NSIS COUNCIL REPORTS

Reports from the Annual General Meeting May 2, 2022 - 5:45 pm

AGENDA

161ST ANNUAL GENERAL MEETING (This meeting will be virtual, via Zoom)

- 1. Minutes of the 160th AGM, 3 May 2021
- 2. Vote to accept Minutes of the 160th AGM
- 3. President's Annual Report (Tamara Franz-Odendaal)
- 4. Treasurer's Annual Report (Angelica Silva)
- 5. Editor's Annual Report (Peter Wells)
- 6. Librarian's Annual Report (Michelle Paon)
- 7. Membership Annual Report (Shea McInnis)
- 8. Webmanager's Annual Report (Romman Muntzar)
- 9. Publicity Annual Report (Brent Robicheau)
- 10. Student Science Communication Competition Annual Report (Cameron Ells)
- 11. Excursions Annual Report (Hank Bird)
- 12. Lecture Programme for 2022-2023 Report (Anne Dalziel)
- 13. Vote to accept the 10 Reports
- 14. Nomination of 2022-2023 Council (Tamara Franz-Odendaal)
- 15. Vote to approve the new Council
- 16. Any Other Business
- 17. Adjournment

Note: Following the AGM, at 7:30pm, there will be a Public Lecture via a separate Zoom Call. The Zoom link will be posted on the NSIS Website (www.nsis1862.ca) prior to the Lecture.

Dr. Gaynor Dr. Watson-Creed, Asst. Dean, Faculty of Medicine, Dalhousie University will present "Public Health Systems in Canada: Pandemics, Plagues, and the Power of Prevention".

Dr. Tamara Franz-Odendaal NSIS President

MINUTES OF THE 160TH NSIS ANNUAL GENERAL MEETING

May 3, 2021

Meeting held virtually, via Zoom.com

Council Members & Observers Present: Tamara Franz-Odendaal (President), Tana Worcester (Past President), Hank Bird (Secretary, and Excursions), Angelica Silva (Treasurer), Peter Wells (Editor), Michelle Paon (Librarian), Patrick Upson (Webmaster), Anne Dalziel (Councillor), Tamara Franklin (Councillor), Tim Fedak (Observer, Nova Scotia Museum), Evans Monyoncho (Writing Competition), Romman Muntzar (Student Representative)

Members Present: Genice Halett-Tagley, Bertrum MacDonald, Carol Morrison

Regrets & Absent (Council Members & Observers): Nicole LeBlanc (Publicity Officer), Shea McInnis (Membership Officer), Sherry Niven (Councillor), Stephanie MacQuarrie (Councillor), Sally Marchand (Observer, Schools), Jillian Phillips (Observer, Discovery Centre), Yashar Monfared (Writing Competition), David Richardson (Associate Editor)

1. Approval of the Minutes of the 159th Annual General Meeting of 14 September 2020:

There were no revisions to these Minutes.

2. Motion to accept the minutes of the 159th AGM:

Moved: M. Paon Seconded: P. Wells

All in favour: Approved via online poll.

3. President's Annual Report (Tamara Franz-Odendaal):

The president thanked the 2020-2021 Council for its work and accomplishments during the past year, and she gave special thanks to those Councilors who are leaving at the end of the term and she welcomed new members who joined the council this year.

The President also thanked David Richardson, Gail LeBlanc, The Editorial Board, and Carol Richardson for their work on producing and distributing the *Proceedings of the NSIS*.

She thanked Nicole LeBlanc for her many years and contributions as our Publicity Officer, and Patrick Upson who migrated our website to accept membership payments via PayPal.

It was a very successful year, even though Covid-19 compelled us to move many activities online. Our public lectures will continue to be, and they are being live-streamed and recorded and are available on YouTube. In perhaps 2 years' time we may move some of the lectures to a hybrid format (half in-person, half online). Council Meetings will also continue online indefinitely.

The President noted the very successful Public Lecture Series this year. She also thanked all the lecturers for sharing their knowledge, experience, and time on such diverse and wide-ranging topics. These were the lectures during 2020-2021:

Sept, 14, 2020: Dr Anne Dalziel (Saint Mary's University) – Diversity of the minnow trap.

Oct, 5, 2020: Dr Erin Bertrand (Dalhousie University) – Phytoplankton need their vitamins too: how the foundation of ocean food webs depends on micronutrients.

Nov, 2, 2020: Dr Glenys Gibson (Acadia University) – The life and times of marine invertebrates of the Minas Basin – a tale of polychaetes, plasticity, and microplastics

Dec, 7, 2020: Amy Tizzard (Nova Scotia Geological Society) – Evolution of the Oxford sinkhole

Jan 4, 2021: Dr Michael Parsons (Geological Survey of Canada) – Metal mining in Nova Scotia: learning from the past to improve future environmental performance.

Feb, 1, 2021: Dr Derek Fisher (Mount Saint Vincent University) – Seeing through the smoke: cannabis and the brain.

March 1, 2021: Dr Gordon McOuat (King's College, Dalhousie University) – Brewing civilization: the science and culture of beer.

April 12, 2021: Dr Russel Wyeth (St. Francis Xavier University) – Wayfinding under the waves.

May 3, 2021: Dr Sarah Wells (Dalhousie University) – What we can learn from the strength of a mother's heart.

The President called on members of Council to present their reports.

4. Treasurer's Annual Report (Angelica Silva):

As of 31 March 2021, the net worth of the NSIS was \$36,039.65, held in our BMO bank account. This includes investments at CIBC-Wood Gundy which matured and the proceeds of which (\$21,259.35) were transferred to our BMO account in March 2021.

Revenue from all sources were \$6246.72 (mostly memberships); over 70% of individual memberships were paid via PayPal. Other revenue included \$360 in Institutional Memberships, \$422.09 in Income/Access Copyright Royalities, and a \$1,500.00 WISE Atlantic contribution

Expenditures amounted to \$8439.50, \$6,841.88 of which was for production of the Proc.N.S.I.Sand expenditures of \$7,052.12 (mostly for *Proc.NSIS*, Science Fairs and the Writing Competition). The remaining expenditures included \$70.00 for our website, \$47.62 for NSIS Brochures, and \$1,500.00 for Student Science Writing Competition prizes. (NOTE: in a normal year we would also contribute \$1,000.00 to support school Science Fairs in the province, but there were none in 2021 due to Covid.)

The Treasurer noted that the NSIS has 130 members. (See the Membership Annual Report below.)

The Treasurer recommended that we engage Dr. Robert Cook to conduct an audit of our 2019-20 and 2020-2022 Financial Reports.

5. Editor's Annual Report (Peter Wells):

The Editor reported that Vol. 51 No. 1 of the *Proceedings of the NSIS* has been published in hard copy in February and distributed to NSIS members. It is also available digitally to members, and will be available digitally to non-members after August.

The Editor thanked the Editorial Board and especially David Richardson (Associate Editor), Gail LeBlanc (Production and Layout Editor), and Carol Richardson (Cataloguing and Distribution) for their work.

Volume 51, No. 2 of the *Proceedings* is in progress, with numerous commentaries, research articles, and a student paper lined up. Other items and contributions are being pursued,

The Editor encouraged current members of the NSIS and Council to write articles, including Commentaries. He also

encouraged Council members to help seek articles for the PNSIS, including articles from past and present speakers, and from winners of the Student Science Writing Competition. He also requested suggestions for Editorials.

6. Librarian's Annual Report (Michelle Paon):

The Librarian reported that in 2020-2021, due to Covid-19, the Killam Library at Dalhousie was closed. This curtailed or delayed a number of activities, including collecting mail addressed to the NSIS.

There were no sales of the *Proc.NSIS* in 2020-2021. Copies of the most recent issue have been sent to Library & Archives Canada, the Library of Congress, and several indexing services.

A search was made through a number of indexing services for citations to *Proc.NSIS* articles, and the most cited ones were tabulated with information such as date of publication, number of citations, and date of most recent citation. Many have been cited scores of times. Some which were published decades ago are still being cited. The data indicate that the *Proc.NSIS* continues to have long-lasting research impact.

Other results of note during the year:

- Between August 2017 and March 2021 a total of 1283 complimentary copies of the Proceedings (from the overstock inventory) were distributed.
- The required forms to Access Copyright for the repertoire payment to publishers were submitted and NSIS received a payment of \$422.09.
- 11 institutional partners renewed their subscriptions, currently there are 14 institutional members and 84 NSIS exchange partners.

7. Membership Annual Report (Shea MacInnis):

Mr. McInnis was unable to attend, but a summary of his submitted report is as follows.

By May 2021 we had 130 total members (up 29 since the last AGM). This includes:

- 2 Honorary members (no change)
- 21 lifetime members (up 8)

- 76 regular members (up 7)
- 16 student members (up 13)
- 8 free members from presenters of Lectures (no change)
- 7 free student members from the writing competition (up 1 from last year)

In addition, there are 14 institutional members.

We continued our policy of offering free 1-term memberships to both speakers and the students who submit for the writing competition.

Shea noted that almost three-quarters of paid memberships were via PayPal. He also noted that we have begun to attract gift memberships, especially for students.

8. Webmaster's Annual Report (Patrick Upson):

As noted elsewhere, one of big achievements was implementation and continued enhancement of an NSIS account on the PayPal electronic payment system, which now allows members to pay their dues online. The Executive Page was updated, and all 2020-2021 Lectures were added to the website.

The NS Hall of Fame index has been re-organized to use the person's last name then first name. Information about the Hall of Fame, including criteria and the nominating process (with submission form) has been added to the HoF main page. Also, a section was added to highlight our two current Honourary Members (Drs. Arthur McDonald and Mary Anne White).

Features were added to allow correspondents to directly route email to the President, the Secretary, or the Membership Officer.

Traffic on the website has been consistent with previous years.

Work continues with Chebucto (our service provider) to resolve a "303 Error" which occurs when too many links on the website are clicked in short succession.

9. Publicity Annual Report (Nicole LeBlanc):

Ms. LeBlanc was unable to attend, so when it is received a summary of her report will be added here.

10. Student Science Writing Competition Annual Report (Evans Monyoncho):

Yashar Monfared and Evans Monyoncho were thanked for taking over this year as Co-cordinators and running a very successful competition. Participation was from all 6 NS Universities and was high: 47 students registered to participate. A total of 32 papers were submitted (Acadia University initial submissions = 19, others = 13). Number of papers in the final round of the competition = 16 (9 undergrad, 7 postgrad).

A panel of 7 Judges reviewed the papers and the results were as follows:

- Undergrad Winner: Olivia Mellville (Dal) about Critical N-to-P Ratio in Wastewater
- Undergrad Hon. Mention: Kat Kabanova (Dal) about Littoral Macrofaunal Biodiversity
- Postgrad Winner: Morgan Mitchell (SMU) about Surface Ozone Trends in NS.
- Postgrad Hon. Mention: Thomas Robert Davies (Dal) about Genomics and Farming.
- Postgrad Hon. Mention: Megan Fass (St.FX) about Seaweed Harvesting in NS.

11. Excursions Annual Report (Hank Bird):

H. Bird reported that between late 2017 and the end of 2019, we conducted thirteen (13) science-based excursions for members and guests.

However due to Covid-19, NSIS Excursions have been on hold since the Spring of 2020, and will be so until further notice.

When coronavirus restrictions are sufficiently relaxed, we have the following possibilities in mind:

- Petroglyphs and Guided Nature Hike (Kejimkujik N.P.)
- Waterfalls of Nova Scotia (various sites)
- Cape Split Nature Hike (Scots Bay)
- NS Museum of Industry (New Glasgow)
- Shubenacadie Wildlife Park (Shubenacadie)

Also, when possible, we may be able to have a joint excursion with the Halifax Field Naturalists organization, guided by a HFN

expert. Also, there is the possibility of a joint excursion in May 2022 with the Canadian Geological Association.

We welcome additional suggestions and possibilities.

12. Lecture Program for 2021-2022 – Report of the Organizing Committee (Anne Dalziel):

Ms. Dalziel said that the program is nearly complete, with just a few final details to be resolved.

13. Motion to accept the Annual Reports:

Moved: A. Dalziel Seconded: P. Wells

All in favour: Approved via online poll

14. Report of the Nominating Committee for the 2021-2022 Council (Tana Worcester):

Tamara Franz-Odendaal thanked the outgoing Council and remarked that the Tana Worcester and the Nominating Committee made efforts to increase the Council's diversity for institutions represented, disciplines, age, gender, and geographic location. The AGM was asked to elect the following to NSIS Council for 2021-22:

President Tamara Franz-Odendaal Vice-President Stephanie MacQuarrie

Past-President Tana Worcester Secretary Hank Bird Treasurer Angelica Silva

Publicity Officer Molly Murray (and Nicole LeBlanc)

Membership Officer Shea McInnis
Librarian Michelle Paon
Editor Peter Wells
Webmaster Patrick Upson
Councillor Anne Dalziel
Councillor Glenys Gibson

Councillor Geniece Halttett-Tapley

Councillor Youyu Lu
Councillor Jinshan Xu
Councillor Anne Dalziel
Student Representative Romman Munt

Student Representative Romman Muntzar

There was a call for additional nominations from the floor. None were forthcoming.

15. Motion to approve the Nominations:

Moved: A. Dalziel **Seconded:** A. Silva

All in favour: An online poll showed all voting councillors

present were in favour of this slate of candidates.

16. Any Other Business:

2022 is the 160th Anniversary of the NSIS. We have begun to review the events that took place during the 150th Anniversary, and will begin planning in earnest for 2022 in the Fall.

17. Adjournment:

Motion by H. Bird to adjourn the 160^{th} Annual General Meeting of the NSIS.

Respectfully submitted Hank Bird Secretary

PRESIDENT'S REPORT 2021-2022

This year NSIS celebrates their 160th anniversary. We initiated a social media campaign to highlight discoveries made by Nova Scotians over the years - I would like to thank all council members who helped make this happen. I hope our members have enjoyed these tidbits of news.

We had a great year, thanks to a very active and engaged Council. I would like to, in particular, thank Dr Anne Dalziel for organizing a stellar lecture series. New this year, we had some hybrid sessions and some sessions with multiple speakers. A highlight in the series for me was the student presenters on their research relating to the pandemic. I would also like to thank Peter Wells and the entire Editorial Board and support staff, for their work in producing excellent issues of the Proceedings.

Our big project this year was to revamp our website. This project is almost complete, and we are excited that our new website will be up and running soon. An enormous thank you to Abe Omorogbe and our website subcommittee for working on this project all year long. Members will see the new website launch this summer.

Another change for us was a modification to our Science Writing competition. This was changed into a Science Communication competition involving a writing and a video component, and enables student participants to make submissions in multiple formats. Thank you to Cameron Els for leading this endeavour.

We were joined mid-year by Brent Robicheau who stepped in as our publicity officer and is doing a fine job of promoting our lecture talks, and also promoting the Nova Scotian discoveries mentioned earlier. Romman Muntzar took over as our website manager mid-way through the year and Shea McInnis continues as our Membership officer. Thank you to all three for being actively involved in our council. It is fantastic to have some younger voices in our discussions and your input is highly valued. Our regular council members, Angelica Silva, who keeps track of our finances, and Michelle Paon, our librarian, thank you for all your many years of service. Hank Bird deserves a particularly special thank you for organizing every meeting and keeping our active business items front and center in our meetings.

I submitted a grant to the Halifax Regional Municipality to support a membership drive, which you will hear more about in September, if successful. We also added one more Nova Scotian researcher to our Hall of Fame, namely Dr. Ron O'Dor.

The following Public Lectures took place over the 2021-2022 year:

October 4th, 2021: Money Often Costs Too Much. Andy Kekacs, NS Woodlot Owners and Operators Association

November 1st, 2021: Making the transition to low-carbon energy in Atlantic Canada: How will we get there? Dr Wayne Groszko, NS Community College

December 6th, 2021: Covid-19 Student Research in NS. Kaleigh McLeod (SMU), Sumalya Amin (StFX), Hillary Fry (MSVU), Mark MacLean (Dalhousie Univ)

January 3rd 2022: Traditional Ecological Knowledge and Molecular Biology Side by Side. Rod Beresford (CBU), Lindsay Marshall (Potlotek First Nation, CBU), Anita Basque (Potlotek First Nation)

February 7th, 2022: Tidal Wetland Restoration and Ecosystem Services in the Bay of Fundy Dykelands. Dr Jeremy Lundholm (SMU), Dr Alana Pinder (CBU), Dr Danika Van Proosdij (SMU), Dr Kate Sherren (Dalhousie Univ)

March 7th, 2022: Tiny Materials for Big Challenges. Dr Mita Dasog (Dalhousie Univ)

April 4th 2022: Tick Talk. Dr Nicoletta Faraone (Acadia Univ)

May 2nd, 2022: Public Health Systems in Canada. Dr Gaynor Watson-Creed.

Respectfully submitted Dr. Tamara Franz-Odendaal NSIS President

TREASURER'S REPORT 2020-2021

April 1, 2021 - March 31, 2022

ASSETS 2021-2022 as of March 31, 2022	
Total Assets at BMO March 31, 2020	\$34,699.60
REVENUE 2021-2022 as of March 31, 2022	
NSIS Membership	
(via paypal – Regular, LIFE, and Students)	2,981.90
NSIS Membership regular (cheque)	600.00
NSIS Membership Life (cheque)	300.00
NSIS Students (cheque)	30.00
NSIS Membership Institutions (cheque)	330.00
Income/ACCESS Copyright Royalties (cheque)	336.93
TOTAL REVENUE	\$4,578.83
EXPENSES 2021-2022 as of March 31, 2022	
NSIS Proceedings PNSIS /Printing	1,659.45
NSIS Proceedings PNSIS/Layout	1,472.00
NSIS Brochures	150.00
Publicity, advertisement	106.95
PNSIS Mail out	496.50
NSIS 2019 Writing Science Competition	1,250.00
NSIS website re-design and development	772.92
BMO charges	11.06
TOTAL EXPENSES	\$5,918.88

NSIS FINANCES 2021-2022

This is a year-end financial status report for the Nova Scotian Institute of Science (NSIS) 2021-2022 period. The NSIS net worth is \$ 34,699.60 currently at BMO as of March 31, 2022.

All NSIS 2021-2022 income and expenses are summarized for the April 1st, 2021 to March 31, 2022, period. NSIS income during this period was \$4,578.83 that arose from membership income from received cheques for a total of \$1,260 and from membership payments made via NSIS website for a total of \$2,981.90. Additional income was received from ACCESS Copyright Royalties for \$336.93.

NSIS total Expenses during 2021-2022 was \$5,918.88 that resulted from costs associated to Printing of Proceedings of Nova Scotia Institute of Science (PNSIS) for \$1,659.45; PNSIS layout costs of \$1,472.00; NSIS brochures for \$150; Advertising NSIS lectures of \$106.95; Regular PNSIS mailing out costs to members for \$496.50; NSIS Student Writing Competition for \$1,250; NSIS website re-design and development for \$772.92, and BMO charges for \$11.06.

NSIS MEMBERSHIP 2021-2022

NSIS had a total of 133 active members that includes 74 regular members, 25 LIFE Memberships, 15 students, 6 Scientists NSIS lecturers, 2 Honorary memberships and 11 Institution members as reported by Shea McInnis, Membership officer.

Since 2020-2021 with help from Patrick Upson and during 2021-2022 with help from graduate student Romman Muntzar (MSVU), NSIS has now the benefit of accepting NSIS renewals and new memberships to be paid via a paypal transaction directly from the current NSIS website link to nsis.chebucto.org. NSIS membership renewal and new memberships also continue to be received via regular mail as shown on website to be paid by personal cheque to NSIS physical address.

We thank **Carol Richardson** from Dalhousie University for her continuing volunteering with NSIS compiling mail and distribution. Many thanks to graduate student **Shea McInnis (SMU)** for his contribution as a Membership officer that compile and update NSIS membership by categories and to **Romman Muntzar** for her patience compiling and monthly transference of website payments. Special thanks also to **Tana Worcester** that helped a great deal with mailing payments and to all of you for renewing and inviting new members.

The Nova Scotian Institute of Science is a not-for-profit and Charitable membership organization that continues to dedicate all its resources towards communication and support of scientific issues relevant to all Nova Scotians by maintaining an Annual NSIS Lecture series (October to May) and it is now more accessible as it has become mostly virtual. NSIS continues to support science lectures, conferences, student science writing competitions, printing and producing the Proceedings of the Nova Scotian Institute of Science (PNSIS) to be distributed to all members. Regional Science Fairs in the Province of Nova Scotia did not occur due to COVID-19, therefore no financial support was provided.

This annual report is included yearly with the NSIS report submission to CRA Charities and it is also included on the PNSIS yearly issue.

Respectfully submitted Angelica Silva NSIS Treasurer May 3, 2021

DRAFT Summaries for 159th NSIS Council Mee	April 01/Mar 31	NSIS 2021- 2022 UPDATE EXPENSES - DRAFT	Ap1/Mar31,	Pending
Regular memberships	600	PNSIS - printing PNSIS (PRINT 101)	1,659.45	
Paypal Memberships Regular + LIFE + stud	2981.9	PNSIS - Layout (G. LeBlanc)	1,472.00	
Life memberships (cheques)	300	Brochures annual/bookmarks/posters	150	
Paypal Memberhips LIFE	0	Publishing, advertisement	106.95	
Student memberships (corrected from \$20)	30	PNSIS- mailout (SMU mail, DAL mail)	496.5	242.43
Paypal Memberships students	0	Flora of NS - reprint 100 copies		
Institutional memberships	330	Field trips guiding /entrance fees		
Sales ofProceedings-flora ns/birds	0	AGM lecture venue (Dalhousie Univ)		
Sales Flora	0	Lecture sponsorships/student posters		
ACCESS Copyright royalties	336.93	Sable Island round table funding		
Provincial grant ns	0	Writing competition prizes	1,250	
Page charges/postage	0	Regional Sience Fairs contribution		
AGM - dinner registrations	0	Student conference/ event funding		
Donations	0	Website annual fee		
Field trips	0	Website domain name		
Contributions from others -WISE Atlantic	0	Website honorarium/design/revamp	772.92	1,803.48
	0	Rental (monthly lectures/	0	
TOTAL INCOME/April 1st to March 31, 2022	4578.83	Office supplies -envelops/supplies/	0	
		Registry of Joint Stock registration	0	
		Charges BMO/ paypal	11.06	
BMO as of March 31, 2022 (with paypal)	34,699.60	TOTAL EXPENSES/ April 1st to March 31, 20	5,918.88	2,045.91
Deposits April 2021 to March 31- 2022 (N21)	4,578.83			
Expenses April to March 31 (N53)	5,918.88			

EDITOR'S REPORT 2021-2022

It has been another busy year for the Editorial Board of the PNSIS, as papers and other contributions continue to be submitted for consideration for publication. Thanks are due to all Board and Council Members for making the journal a successful voice piece for the NSIS and an outlet for natural and physical sciences of regional interest. We also thank the long serving Gail LeBlanc, our production and layout Editor, for her excellent service to the NSIS, and Carol Richardson for her work in distributing the PNSIS to NSIS members and other interested parties.

PNSIS Vol. 51, Part 2, 2021, with eleven contributions, was completed in September, 2021, and circulated to members in October 2021. Its highlight was the extensive paper on the seabirds of East Machias Island, in the outer Bay of Fundy, by Dr. Antony (Tony) Diamond of UNB, Fredericton.

PNSIS Vol. 52, Part 1, 2022 was completed in April 2022. It is a special Issue, *The Birds of Brier Island* (2nd Edition), by the NSIS member and noted birder, Dr. Eric Mills, together with his distinguished naturalist colleague and avid birder, Mr. Lance Laviolette. This special Issue is already available on the NSIS website, open access. Some consideration is being given to have a limited printing if monies permit. It was published to coincide with the May AGM.

PNSIS Vol. 52, Part 2, 2022, a regular Issue, is well underway and should be published by mid-summer 2022. It will have the full range of contributions including an Editorial, Commentaries, Research Articles, Book Reviews, and Reports of the May 2022 AGM. No doubt there will also be an item celebrating the notable 160th Anniversary of the NSIS. We are also adding a new section – a summary of the current years' talks, in this case '21-'22.

As usual, the Editors welcome contributions to the Proceedings from all NSIS members and especially from those giving annual lectures to the NSIS. Submissions from other interested and active scientists and citizen scientists in Nova Scotia or other parts of the Maritime Provinces are also welcomed. The Proceedings and the website of the NSIS provide the voice piece for the Institute along with the

annual lectures. They reflect the very active and varied science that is conducted in our ocean province and region.

Submitted by
Peter G Wells
Dalhousie University, Editor
David H.S. Richardson
Saint Mary's University, Associate Editor
April 8th, 2022 (revised May 3rd, 2022)

LIBRARIAN'S REPORT 2021-2022

(submitted for the May 2022 AGM)

The NSIS Librarian serves as a liaison between the Dalhousie University Libraries and the Nova Scotian Institute of Science. The Librarian communicates with NSIS journal exchange partners from around the world and oversees the receipt of partner journals. She also works with Dalhousie Libraries' staff members in the Killam Memorial Library who prepare these journals for the shelves and facilitate access to the online *Proceedings of the Nova Scotian Institute of Science*.

Proceedings of the Nova Scotian Institute of Science

During 2021/2022, there were no sales of the *Proceedings* from the Killam Library's Reference & Research Services Office.

Access Copyright

During the summer of 2021, the NSIS Librarian submitted the required forms to Access Copyright for the repertoire payment to publishers. NSIS subsequently received a payment of \$336.93.

Institutional Members and Exchange Partners

NSIS has 15 institutional members, including the Bibliothèque Centrale du Muséum National d'Histoire Naturelle in Paris. This institution ended its exchange program in the fall of 2020, but it continues to support NSIS via a new institutional membership. NSIS also has 84 journal exchange partners.

NSIS Exchange Journal Collection

On behalf of NSIS, I would like to thank Carol Richardson and the Dalhousie Libraries' Resources staff, who process the exchange journals and make them shelf-ready. NSIS receives journal issues from exchange partners around the world. From mid-March 2021 to mid-March 2022, NSIS received 50 issues (an increase from the 36 issues received during the same period in 2020-21).

Over the past few years, as print publication costs and postage rates have increased, the number of scholarly scientific societies participating in the print journal exchange program has decreased. This year was no exception. In October 2021, NSIS received news from the Natural History Museum (NHM) in London, UK, that in 2022, the exchange journal *Systematics & Biodiversity* would no longer be available as a print exchange journal and would transition to an online subscription instead. Subsequently in March 2022, the Zoologisch-Botanische Gesellschaft in Österreich (Zoological-Botanical Society in Austria) notified NSIS that for financial reasons, they would no longer participate in the print exchange program. The society transitioned its journal *Acta ZooBot Austria* to an open access online publication available at: https://www.zobodat.at/publikation_series.php?id=146

Report respectfully submitted by Michelle Paon, NSIS Librarian April 19, 2022

WEBMASTER'S REPORT 2021-2022

This year, the main tasks that were done were updating the NSIS website with the upcoming talks on the Public lectures page every month prior to the day of the talk and updating the archive lectures pages on the website as well. Money from the PayPal account continued to be transferred to the BMO account and the PayPal Membership update excel sheet was also updated as the money would be sent. In December, I took over the Webmaster duties from Patrick Upson and he officially handed over the passwords and account details for the Chebucto, Wordpress, Google and PayPal accounts.

Additionally, the NSIS Science Writing Competition webpage was updated, Poster Competition information was added and Dr. Ron O'Dor was added to the Hall of Fame on the NSIS website.

Lastly, a new and refurbished website is being designed by Abraham Omorogbe and I have been keeping up with his updates on the process as well.

Submitted by Patrick Upson Webmaster

STUDENT SCIENCE WRITING COMPETITION 2022

In 2021, I was one of the competition judges. I later volunteered as the competition coordinator and benefitted from the generous time and archive of digital files from long-time former coordinator Hank Bird.

On my initiative and responsibility there were some changes for the 2022 competition.

- In addition to evaluating submissions from separate undergraduate and graduate groups of students, a third group of submissions were invited from Nova Scotia Community College students from across Nova Scotia.
- 2. In addition to funds typically provided by the NSIS as prizes, there would be a fundraising effort to increase the pool of prize money available. For three groups of submissions, each having the same \$750 prize, a total of \$2250 was desired.
- 3. In addition to the typical 3500-word essay used as a submission in previous years, this year there were additional submission requirements for a 400-word article on the same topic (as if it were for a local community paper article read by people who are not science or technical specialists), and a 4-minute video (as a "You Tube" type of video clip).
- The name of the competition was changed to Student Science Communications Competition since it is now more than a writing competition.
- 5. In addition to individual submissions, group submissions would be accepted on an equal basis, but with a designated "representative" for the group with the competition.
- 6. In a year with COVID, and recently developed digital communication skills, the submission time was extended, with an announcement of winners to be in May (after the university year was over, since there would not be an in-person event for making awards, as had been done in earlier years).

Not everything turned out as was hoped. COVID, automatic email spam filters, and some university work stoppage activities were also influences on the competition. Some of the results of these initiatives, changes, and efforts included:

- A relatively small number of submissions.
- A mix of individual and group submissions.
- No submissions by Nova Scotia Community College students
- A generally unsuccessful response to the emailed fundraising appeals for academic faculty members, the private sector, and organized labour. (\$500 was pledged and expected to be received by the NSIS in May 2022).
- For 2 x \$750 prizes, when counting the pledged \$500, the net contribution by the NSIS is \$1000, which is less than last year.
- While April was expected to be an available time for competition judging, that did not turn out to be the case. It will be completed later in May 2022.
- The mix of an essay plus 400-word article plus 4-minute video seemed to work well to the eye of the competition coordinator, but the real debrief by judges and interested NSIS Executive, will happen after the awards are made.
- The competition was promoted through the typical NSIS social media channels.
- A new email address was used for the competition: NS.Science.1862@Gmail.com.
- While emailed communications to raise the competition profile, to seek prize money donations, and to seek a broader group of submissions were not on their own successful, a debrief may result in recommendations for 2023 that include working to not have NSIS emails treated as spam, and to make greater use of the telephone.

So, several new things were tried in 2022, with mixed success. Still there are and will be some useful lessons learned. I hope to prepare a 2023 competition report for the 2023 version of this meeting, with a significant improvement in the number of submissions, in the prize money donations, and in the profile for the NSIS.

Cameron Ells, Coordinator NSIS 2022 Student Science Communications Competition

PUBLICITY OFFICER REPORT 2021–2022

Highlights for the AGM:

New Publicity Officer (Brent Robicheau; Dalhousie Biology PhD Student) joined NSIS executive team in December 2021. Many thanks to S MacQuarrie for taking on the role of interim Publicity Officer prior to this position being filled.a

Publicity Officer has been working to increase our Twitter followers. In general, we continue to advertise the monthly lecture series (as well as other NSIS events, for example the student science communications competition) through Facebook and Twitter posts.

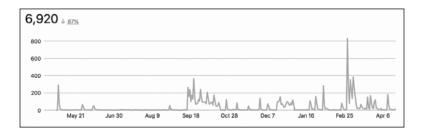
The publicity officer led a focus group of graduate students at the Dalhousie Biology Dept. with the goal of generating some new ideas for increasing student membership within the NSIS. This focus group resulted in a preliminary list of ideas that are currently being refined and discussed by members of the NSIS executive team.

The Publicity Officer and Vice-President have been collaborating to generate a series of social media posts on "NS Inventions and Inventors" in celebration of the 160-year anniversary of the NSIS. Several of these have now been posted to social media with more to come as the year progresses.

The Publicity Officer is organizing the book prizes for our forthcoming "160-year membership drive".

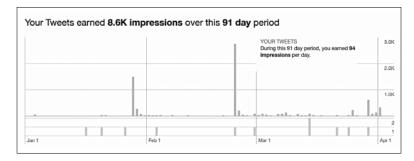
Facebook (past year; 1-May-2021 to 1-May-2022)

Page Reach values are shown. Page Reach = "the number of people who saw any content from your Page or about your Page, including posts, stories, ads, social information from people who interact with your Page and more."



Twitter

(Twitter limits to 3-month window for data analysis)



NSIS EXCURSIONS 2022

Due to Covid-19, NSIS Excursions have been on hold since the Spring of 2020, until the present. Now that the covid restriction have eased somewhat, we are planning for some in 2022.

At the time of writing, we are working with the Halifax Field Naturalists organization for them to provide a guided nature walk in the Purcell's Cove Backlands in late May. We are also working with the staff at Kejimkujik National Park for them to provide us with a guided outing in July involving the petroglyphs and a nature walk.

We have also been considering one or more of the following:

Waterfalls of Nova Scotia (various sites)
Cape Split Nature Hike (Scots Bay)
NS Museum of Industry (New Glasgow)
Shubenacadie Wildlife Park (Shubenacadie)

We welcome additional suggestions and possibilities.

For the record, we did thirteen excursions in late 2016, in 2017, in 2018 and 2019:

- Natural History of McNab's Island
- Annapolis Royal Historic Gardens
- The Science and Art of Making Beer
- Burke-Gaffney Observatory
- Joggins Fossil Cliffs
- Shubenacadie Canal
- Bedford Institute of Oceanography
- Dalhousie Planetarium
- Habits and Habitats of NS Birds (in association with the NS Birding Society)
- Otter Ponds Demonstration Forest
- The Science and Art of Making Beer, at the 2 Crows Brewing Company.
- Fundy Geological Museum, Ottawa House, and the Tidal Power Exhibit.
- Discovery Centre (including "behind the scenes").

Hank Bird Excursions Coordinator

PUBLIC ONLINE LECTURES 2022-2023

October 3, 2022

How the black soldier fly can help turn the global protein crisis around Dr. Greg Wanger, Oberland Agriscience

November 7, 2022

Drawing on Science: Mastodons of Nova Scotia

Dr. Tim Fedak. Nova Scotia Museum

December 5, 2022

New lessons from old mountains; what are our rocks trying to tell us? Dr. Deanne van Rooyen, Cape Breton University

January 9, 2023

Getting Nova Scotia Off Oil, Off Coal, and Off Gas

Dr. Kathlyne Nelson, Nova Scotia Department of Natural Resources and Renewables

February 6, 2023

Student symposium: Climate Science in NS

March 6, 2023

Accelerating natural ocean CO2 sequestration as a climate change solution? Testing the safety and viability of Ocean Alkalinity Enhancement

Dr. William Burt, Planetary Technologies

April 3, 2023

How to Stop Global Warming

Dr. Andrew MacDougall, St. Francis Xavier University

May 1, 2023 | AGM 2023

Winter: A Bugs-Eye View

Dr. Jantina Toxopeus, St. Francis Xavier University

ANNUAL MEMBERSHIP OFFICER REPORT 2022

Summary

This year we continued to encourage members to buy gift memberships for others this year. Additionally, changes were made as to who receives a complementary membership for participating in the SSCC; previously, all entrants received a complementary membership, but this year it was changed such that only winners and honourable mentions receive. As such, in this report all comparisons made between the 2022 and 2021 membership counts will not include participant members. Plans were made to recruit more members, and to increase student interest in the NSIS. To me, these plans seem like a great idea to further interest in the NSIS and I am feeling optimistic for the 2022-2023 year.

At the 2021 AGM, it was reported that there were 123 total members of the NSIS (not including the 7 competition participant members). At this AGM, there are currently 122 active members of the NSIS.

Membership Overview

To date, there are currently 122 active members of the NSIS. This is effectively unchanged from 2021.

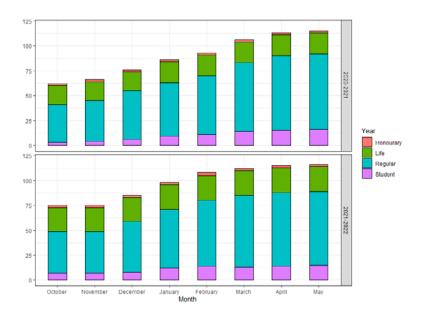
- 74 Regular 61% of membership (compared to 76 in 2021, 62% of membership)
- 25 Life 20% of membership (compared to 21 in 2021, 16% of membership)
- 15 Student 12% of membership (compared to 16 in 2021, 13% of membership)
- 6 Lecturers 5% of membership (compared to 8 in 2021, 7% of membership)
- 2 Honourary 2% of membership (unchanged from 2021)

Membership Growth

The overall number of members did not significantly change between the 2021 AGM and the 2022 AGM. However, many more members became life members. While in 2021 only 16% of the membership was life members, now 20% of the membership are life members. This is not an insignificant change, and it is reassuring to see so many people expressing their interest in the longevity of the NSIS. Below is a graph comparing the monthly counts of Regular, Student,

Life, and Honourary members during the 2020-2021, and 2021-2022 years. Interestingly the 2020-2021 year showed continuous growth from October to May, and the 2021-2022 year showed rapid growth between November and February, and slow growth from February to May. Additionally, the membership counts in the 2021-2022 year were much higher from October-April when compared to the 2020-2021 year. April and May show essentially the same counts during both years.

Shea McInnis



NOMINATIONS FOR NSIS COUNCIL 2022-2023 SLATE

President Stephanie McQuarrie

Vice-President Anne Dalziel

Past President Tamara Franz-Odendaal

Secretary
Treasurer
Angelica Silva
Editor
Peter Wells
Librarian
Michelle Paon
Publicity Officer
Web Manager
Membership Officer
Shea McInnis

Councillors:

Councillor Geniece Hallett-Tapley

Councillor Youyu Lu Councillor Jinshan Xu

Councillor Nicoletta Faraone

Observers:

Nova Scotia Museum Tim Fedak
Discovery Centre Nora Whelan
Writing Competition Cameron Ells

Student Representative: Ale Torres

Associate Editor: David Richardson