due to COVID and retain them, and leverage successful astronomy initiatives by others (e.g., Dave Lane BGO, a twitter-enabled scope) in outreach and member engagement including increasing the use of Glenlea. There was also a suggestion to utilize the planetarium and other venues who have offered use of their space, e.g., lecture theatres.

Council members identified some external challenges that might decrease our success in the next 3-5 years, and how we could mitigate them. COVID restrictions remain in place past July; this could be mitigated by moving to a small-group model of service delivery to the membership based on survey results. The pandemic and extended lockdowns with the pandemic were clearly considered a negative aspect of continuing operations. There was a potential for decreased membership and interest in the sciences, and that RASC may be viewed as something that filled a gap during the pandemic, but was not as interesting once "new-normal life" resumes with vaccination levels increasing. It is possible that there is no grant funding available from government (post-covid). Council suggested that we should incorporate quickly to take advantage of what funding is available now and apply based on results of membership survey. Funding opportunities would actually decline as there will be so many groups/people seeking to rebuild after the pandemic. Alternative funding may not be available due to covid restrictions or follow-on financial impact of the pandemic, so we should brainstorm about fundraising to identify other means to

meet items identified in the membership survey. There is a possibility that membership may grow but volunteer activities and contributions do not, which will really hamstring our Centre because we'll keep trying to do more and more with fewer volunteers than necessary. It is possible that the University of Manitoba may decide not to renew the agreement once we open up that topic by discussing it with UM – this might leave us "high and dry" with an observatory we have to relocate, or too many legal (safety) requirements to satisfy the UM, or leave us under water when the UM's planning for increased activity and outreach with the Glenlea domes/pad overwhelms the scheduling or opportunities for the Centre members to use the pad/dome that we have enjoyed for decades. As light pollution increases, there will be less and less dark sky, such that Glenlea may not really be useful, and as a result, it will become much harder to connect casually with members for observing in a nearby location. Being able to socialize during observing sessions is really key for members, as much as socializing on its own (at meetings and outside meetings). St John's college could restrict use of that lecture theatre for regular meetings, once they can resume. There may be an aging-out of membership, and poor intake of younger members. Social media may become the source of information as well as the source of mis-information. People can be distracted by too many screens. Hobbyist expectations for entertainment rather than active participation would detract from volunteer pool and engagement - a shallow pool of volunteers would be very detrimental. If member expectations do not match reality (similar to equipment not always being as advertised), this would impact membership and engagement. There is always a change of floods and infrastructure threats due to global warming that would affect Glenlea, and there would be increasing disinterest if we don't address the aging observatory infrastructure. The National website might not measure up to our expectations.

Council members suggested that the Centre has some major strengths and we should use them to our advantage. For example, the loyalty of members gives us an existing long-term community of support. There are lots of members, many of whom are really knowledgeable and keen to help out or contribute (or continue to help/contribute) with talks, photography, articles, outreach, etc. There are also many senior members with lots of institutional memory available for input/advice. Sometimes I feel that Council could have a senior advisor (non-voting), longer in the 'tooth' than the past-president. The RASC list (UofM svc) is a good place to rapidly post questions, photos, etc. There are some really dedicated members of council, both younger and older; this provides good energy. Members still are willing to develop and deliver programs etc., to meet membership needs, but we need to align the members to the needs identified in the membership survey. There are existing, strong outreach activities such as the Spruce Woods public event, Oak Hammock Marsh programming, Astronomy Day, etc., and the Spruce Woods Star Party. We have infrastructure assets such as the dome, pad, scopes, and warm room, plus financial assets in the bank. We have a good reputation, but are not a household name. We have the new website with lots of potential needing content for it. We have a Facebook page that is actively used, and is pulling the Aurora people to it.

Council members identified some major weaknesses of the Centre and how to address them, including that we are reliant on the ambitions of Council members, and that changes frequently. Previous records haven't itemized the basis of decisions, kept decades of minutes on file (or organized and accessible), which means that a lot of institutional memory is lost from the paper trail. As people age, it's harder to remember the history of events/decisions, and some folks just stop trying to remember as it seems moot anyway. There is an unpleasant tension between initiatives that can move quickly to capture opportunities and energy of some members (council and regular members) pulling in the opposite

direction of people who are happy with just being a member or council member and not really putting much into the Centre. At some point, those with energy who are doing a lot, start to do too much, for their own sake or for the sake of retaining diverse input from many members (i.e., sometimes organizations and their flexibility suffer by losing the diversity that gives them flexibility to respond to change or urgency.) Communication with Forums assumes people look every day, and GoogleDocs is not reliable (in my experience at least), so we're losing work by members who really do try to give input. Many members want RASC meetings and events to be entertaining (including snacks) and seem to care less about contributing to growing the club or doing outreach. At meetings, we aren't engaging members as individuals, because there's no time allocated for open discussions (this is especially the case in the past year of Zoom meetings, when the emphasis seemed to be on getting through the different talks quickly, without helping to form a group that learns from one another and enjoys discussing things astronomical. Regarding the ability to easily volunteer to help with events, in the past we have worked really well together on group projects, but it's not obvious what projects people can sign up for. We need a button on the website that invites people to volunteer, or to suggest topics for upcoming meetings, or to pose questions for discussion at upcoming meetings.

Right now, everything dynamic among members of the club, happens at meetings for a few, at the virtual pizza for an additional few, or well outside the forums (non-RASC chatter). Not sure if there's a way to put the list messages immediately on Facebook or vice versa, since currently someone needs to post images twice. The forums are supposed to help, but not everyone uses them. Some members of Council are very quiet and their input would really be valuable in helping guide the Centre's activities and planning. Everyone might be asked to find or nominate a speaker for meetings or someone else to confirm with that person, since 1/year from each member of council would almost fill the slate. Centre can be seen as only for certain groups of people. New members not feeling welcome or hard to break into groups. Deliver a broad base of programs to meet what the membership survey tells us within the ability of our volunteers. Council is aware of when events are organized that where possible there is something for everyone. For instance, "Virtual BP" meets the needs of a small select group, but we could offer the remainder of the membership an alternative; it doesn't necessarily have to happen at the same time. The average age of members is high. We need youth engagement. There is a perception by some members that Council does all the work required to support and operate the Centre; we need members to be more involved. Our transparency needs to be upgraded, e.g., financial statements, council minutes, and by-laws on the website. Resources are needed for observatory training. Our outreach is limited to grassroots, individual initiatives as opposed to club-coordinated initiatives. There is no inventory of volunteers. For incorporation, we could be weak on the financial reporting, currently having no budget and may not have the ability to handle multiple sources of revenue.

Appendix C - Themes in Focus Group from Senior members

Senior members suggested new programs be implemented by establishing relationships with Dark-Sky sites and then holding events there, including Glenlea, BHP, Oak Hammock, Nature Conservancy, and Beaudry Park. In addition, there were suggestions to conduct high quality entertaining meetings with a variety of general topics to match varying interests of the membership. Some might be chargeable for example for a high-caliber person.

To provide funding for the above programs, senior members suggested we establish a budget to handle speaker fees to attract really big names who might charge to speak to the club at our meetings. The existing cash on hand is a significant asset that can satisfy short term goals. Funding from government and philanthropic organizations will help, and these sources will require a rationale with a project plan. The Centre can also acquire special funding from raffles, banquets, and other special events.

Senior members indicated their vision of leadership for Winnipeg RASC and the changes to governance, Council roles, and succession planning that are needed. There were suggestions to have a succession plan that is understood by members and well documented in Centre procedures. The procedures manual should have responsibilities for each position. Nominating committee should aim to have competitive elections, not just acclamations. Centre should have a knowledge- transfer process for mid-life members to pass knowledge to younger members. This would include a role-progression path to enable the gradual gain in knowledge about the organization and be managed by the nominating committee. Centre should improve tracking and recognition for volunteer activities.

Senior members suggested things or activities that should not be changed, including Spruce Woods Star Party, Glenlea (except to enhance/upgrade), the U of M RASC email list, and to continue and enhance the processes for welcoming and supporting new members.

Senior members suggested things or activities that really need to be changed, including eliminating cliques and being welcoming to groups and individuals, possibly by developing a code of conduct. Centre should engage members broadly, rejuvenate excitement, and communicate to members using the channels that they prefer. We should hold various events, club and public including social, to engage membership and sustain it. We should hold remote (Zoom) observing events, and provide better and more recognition for volunteers and members' accomplishments, e.g., in the Newsletter. Longer term, the Centre should increase its involvement in the National RASC.

Senior members noted there were external opportunities (ongoing or new) that RASC could use to our advantage in the next 3-5 years, including astronomical events (eclipses and Astronomy Day), that we should be giving sufficient time advance notice for preparing for such events. We should have a calendar of events at the beginning of the year, and we should be promoting our events on all channels. Longer term, we should have a plan to engage with the education system, and focus on shorter term organizational maturity to enable longer term significant initiatives. We should work with the Planetarium and other like-minded organizations.