



National Association of  
Geoscience Teachers

2021 Leadership Reports

Prepared for the 2021 Annual Meeting

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**NAGT Year-end Report  
Fall 2021  
Jennifer M Wenner  
President, 2020-2021  
Report prepared: October 10, 2021**

**Goals from last report:**

My goals for the previous reporting period included successfully transitioning to the role of President; supporting the work of all the standing committees, and in particular the new DEI committee; and helping to facilitate another successful virtual EER. I also planned to continue as a member of the TTE committee to support Sarah Fortner in her new role as chair of that committee.

**NAGT Executive Committee work:**

In the last year, I presided over 8 Executive Committee meetings and 6 presidential line meetings. As president, I run the meetings and help to facilitate the work of the ExComm. The ExComm has accomplished and facilitated a number of activities associated with the organization. The decision was made to hold EER online again this year and registration was kept at the same rate. The online version of EER was successful and drew a large crowd. During the face-to-face meeting in April, we began to work on Strategic Planning, and this has continued in subsequent meetings. There are four areas of focus that we identified – increasing K-12 teacher activities and student opportunities, strengthening sections, and furthering our JEDI efforts. We expanded several committees and appointed a number of new members to standing committees. A new committee focused on the Outstanding Teaching Assistant awards was established with a draft of the charge approved at the October GSA meeting. The ExComm established a Development Committee to accomplish fundraising work; a draft of charge and tasks was presented and approved at the November meeting. Membership on the new committee was approved in January.

**NAGT Council work:**

I attended two Council meeting (January and May) since GSA 2020. Meetings focused on ExComm work (e.g., Bylaws and policy; editor searches (ITT & JGE)), transitioning to virtual meetings, updates from committees, sections and divisions.

**NAGT Committee work:**

***Teach the Earth Website committee***

At the time of GSA as I transitioned to the role of president, I stepped down as chair of the Teach the Earth website committee and passed that role to Sarah Fortner. Sarah convened two meetings since GSA, I attended both. I continue to work on helping the committee set policy for the website.

**Liaison activity:**

***Council for Undergraduate Research (Geosciences Division)***

As liaison to GeoCUR, I attended the meeting of CUR at GSA and have had conversations with other GeoCUR members throughout the year.

### ***Central Section***

There has been little activity with respect to the [Central Section](#) over the course of the year. The section is not particularly active and have not been good about keeping up their webpage. I do not think there is anyone coming up in the presidential line and this section is in danger of becoming defunct.

### **Conference/meeting participation:**

I attended the Annual meeting of GSA in October of 2020, which was held virtually. I also recorded several videos for the virtual NAGT/GSA Geoscience Education/GeoCUR awards ceremony.

I attended the Fall Meeting of AGU, also held virtually over two weeks in December.

### **Other activities relevant to NAGT:**

I continue to work with Julie Sexton (University of Colorado) and Molly Jameson (University of Northern Colorado) to build and incorporate lessons related to affective domain and its relationship to science and mathematical learning. We will offer a mini-workshop for EER 2021.

I continue to work with some of the participants from last summer's workshop from time to time to help engage them in effective online teaching.

I attended EER for the full 5 days in 2021 and attended workshops focused on teaching

I am participating in the URGE initiative (pod name Geoscience Success Lessons) with my Geoscience Education Research Group – Julie Sexton, Dina London, Molly Jameson and me – to incorporate anti-racist ideas into our interventions.

### **Upcoming Activities**

I plan to attend GSA 2021 virtually. I will also attend the NAGT meetings associated with GSA and work to transition from the role of President to the role of Past President.

I plan to attend AGU21 Fall Meeting will help with NAGT booth there as well.

### **Goals for next reporting period:**

My goals for the next reporting period include transitioning to the role of Past President; supporting the work of the President, serve on committees as member *ex officio* and helping to facilitate our first in-person EER in summer 2022. I also plan to continue as a member of the TTE committee.

**NAGT Year-End Report  
Fall 2021  
Margaret Crowder  
1<sup>st</sup> Vice President, 2020-2021  
Report prepared: October 10, 2021**

**NAGT Executive Committee**

Within this past year, I have attended the Executive Committee meetings and Council meetings. I've also attended various presidential line meetings as those have arisen. All the meetings have been virtual.

The executive committee has begun a detailed process of strategic planning for the future, overseen updating the ethics policy procedures and continuing to move various activities to a virtual space (including the decision to keep EER online in 2021), has supported sponsorship of multiple events, sessions, and workshops, has filled vacant positions for liaisons committee members, and has created a Development Committee to spearhead fundraising efforts. The executive committee has also brought the Code of Conduct to the start of all meetings as a general reminder, has approved a reallocation of NAGT's investment portfolio as recommended by the Investment Committee, and as recommended by the DEI committee, established the new JEDI award for the accomplishments in justice, equity, diversity and/or inclusion in the geosciences. In working with the Advocacy Committee, the executive committee has also moved to update multiple policy statements.

Some of the other executive committee work has involved moving ITT to a once a year print publication with the rest of the issues online only, providing a stipend for the work of the ITT editor, becoming a professional society affiliate of the UTeach Institute and exhibiting at their virtual conference in 2021, signing on to the ACE National Strategy Framework for the United States, AGI's Framework for Addressing Racial and Ethnic Equity in Geosciences Professional Societies, and submitting a letter of collaboration for the IUSE proposal "Geoscience Anti-Racism Diversity, Equity, & iNclusion (GARDEN) Project."

**NAGT Council**

I was in attendance at the virtual NAGT council meeting in October and, as 1<sup>st</sup> VP, ran the January and May virtual council meetings and will run the October virtual meeting. Council meetings are designed to help relay information between the executive committee and council members. The Council is working to get feedback from sections to help create a stronger bridge between the national organization and regional sections and find ways to assist sections in communication and organization.

**NAGT Committees**

- **Advocacy Committee**

Though I am a member of the Advocacy Committee, the scheduling and some individual commitments have continued to make it difficult to attend many of the meetings. I have provided input where I can, even when not in attendance. Decisions are currently being made on what level NAGT should become involved in statements, beyond statements that already exists and/or are in process of revision/update. The Advocacy Committee has updated the Climate Change position statement, which will be voted on for final approval at October's Council meeting.

## **Liaison activity**

- **AGI Liaison**

I've been in attendance at AGI member society meetings and also attended the first day of the AGI member society leadership forum in January. Conversations centered on effects of the pandemic on the geosciences – in academia and business.

As AGI Liaison, I also served on an ad hoc Diversity, Equity, and Inclusion committee for AGI where a statement with suggested guidelines on best practices was created. That statement, AGI's Framework for Addressing Racial and Ethnic Equity in Geosciences Professional Societies, was released and has been signed onto by various member societies including NAGT.

Mid-way through the year, a regular AGI member society DEI committee was put in place and I serve as one of two NAGT members attending for our organization.

- **GSA Joint Technical Program Committee**

As the JTPC representative for NAGT, I was involved in the scheduling of both 2020 and 2021's geoscience education section presentations and posters. Last year's sessions were all online, but this year, the meeting is hybrid with some sessions virtual and some in-person.

The JTPC representative also works on the NAGT end to communicate with proponents (and the NAGT executive committee and executive director, if necessary) to approve any NAGT sponsorship requests for sessions, events, and workshops, whether for GSA or other events. This is ongoing work beyond the GSA JTPC duties to do session, workshop, and other event sponsorship approvals. This year, NAGT worked to create deadlines for sponsorship requests prior to the larger national conferences (such as GSA and AGU).

## **Conference/Meeting participation]**

I attended the virtual GSA annual meeting in October 2020 and tended to the NAGT virtual booth for a short shift. I also attended the NAGT booth at the UTeach Institute over the summer. I was also in attendance at the virtual GSA NAGT executive committee meeting and the NAGT council meeting at least year's GSA and will attend both of those events virtually at this year's GSA.

This past summer, I also attended the Earth Educators' Rendezvous.

## **Other activities relevant to NAGT**

Last fall, I incorporated material from EarthLabs into a course on Earth Systems Science for Teachers. It was a fully online course geared primarily toward preservice middle school science teachers, and I hope the introduction of this site to them encouraged them to use these and other NAGT and SERC related resources in their teaching careers.

I completed work with an undergraduate preservice science teacher (a chemistry and education double-major) to incorporate concept sketching into my classrooms and evaluate the use of concept sketching as a pedagogical tool for the students. Although COVID hindered our ability to do the full project that we intended to do, we were still able to collect one semester of information and he wrote his senior education research thesis on this topic and presented at a campus student research conference and at a

state-level meeting (at which he received second place for his presentation in the science education session).

### **Upcoming activities**

I am transitioning to the President of the organization. My institution will be hosting the spring face-to-face meeting of the executive committee in 2022 (if the meeting isn't moved to a virtual space). I have begun thinking about spaces and potential field trips for the group.

### **Goals for next reporting period**

I plan to continue as the AGI liaison for NAGT, while also transitioning to President of NAGT. Part of becoming President will also involve running the executive committee meetings. I once again hope to attend more Advocacy Committee meetings this coming year and be more involved in that work.



**NAGT Annual Report**  
**2<sup>nd</sup> Vice-President (2020-2021)**  
**Christy C. Visaggi**  
**Prepared 10/9/21**

*Note: I prepared this report following an example format I found online for the 2<sup>nd</sup> VP from 2016-2017. However, in now reviewing the other reports prior to annual meeting, I see that more of a narrative form is expected. My apologies for misunderstanding and I will modify how I approach this moving forward.*

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**NAGT Presidential Line**

Attended Meetings:  
November 6, 2020  
January 15, 2021  
March 9, 2021  
April 9, 2021  
May 6, 2021  
July 1, 2021  
September 28, 2021

**NAGT Executive Committee**

Attended Meetings:  
September 22, 2020  
October 20, 2020  
November 12, 2020  
January 15, 2021  
April 16-17, 2021  
May 10, 2021  
July 6, 2021  
September 7, 2021

**NAGT Council**

Attended Meetings:  
October 20, 2020  
January 19, 2021  
May 3, 2021

**TED**

Attended Meetings:  
December 8, 2020  
February 8, 2021  
April 6, 2021  
May 25, 2021 (TED – DEI)  
June 1, 2021  
August 4, 2021  
August 19, 2021 (TED – DEI)

Roles: Exec Comm Liaison, TED DEI Chair

→ Formed TED DEI Committee, initiated meetings in 2020, led discussion of initial challenges, goals, etc.

**NAGT Annual Report**  
**2<sup>nd</sup> Vice-President (2020-2021)**  
**Christy C. Visaggi**  
**Prepared 10/9/21**

**GSA Associated Societies**

Attended Meeting:

April 7, 2021

Roles: Exec Comm Liaison

**OEST**

Attended Meetings:

October 9, 2020

- Provided recommendations for revised process and website updates
- Drafted advertisement that could be modified for use across sections
- Coordinated the awards program for SENAGT (more details below)

**Southeastern Section**

Attended Meetings/Events:

Spring Planning Meeting - January 15, 2021

Summer Planning Meeting - May 14, 2021

Leadership Interest Event - May 26, 2021

Transition Leadership Meeting - June 11, 2021

EER Social, Awards, and New Officers Event - July 15, 2021

Roles: OEST Chair, State Representative (Georgia), Past-Past President (Advisory)

- Worked with President to enhance leadership structure and encourage new members to serve
- Co-led leadership interest meeting to speak to members about future SENAGT opportunities
- Co-led new welcome for officers and awards recognition at section social event during EER
- Coordinated the OEST awards in the region resulting in 1 section winner and 5 state winners

**NAGT Investment Committee**

Attended Meeting:

January 7, 2021

**NAGT Officer Orientation**

Attended Meeting:

October 7, 2020

**NAGT Miner Award**

Contributed to nomination package for Lisa White  
Served as citationist for award recipient Lisa White

**NAGT Annual Report**  
**2<sup>nd</sup> Vice-President (2020-2021)**  
**Christy C. Visaggi**  
**Prepared 10/9/21**

**Earth Educator Rendezvous:**

Attended morning workshops

Monday – Wednesday: Inclusive Teaching Practices

Thursday – Friday: Storytelling for Change

Attended afternoon mini-workshops, plenary, posters, and more

Presented:

[Inclusive Narratives in Fossil Use Cards](#) (Share-a-thon)

[Bringing Meaningful and Diverse Narratives into Learning...](#) (Oral Session)

Organized and co-led the SENAGT social event with awards, new officer welcome, etc.

**Miscellaneous NAGT Items:**

Attended Meetings/Events:

Earth Educators Fall Reception - October 21, 2020

NAGT Code of Conduct & DEI Meeting - December 17, 2020

NAGT Code of Conduct & DEI Meeting - February 12, 2021

Jamboard Planning - October 6, 2021

Traveling Workshop Program:

Georgia State University as a Participant Institution via the BTSE Grant:

Lead on GSU GEOS Proposal & Application for NAGT TWP

Planning Meetings – In Progress:

*Supporting Success of All Students* - Scheduled for January 2022

**Relevant Work to NAGT:**

Published in 2020:

Atchison, C.L., Hawthorne, T.L., Torres, H., **Visaggi, C.C.**, Bencivenga, P., Haralson, J., Relyea, D., and Jarrett, O., 2020, Designing inclusive community-based geography research experiences across the spectrum of ability. *Journal of Geography in Higher Education*, <https://doi.org/10.1080/03098265.2021.1928026>

**Visaggi, C.C.**, 2020, Equity, culture, and place in teaching paleontology: student-centered pedagogy for broadening participation, *Pedagogy and Technology in the Modern Paleontology Classroom, Elements of Paleontology*. Cambridge University Press. <https://doi.org/10.1017/9781108681766>

Public Talks in 2020:

Teaching Geology & Paleontology for All Identities – [PRI Summer Symposium](#) (August 2020)

Minerals, Rocks, and Fossils... Oh My! – Atlanta Science Festival (March 2021)

[Fossils, Culture, and Diverse Narratives in Paleontology](#) – Science in the Virtual Pub (May 2021)

**NAGT Annual Report**  
**2<sup>nd</sup> Vice-President (2020-2021)**  
**Christy C. Visaggi**  
**Prepared 10/9/21**

Led 4 workshops for the GSU Center for Excellence in Teaching & Learning at GSU in 2020-2021:

- College To Career & Experiential Learning
- Experiential Learning in the Virtual Space
- Signature Experiences & High-Impact Practices
- Course Development, Mini-Grants, & Teaching Awards

Contributed to 3 events for Atlanta Science Festival in March 2021:

- Goosechase Scavenger Hunt
- Geology Workshop for Kids
- Atlanta 40 for Science ATL

Coordinated Georgia State University students in education and outreach events in 2020:

- Earth Science Week
- Geography Awareness Week

Lead in developing [Fossil Use Cards](#) for K-12 / NGSS-aligned inclusive learning and beyond as part of Earth Science Week 2020 activities (Spanish version is due to be released by end of 2021)

**Related Service to NAGT:**

Member of Education & Outreach Committee for the Paleontological Society

→ Leading development of a new partner program for students with the National Park Service

**Related Awards to NAGT:**

2020 Outstanding Rising Leader Experiential Education – National Society of Experiential Education

**Upcoming Activities:**

GSA Meeting (Talk & Poster), SACNAS Meeting (Poster), AGU Meeting (Poster)

*Posters are all focused on inclusive learning projects in paleontology with students as presenters.*

Guiding an undergraduate Honors student in a story map project with the National Park Service on paleontological resources that will be made available in both Spanish and English during Earth Science Week on National Fossil Day

Other story maps in final stages soon to be released emphasize geology and building stones, stories of oppression related to building stones, and diverse narratives in the geosciences.

**Goals for next reporting period:**

- Learn more about the role of 1<sup>st</sup> Vice-President and future responsibilities
- Take on more leadership in strengthening supports related to sections and OESTs

**NAGT Mid-Year Report  
Spring 2021  
Mike Phillips  
Secretary/Treasurer (2020-2021)  
Report prepared September 23, 2021**

**Goals from last Report:**

I will continue to develop my understanding of the NAGT budget and budgeting process. I plan to take an active role in NAGT's strategic planning process. As a member of the Advocacy Committee, I will help identify potential topics for position papers and work to develop them. I will continue to work on the proposal for place-based educator workshops; ideally, we will create and submit a grant proposal that includes a role for NAGT. I will continue to work on the proposal to create a fossil park in northern Illinois that will be accessible to formal and informal educators.

**NAGT Executive Committee work:**

As Secretary, I kept minutes at all meetings and shared the drafts within the week following the meeting.

As Treasurer, I have reviewed and provided feedback on quarterly and annual financial reports and the FY21 and FY 22 budgets provided by Amy Collette. The reports prepared and presented by Amy Collette continue to be clear and include information from prior years. With Amy's assistance, I present the budget overview at Exec Comm meetings.

NAGT's fiscal outlook continues to be good. EER 2021 was well-attended, membership was expected to grow slightly but was down 5% in July, and revenues from JGE have been steady. The investment portfolio continues to perform well and per the direction of the investment committee is now split between two providers in order to diversify our portfolio and reduce management expenses.

Of continuing concern to NAGT's fiscal outlook are the uncertainties presented by COVID 19 (which effects the recruitment of new members and registration for programs) and royalties from the lab manual. 2021 EER was well-attended and did not seem to be impacted by Zoom-fatigue.

The strategic planning process led by Executive Director Anne Egger has identified future opportunities as well as weaknesses and potential threats. This process has helped ensure NAGT is on a path supported by the membership and its future needs which will, in turn, help to establish a sound financial footing.

**NAGT Council work:**

I have attended the Council meetings and kept and shared the minutes.

**NAGT Committee work:**

I currently serve as a member of the NAGT Advocacy Committee and have been asked to transition into the position of chair (the current chair is leaving the NAGT Exec Comm). I attended meetings in September and December 2020 and January, March, May, July, and September 2021. I developed a procedure for the signing on to position statements of other organizations which is slated for approval later this year. I have helped develop updates to position statements on teaching climate change and dual credit. With committee Chair Catherine Riihimaki, I co-authored two articles on advocacy which were published in ITT.

As Treasurer, I serve on the NAGT Investment and Donor Development Committees as an ex officio member. I attended meetings and discussed investment strategies and plans to increase donations.

**Liaison activity:**

I do not serve as liaison to any section or division or outside group.

**Conference/meeting participation:**

I attended the Fall 2020 GSA Annual Meeting and the Summer 2021 Earth Educators Rendezvous.

I attended a series of webinars and the concluding workshop, America's Geoheritage Workshop II: Identifying, Developing, and Preserving America's Natural Legacy. I worked with a group to develop best practices in identifying and developing local geoheritage sites.

**Other activities relevant to NAGT:**

As an outcome of the 2019 Earth Education for Sustainable Societies Workshop, I am continuing to work with former NAGT Executive Director Cathy Manduca and several others to develop a series of workshops for place-based educators. We have developed a project overview and have been sharing it with possible grant providers.

A quarry near my college was acquired by the Illinois Dept. of Natural Resources. I am continuing to pursue a project to designate a portion of that quarry as a fossil park open to educators for field trips.

**Upcoming Activities**

I plan to attend the 2021 Annual Meeting of the Geologic Society of America in October 2021. For the Fall GSA meeting, I am the co-leader of a topical session, "Best Practices in Place-Based Education," with two other NAGT members and NAGT and the GSA Education Section as a session endorser; the session has 24 abstracts accepted and will include both oral and poster presentations. I will also help set up and coordinate activities at the NAGT booth in the exhibition hall.

My college has asked me to teach an in-house faculty development course on using classroom assessment techniques during the Spring 2022 semester. I helped introduce this course at IVCC and am looking forward to revising and teaching it again. It may be something NAGT could offer to our members at some point in the future using distance learning technology.

**Goals for next reporting period:**

I hope to be elected this fall to serve a full term as NAGT Secretary-Treasurer, and I will continue to develop my understanding of the NAGT budget and budgeting process.

As chair of the Advocacy Committee, I will help identify potential topics for position papers and work to develop them.

I will continue to work on the proposal for place-based educator workshops; ideally, we will create and submit a grant proposal that includes a role for NAGT.

I will continue to work on the proposal to create a fossil park in northern Illinois that will be accessible to formal and informal educators.

**NAGT Annual Report  
Fall 2021  
Karen Viskupic  
Past President, 2020-2021  
Report prepared: October 9, 2021**

**Goals from last report:**

My goals from my mid-year report were to learn how to code in R, make progress on a submitted proposal (if funded) and to make preparations for serving as Chair of the Pd Committee. I did start learning to code in R, but stalled on making further progress in order to resubmit rejected NSF proposals to the new July IUUSE deadline.

**NAGT Executive Committee work:**

As Past President I attended all meetings of the Executive Committee (ExComm) and the Council, including several calls of the Presidential Line to help prepare the agendas for meetings.

**NAGT Council work:**

I attended all Council meetings.

**NAGT Committee work:**

I have been serving as the NAGT representative on the NSF-funded [Bridging to STEM Excellence](#) project led by Rick Moog from the POGIL project. The project created a consortium of organizations that provide professional development (POGIL, BioQuest, NAGT, National Center for Science and Civic Engagement, and the Summer Institutes for Scientific Teaching) to pilot a consultancy program. Five pilot institutions identified challenges, and the BTSE project provided 3-person teams of PD providers to lead consultancy visits to each campus and provide recommendations for professional development. I led a team of three consultants (myself and representatives from NCSCE and BioQuest) to Bakersfield College in California in March, 2020 and co-authored a report based on findings from that visit to provide suggestions to the institution for improving student success in math courses. The group has continued to meet virtually, but only two of the pilot institutions have been able to have in-person consultation visits.

I have been promoting NAGT PD programs (especially the TWP) through the BTSE project. One of the pilot institutions, Georgia State University, applied to host a TWP in January of 2022 (thanks to efforts from NAGT 2nd Vice President Christy Visaggi). I also helped to solicit a TWP leader (Rachel Teasdale) to co-lead a workshop in the Biology Department at BTSE pilot institution California State University at Chico. This workshop was offered in partnership with a facilitator from BioQuest, another partner organization in the BTSE project.

I serve as a member of the Professional Development Planning Committee and attended all meetings. The PD committee oversees all professional development activities for NAGT. The PD committee was expanded to include a graduate student representative. We will need to work on finding new committee members as some members complete their terms, and should also think



about staggering terms to keep consistency in membership. We also began discussions about how the PD committee could respond to new ideas for programming.

I was present at the NAGT virtual booth at the UTeach virtual conference in June, 2020. No meeting attendees visited the booth while I was present.

I met twice with Executive Director Anne Egger, Rory McFadden, and SERC staff to think about redesigning the NAGT homepage.

Executive Director Anne Egger, SERC Director Ellen Iverson, NAGT member Sue Ebanks and I submitted a proposal to the NSF IUSE program to seek funding to administer the National Geoscience Faculty Survey two more times. This proposal was revised and resubmitted based on reviews from a December 2020 submission.

Councilor-at-Large Katherine Ryker and I have been meeting to brainstorm ways to expand NAGT activities for students. To begin, we will propose the creation of an Outstanding Teaching Assistant Awards Committee that would solicit and review nominations for the awards and help promote the involvement of award recipients in NAGT activities (e.g. networking activities, special invitations for EER registration, etc.). I will continue to work with Katherine to further develop and implement our ideas.

I am a workshop leader for the Travelling Workshops Program (TWP). I participated in an URGE pod for TWP facilitators led by TWP chair Catherine Riihimaki. These discussions were valuable for me personally, and have been important for thinking about both how the TWP operates and the programming we provide. I attended the virtual TWP leader training in January, 2021 focused on leading virtual workshops, the training in May 2021 focused on DEI, and the July 2021 training focused on revising and updating TWP materials. I led a 2-day Building Strong Geoscience Departments workshop with Julie Bartley at Mississippi State University in October, 2021, and am scheduled to lead a 2-day Supporting all Students workshop with Patrick Belmont at Central Washington University in November, 2021.

I served as the chair of the Nominations Committee. The committee solicited nominations from the NAGT community for two Councilor-at-Large positions, Secretary/Treasurer, and 2nd Vice President. I enjoyed working with past presidents Anne Egger, Randy Richardson, and David McConnell to review nominations and invited a strong set of candidates to be put forward to the NAGT community for approval by vote.

**Liaison activity:**

I am the liaison to the Geo2YC Division, but was not invited to attend any officers meetings during the reporting period.

**Conference/meeting participation:**

I attended the virtual Earth Educators' Rendezvous in July 2021, where my graduate student, Greg Shafer, gave a talk about desired workforce skills in bachelors-level geoscientists based on an analysis of job advertisements. I will also attend the October 2021 GSA meeting in Portland.

**Other activities relevant to NAGT:**

I co-led an NAGT webinar about [graduate student onboarding courses](#) in March of 2021. We had approximately 50 participants and the webinar recording remains available. The informal group of instructors involved in this webinar is led by Michele Cooke at UMass Amherst. We had a commentary about onboarding courses published in Nature Geoscience, and we will lead an NAGT-sponsored virtual workshop at AGU in December 2021 about the same topic.

I was invited to speak with the National Academies [Roundtable on Systemic Change in Undergraduate STEM Education](#) about the current state of undergraduate geoscience education. The meeting took place on February 16, 2021.

At my own institution (Boise State University), I serve as a member of the Department of Geosciences Undergraduate Program Committee. I am also the PI on an NSF S-STEM grant that awards scholarships to BS Geoscience students at Boise State. As part of the project activities, I developed a new course, GEOS 301 Career Exploration and Planning in the Geosciences that I teach each Fall.

During the Fall 2020 semester, I worked with three co-instructors to facilitate a one-credit Race and Racism in the Earth and Environmental Sciences readings seminar for undergraduate and graduate students in the geosciences, biology, and human and environmental systems communities. The 15 enrolled students proposed action plans at the end of the semester based on course readings and discussions. I am continuing to work with one of these students on exploring strategies for training teaching assistants in our department.

I am advising a PhD student, Greg Shafer, who is investigating desired workforce skills and the alignment between these skills and undergraduate geoscience programming. Greg presented his work at the 2021 EER, and will be giving a talk at GSA..

**Goals for the next reporting period:**

This is my last report as a member of the NAGT Executive Committee. I have served as a member of the ExComm since the Fall of 2014 when I began a 3-year term as Council-at-Large. Thank you to NAGT for helping me to find a place in the world of geoscience education, and for giving me an opportunity to learn from and contribute to an amazing community. I'm pretty sad to be leaving, but will still be in touch with ExComm through my role as Chair of the PD Committee.

## 2021 Annual report

Anne Egger  
Executive Director

As is true for many non-profit organizations, 2021 has been a year of flux for NAGT. Overall, we have weathered this pandemic year well, but it has not been without its challenges. Despite the challenges, we have made substantial progress in strategic planning and taking action on our goals.

### **NAGT Activities**

The strategic planning process we engaged in over the last year has allowed us to establish new goals and prioritize our activities in order to make progress on those goals. Below I report on the progress made on our prioritized actions.

Goal 1: **To promote high-quality Earth education.**

Goal 2: **To foster and disseminate research in geoscience education.**

Goal 3: **To drive change toward an equitable and inclusive system of geoscience education.**

Goal 4: **To support current and future geoscience educators throughout their careers.**

### **Prioritized actions**

**Action 1:** Increase the value of NAGT membership and programming for K-12 teachers.

**Rationale:** Currently, <10% of our members are K-12 educators, which represents a vanishingly small fraction of K-12 teachers who engage their students in learning about Earth. K-12 schools are a large component of the system of geoscience education, and a component where Earth science has not traditionally had a strong presence. The adoption of the NGSS and other Framework-based standards across much of the United States has the potential to elevate the Earth sciences, and both current and future teachers need to support in implementing the new standards effectively.

### **Progress on objectives:**

1. Ensure continued K-12 representation on committees and in leadership, promoting opportunities for involvement through targeted email and social media efforts.
  - *Ongoing*
2. Develop a welcoming entry page for K-12 educators on the website that helps them navigate the NAGT site, find high-quality, useful, and relevant resources, and see the benefits of NAGT membership.
  - *Website redesign is just beginning; new page of K-12 educators is planned*
3. Work with section leaders to streamline and elevate the OEST award process, celebrate OEST award winners, and develop opportunities to keep them engaged in NAGT.
  - *OEST award winners are being celebrated on social media (Facebook) during Earth Science Week*
  - *Seeking new chair of the OEST Award process to lead streamlining efforts*
4. Make use of social media and our publications to highlight new K-12-focused research and activities published in JGE, ITT and on the web.
  - *Not started.*

5. Actively recruit K-12 teachers and future teachers to become members of NAGT through multiple strategies, including collaborations with other organizations and such as the UTeach STEM Educators Association (USEA), strengthening state- and section-level coordination within NAGT, and increasing our PD offerings for K-12 educators.
  - *Joined USEA and exhibited at annual meeting (virtual)*
  - *Section coordination is underway*
6. Reduce the cost for K-12 educators to participate in our professional development activities, considering both targeted fundraising strategies and reducing the cost of registration.
  - *Fundraising allowed us to support 13 K-12 educators to attend the Rendezvous*

## **Action 2: Increase the value of NAGT membership and programming for students**

**Rationale:** Approximately 10% of our current membership is students, primarily graduate students. Bringing new members in while they are students gives them an early affinity with the organization and supports long-term membership. Our current programming supports graduate students seeking academic careers, but we have many opportunities to expand our support for students, including future teachers.

### **Progress on objectives:**

1. Develop a welcoming entry page for students (graduate and undergraduate) on the website that helps them navigate the NAGT site, find high-quality, useful, and relevant resources, and see the benefits of NAGT membership.
  - *Website redesign is just beginning; new page for students is planned*
2. Work with TA Award and USGS/NAGT internship committee leaders to highlight and celebrate award winners, and develop opportunities to keep them engaged in NAGT.
  - *Establishing new Outstanding Teaching Assistant Award committee and soliciting for a chair and committee members*
  - *Meeting with USGS leaders at GSA*
3. Consider appropriate opportunities for student representation on committees and in leadership, and promote these through targeted email and social media efforts.
  - *Soliciting nominations for committees will begin after GSA; we will include targeted emails to student members where appropriate*
4. Develop and offer a certificate/credential for graduate students in geoscience teaching, building on the Preparing for an Academic Career Preparation
  - *Not yet started*
5. Work with the Travelling Workshops Program and sections to increase regional opportunities for graduate students (e.g. workshops at regional GSA meetings and NAGT section meetings, TWP workshops targeted for graduate students)
  - *Not yet started*
6. Develop a presence on LinkedIn and make use of the site in programming for students
  - *LinkedIn page established*
  - *Beginning discussions with USGS about how to incorporate LinkedIn into internship program*

### **Action 3: Re-envision and strengthen our framework for sections**

**Rationale:** Regional sections allow members to interact with Earth educators in their region and can be a hub for sharing and facilitating place-based geoscience education. Regional and place-based know-how can be particularly valuable to K-12 and 2YC members. Sections run the Outstanding Earth Science Teacher award programs and provide leadership opportunities. Currently, some sections have been inactive for several years, others are struggling to maintain leadership, and a few are thriving. Yet sections are the primary interaction that many members have with the organization.

#### **Progress on objectives:**

1. Conduct review of sections
  - *Questionnaire developed and sent to leaders; feedback received from two sections*
  - *Discussion will take place at GSA Council meeting*
2. Develop schedules and templates to ensure consistent practices across sections and to align with divisions
  - *Not started, awaiting additional responses from section leaders and discussion at GSA Council meeting*

### **Action 4: Diversify and expand our membership, leadership, programming participants, and award winners**

**Rationale:** NAGT has signed on to a call to action and made commitments to produce data-rich reports that highlight our organizational demographics; we have pledged to diversify nomination pools and awardees, to actively recruit Black, Indigenous, Latinx, and other minoritized geoscientists as editors, reviewers, participants. Now is the time to act on those pledges. Our disciplinary diversity has also been narrow, and we have the opportunity to provide more support for geoscience educators in atmospheric sciences, oceanography, and environmental science. We have established the Diversity, Equity, and Inclusion committee to lead these efforts, but we need additional data and efforts throughout the organization.

#### **Progress on objectives:**

1. Establish and implement demographic data collection for members
  - *New demographic questions implemented in member profile*
  - *Campaign initiated to encourage members to update their data*
2. Grow our membership
  - *Exhibited at NABG and USEA (virtually), continuing to assess the landscape and options for meetings in order to determine where to focus our efforts*
  - *Membership renewals are currently slightly higher than 2019 at this time*
3. Expand and diversify nominations for committees, leadership, and awards by actively promoting nominations processes through targeted efforts and making the process as transparent as possible.
  - *Ongoing*
4. Support members with networking and mentoring opportunities
  - *Not started*

5. Develop a reporting framework for DEI efforts within the organization to coordinate and share information
  - *Not started*

### **Other**

- Our proposal to NSF to support administrations of the National Geoscience Faculty Survey was declined, with substantial useful feedback from reviewers. We revised the proposal and resubmitted it in July.
- As mentioned in my mid-year report, I co-led (with Walt Robinson) a traveling workshop at the University of Montana last spring. This fall, fortuitously, I visited the university for research purposes, and met with the chair of the department. He said that our workshop, “broke a log-jam that had been in place in the department for 20 years,” and that they were able to see how much they really were in agreement. Yay, TWP!

### **Related activities**

Much of my work is not explicitly for NAGT, but is related.

- I began a four-year term as co-chair of one of my departments, Geological Sciences, at Central Washington University. We have a new president, who is beginning a strategic planning process, and we are in a mid-cycle evaluation year of our accreditation. This year, our department needs to focus on revising our program outcomes and capstone experience, and I am leading that process.
- My TIDeS project (Teaching with Investigation and Design in Science) is entering its second year. I am working with two post-docs to document how a classroom centered on investigation and design is different from one with active learning, and we’ve begun our observations of the 13 materials developers that will be engaged in this transformation.
- I served on a Committee of Visitors for the Division of Earth Science at the National Science Foundation. The charge of the COV is to “review and comment on the quality and integrity of program operations and program-level technical and managerial matters pertaining to proposal decisions.” Within the committee, there was substantial experience and expertise in “broader impacts,” and many of our recommendations focused on elevating and substantiating the broader impacts review criteria. The COV report has been finalized, although it is not yet available on the NSF website.

NAGT Annual Report  
October 2021  
**Reginald S. Archer**  
Councilor-at-Large, Elected 2018  
Report prepared October 7, 2021

**NAGT Executive Committee work & meetings attended**

- GSA Annual Meeting (*virtual*) October 2020
- November 20, 2020 (*virtual*)
- January 15, 2021 (*virtual*)
- March 12, 2021 (*virtual*)
- April 16-17, 2021 (*Face-2-face but virtual-COVID - 19*)
- May 10, 2021 (*virtual*)
- July 7, 2021 (*virtual*)
- September 7, 2021 (*virtual*)

**NAGT Council work & meetings Attended**

- October 20, 2021 *Council Meeting (GSA)*
- ~~January 19, 2021 *Council Meeting (virtual)*—did not attend~~
- May 3, 2021 Council Meeting (Virtual)

**Conference/Meeting Participation:**

- EER 2021 (Virtual) Once again, I participated in several ways. I worked with the Exec committee to determine the feasibility and decide to host EER Virtually. I also hosted an oral session “Moving the Needle by Expanding HBCU Pathways for Geoscience Education”.
- This year we discussed and voted on issues related to budget, ethics, calls to action, DEI issues, program sponsorship requests, as well as awards and honors.

**Section Liaison Activity: Southeast section**

- No current activity

**NABG Liaison**

- No current activity

**NAGT Travelling Workshop Program (TWP)**

- Serve on Management Team for the Traveling Workshops Program
- Cohosted TWP workshop at CSU Fresno - April 29 -30, 2021
- Participated on the URGE TWP team
- Served on an ad-hoc committee to revise core workshop materials to facilitate virtual workshops.
- Awarded an NSF grant to organize and support facilitator training for TWP – Virtual Workshop facilitation and to support inclusion of DEI & anti-racism content. The grant supported Facilitator training in 3 workshop parts.
  - Part 1: Transitioning to a Virtual Format (1 day)
    - Friday, January 8
  - Part 2: Toward a More Equitable Geoscience (2 days)
    - Thursday, May 20 - Friday, May 21
  - Part 3: Updating TWP Materials (1/2 day)
    - Tuesday, June 22

**News**

- Nominated and Elected to serve NAGT as Second Vice President in the presidential line

- Submitted a proposal for a TWP Training workshop supplement to continue the work we started.

**Other Activities Relevant to NAGT:**

- HBCU Geosciences working group (Ongoing)
  - We held a meeting during and after the EER 2021

**Goals for Next Reporting Period**

- Attend Virtual GSA Meeting Council Meeting and Annual NAGT Business Meeting
- Support the committee and liaisons
- Attend AGU
- Plan for EER 2022
- Transition into VP2 role



**NAGT Annual Report**  
**Fall 2021**  
**Ryan J Hollister**  
**Councilor-at-Large, 2019-2022**  
**Report Prepared October 8, 2021**

2020-2021 was a much quieter year for me with NAGT. Like many others, parenting, family obligations and self-preservation required the majority of my attention and limited my effectiveness as a Councilor. In August I left my role as a school district science coach and jumped to the adjunct life teaching Intro Earth Science and History of Earth & Life at local universities. I look forward to 2021-22 being more active at the regional level and hopefully returning to an in-person EER in Minnesota during the summer of 2022 if the pandemic has waned.

**NAGT Executive Committee work:**

In my second year as Councilor-at-Large I was able to attend all but one ExComm meeting. The opportunity to have input on the rough drafts of the updated NAGT Prioritized Actions was very meaningful to me. I am very hopeful that once the new prioritized actions are finalized and adopted they will play a role in revitalizing K-12 geoscience teaching and jumpstart regional NAGT Sections that haven't been able to be as active due to the pandemic.

**Conference/meeting participation:**

- Presented a new focus-stacking workflow for photogrammetry at the 2020 GSA Conference.

**Other activities relevant to NAGT:**

- Over the past summer I have created several 3D models of a rare and newly rediscovered collection of fish and leaf fossils from [Bear Valley, CA \(central sierra\)](#) free to use for study by our local students.

**Goals to Accomplish in 2021-22:**

- Support the reinvigoration of the NAGT Far West Section now that COVID restrictions are easing.
- Support the 2022 Earth Educators' Rendezvous
- Expand NAGT outreach to K-12 teachers and classes.

NAGT Annual Report  
October 2021  
Steve Mattox  
Councilor-at-Large,  
Elected 2019  
Report prepared October 7, 2021

**NAGT Executive Committee meetings attended**

- November 12, 2020 (virtual)
- January 15, 2021 (virtual)
- March 12, 2021 (virtual)
- April 16, 2021 (virtual)
- September 7, 2021 (virtual)

**NAGT Council meetings attended**

- October 20, 2020 (virtual)
- January 19, 2021 (virtual)
- May 3, 2021 (virtual)

**Conference/Meeting Participation**

- GSA 2020 (virtual)

**Section Liaison Activity: New England**

- No activity to report. They have an excellent Facebook and Twitter and announce useful upcoming events. Even a session at Northeastern GSA section meeting.

**Other Activities Relevant to NAGT:**

- Ongoing active member of NAGT's DEI Committee. Meets fortnightly. Excellent people and work. See report below.
- Completed service to the State of Michigan's Department of Education to write teacher preparation standards for middle and high school.

**Goals for Next Reporting Period**

- Attend virtual meetings at GSA, including Ex Comm and Annual & Council Meeting.

**NAGT Annual Report**  
**Fall 2020**  
**Catherine Riihimaki**  
**Councilor-at-Large, 2018-2021**  
**Report prepared October 9, 2021**  
**Activities since Annual GSA meeting, October 2020**

My final year as a member of the Executive Committee has been busy and filled with changes. My work generally fell into three areas: facilitator and chair of the Traveling Workshop Program, chair of the Advocacy Committee, and co-leader of programs at the Earth Educators' Rendezvous.

*Traveling Workshop Program:* This year, the TWP was able to fully adapt to the ongoing COVID-19 pandemic and to conduct a series of three workshops for our facilitators. I personally was lead facilitator for a two-day virtual workshop for the University of Pennsylvania December 14-15, 2020 with co-facilitator Walt Robinson. Although the End-of-Workshop evaluation had poor participation, we conclude that the workshop was highly successful based on post-workshop conversations with the department chair, who highlighted specific actions that resulted from the strategic planning completed during the Traveling Workshop.

With funding from NSF secured by Reginald Archer and David Blockstein, I helped plan and implement three virtual workshops for our facilitators to assess our program, revise our materials, and practice facilitation techniques. On January 8, 2021, the facilitators met to discuss how to transition to virtual Traveling Workshops. On May 20-21, 2021, facilitators from the Traveling Workshop Program, Workshop for Early Career Geoscience Faculty, and Preparing for an Academic Career Workshop, met for professional development led by Nancy McHugh entitled "Toward a More Equitable Geoscience: A Training Workshop for Facilitators." This workshop marked a first for collaboration across workshop types and for combining resources from distinct NSF grants (to TWP and the Early Career Workshop). On June 22, 2021, the TWP facilitators met again to revise materials and plan for next steps.

Finally, I led an Unlearning Racism in the Geosciences (URGE) pod of 12 facilitators and participated in several meetings as a member of the TWP Management Team. I look forward to another year as TWP Chair, with Walt Robinson now acting as Co-Chair.

*Advocacy Committee:* This year, the Advocacy Committee has continued our focus on serving all NAGT members to become effective advocates. To that end, we had three primary activities this year:

- A series of *In the Trenches* articles focused on how NAGT members can kickstart their advocacy (several articles in the [April 2021 issue](#) and one in the [July 2021 issue](#)).
- Continuing revising existing NAGT [position statements](#), with a revised statement on Climate Change Education to be voted on by the NAGT Council in October 2021. Don Haas conducted a webinar in February 2021 to get community feedback on the statement, a nice model that we hope to continue in the other statement revisions.
- A roundtable discussion on advocacy at the 2021 Earth Educators' Rendezvous.
- A draft update to the procedure for NAGT signing on to other organizations' position statements, now awaiting discussion by the Executive Committee.
- A draft policy for NAGT to consider discriminatory laws that might affect participants when choosing event venues.
- Revising the committee membership to have nine total members on three-year rotations.
- Successfully advocating to the Executive Committee that NAGT should sign on to the ACE National Strategy Framework for the United States

Mike Phillips will now be taking over as committee chair, because the chair must be a member of the Executive Committee. I will remain on the Advocacy Committee for at least one more year.

*Earth Educators' Rendezvous:* I was proud to attend the second virtual Earth Educators' Rendezvous (EER) in July 2021, keeping my streak alive of having attended each one. I co-led the Preparing for an Academic Career workshop Monday-Wednesday mornings and presented a virtual poster Wednesday afternoon on the TWP URGE pod. Thursday and Friday mornings, I participated in the workshop on students' mental health and well-being. As a leader and a participant, I congratulate all involved in planning and implementing the virtual EER. I thought it went really well!

*General NAGT work:* Finally, I'm proud to have been an active member of the Executive Committee, attending all but two meetings of the ExComm and the Council this year. I also represented NAGT at its virtual booth at the GSA annual meeting. It is a pleasure working with all of my great NAGT colleagues! I will miss being on the Executive Committee, though my new position in private industry will make full engagement more difficult. Still, I am looking for ways in which my new company, 2NDNATURE Software Inc., can collaborate with NAGT.

NAGT Annual Report  
October 2021  
Katherine Ryker  
Councilor-at-Large, Elected 2020  
Report prepared October 6, 2021

**NAGT Executive Committee meetings attended**

- November 12, 2020 (*virtual*)
- January 15, 2021 (*virtual*)
- March 12, 2021 (*virtual*)
- July 7, 2021 (*virtual*)
- September 7, 2021 (*virtual*)

**NAGT Council meetings attended**

- October 20, 2020 (*virtual*)
- January 19, 2021 (*virtual*)

Note: I missed the April 16-17 and May 10 (*virtual*) Executive Committee meeting and May 3, 2021 Council meeting while on maternity leave.

**Conference/Meeting Participation**

- GSA 2020 (*virtual*)
- EER 2021 (*virtual*)

**Section Liaison Activity: Pacific NW**

- No activity to report

**Other Activities Relevant to NAGT:**

- Associate Editor: Journal of Geoscience Education
- Working with Karen Viskupic on strategies to recruit and retain student members in NAGT, including drafting charge for new Outstanding TA Committee.
- Ongoing active member of NAGT's GER division. Advocacy related to inclusion of the division's section in streaming/hybrid format, including communication with GSA directly and GSA's Geoscience Education Division (GED).
- Updating list of field camps open to other students  
[https://nagt.org/nagt/teaching\\_resources/field/summer\\_2021\\_virtual\\_field\\_camp.html](https://nagt.org/nagt/teaching_resources/field/summer_2021_virtual_field_camp.html)

**Goals for Next Reporting Period**

- Attend virtual meetings at GSA, including Ex Comm, Annual & Council Meeting, NAGT/USGS Field Camp Business meeting and GER Division meetings.
- Improve my connection with my assigned section to see how I can better support and communicate their needs.
- Continue work with Karen Viskupic on recruiting and retaining NAGT student members.

**NAGT Annual Report  
Fall 2021  
Cindy Shellito  
Councilor-at-Large, July-October 2021  
Report Prepared: Oct 4, 2021**

I was appointed to the Executive Committee in July 2021, to complete the term that was vacated by the resignation of Aida Awad. I am honored to serve in this position, and excited to get to know the other officers and councilors in the Executive Committee. Since my appointment I have attended two meetings, in July and September 2021. During this time, I have also offered feedback on the NAGT on Teaching Climate Change position statement and on a survey for section leadership.

**NAGT Committee work**

Prior to my appointment to the Ex Comm, through the past couple of years, I have been active in the Traveling Workshop Program (TWP). I have served on the TWP Management Committee since summer of 2020. I also served on an ad hoc TWP committee in Fall 2020 to create strategies and materials for virtual workshops. In spring 2021, I facilitated the first international virtual TWP workshop with a geoscience department at a university in Ecuador. My colleagues, Diane Doser and Antonia Arribas (both from UTEP), and I developed a series of four 3-hour virtual workshops conducted over a period of two months. This involved considerable modification of materials for conducting the program in Spanish.

I also participated in the TWP URGE (Unlearning Racism in the Geosciences) pod. Our pod discussions gave us an opportunity to consider TWP programming and materials through an equity lens and begin to address issues of inclusivity and equity in our materials and strategies for working not only with departments and programs, but also with new TWP facilitators.

**Ongoing work**

I am very interested in extending the reach of NAGT internationally. While online workshops and programs pose challenges, they also offer us opportunities to build connections with universities abroad. My colleagues and I are working on an ITT article about the TWP workshop with the geoscience program in Ecuador. During my tenure as an Ex Comm councilor, I hope to find some new ways that we might continue to broaden the reach of NAGT.

# Carleton

Mitchell Bender-Awalt <mawalt@carleton.edu>

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## NAGT Central section Treasurer's 2021 report

1 message

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**Wolf, Michael** <michaelwolf@augustana.edu>

Tue, Apr 5, 2022 at 3:48 PM

To: Amy Collette <acollette@carleton.edu>, mawalt@carleton.edu

Cc: Kelsey Arkle <kelseyarkle@augustana.edu>

Amy and Mitchell,

I have attached the financial report for our Central section (2021). We only had one addition (dues) and one subtraction (one OEST award for \$500). We are working on potentially funding community college field trips to our college, to try to bridge the 2-yr to 4-yr college transition. There has been no other activity during the pandemic!

Sincerely,  
Mike

--

Dr. Michael B. Wolf

Fritiof Fryxell Professor of *Geology*

Director and Curator of the Fryxell *Geology Museum*

Chair of the Division of Natural Sciences

Department of *Geology*

Augustana College

[639 38th St.](#)

[Rock Island, IL 61201](#)

[Office: 309-794-7304](#)



**NAGT Central section financial report for 2021.pdf**

292K

**Section/Division Financial Statements**

Name of Section/Division NAGT Central Section

Year Ending 9/30/21

**Bank Information**

Bank Name & Location Wells Fargo, Rock Island, IL

Type of Account Checking

Please fill out the following information

**Print Form**

**RESET FORM**

Bank Account	Current Year	Previous Year
Beginning Balance	\$ 5,692.30	Beginning Balance \$ 5,747.30
Ending Balance	\$ 5,882.30	Ending Balance \$ 5,692.30

Income	Current Year	Previous Year
National Dues	\$ 690.00	\$ 645.00
Interest		
Field Guides/Publications		
Other (Please specify)		
Other (Please specify)		
<b>Total</b>	<b>\$ 690.00</b>	<b>\$ 645.00</b>

Expenses	Current Year	Previous Year
Awards	\$ 500.00	\$ 700.00
Meetings/Conferences		
Bank Fees		
Other (Please specify)		
Other (Please specify)		
<b>Total</b>	<b>\$ 500.00</b>	<b>\$ 700.00</b>

Summary	Current Year	Previous Year
Beginning Balance	\$ 5,692.30	\$ 5,747.30
Income	\$ 690.00	\$ 645.00
Expense	\$ 500.00	\$ 700.00
Ending Balance	\$ 5,882.30	\$ 5,692.30
Ending Balance from Above	\$ 5,882.30	\$ 5,692.30
Difference	\$ 0.00	\$ 0.00

\*\*if there is a discrepancy, please state why below:



STATE OF THE EASTERN SECTION FOR THE 2021-2022 YEAR; NATIONAL ASSOCIATION OF GEOSCIENCE TEACHERS.

JULY, 2022

REPORT COMPLETED BY STEVE LINDBERG; EASTERN SECTION ARCHIVIST AND ACTING SECRETARY.

*Covid Impact Statement*

As with all other organizations, the impact of the Covid-19 pandemic severely impacted the planned activities of the eastern section during the 2020, 2021, and 2022 calendar years. The last in-person meeting held by the eastern section was our spring 2019 conference held on June 6,7,8 at Martinsburg, West Virginia. This conference was well attended and included a wide variety of activities that included, but were not limited to an opening session keynote speaker; Dr. Wendy Bohon (IRIS) on “Science Communication; from the chatroom to the classroom”. Friday, June 7 included a variety of workshops, member presentations, section business meeting, and afternoon field trips that included “Geology Of Harper’s Ferry” and “Potomac River Geology Float Trip”. Saturday, June 8 provided a choice between two, all day field trips; “Geology Of Corridor H”, led by Callan Bentley of Northern Virginia Community College, or “Karst Geology and Hydrology of the Shenandoah Valley” led by Dr. Dan Doctor of the USGS. The conference concluded Saturday evening, June 8 with the traditional eastern section awards-recognition dinner for OEST awardees and other eastern section awards. Participants departed the meeting with the usual high expectations for the announcement of the date and location for the spring, 2020 meeting, which would never materialize. In spite of the setbacks and cancellations brought on by Covid-19, the eastern section continues to thrive and provide our members with opportunities to become engaged through interactive activities that will be summarized within this report.

*Current Eastern Section Officers\**

Current Eastern Section Officers as of July, 2022

President, Mike O’Donnell  
Vice President, Christopher Roemmele  
Past President, Jason Petula  
Treasurer, Renee Aubry  
Secretary, Steve Lindberg, acting secretary  
Editor, Callan Bentley  
Publicity, Open  
Awards Chairperson, Christopher Roemmele  
Executive Committee Liaison, Dana Thomas

\* Eastern Section elections for new officers has been placed on hold status pending the return of in-person annual conferences; expected to be held in the spring of 2023.

*Eastern Section Financial Report - Membership*

The financial report for the eastern section has been filed by section treasurer Renee Aubry. The Treasurer reports that as of July, 2022 our current balance in the credit union is \$13854.87

## Eastern Section Awards and Recognitions\*

The eastern section activity promotes and encourages excellence in the geosciences. OEST nominations and awards to deserving individuals are an important part of our yearly conference. OEST awardees, along with other eastern section awardees are invited to the annual conference and recognized at the Saturday evening awards dinner. In addition to the OEST winners, the eastern section maintains and presents the following awards to individuals within our section:

Distinguished Service Award, The Distinguished Service Award is given to a member of the Eastern Section (still actively teaching or retired) who has, over the years, contributed to the growth and activities of the Eastern Section. This person should have a history of continued service to the Eastern Section.

James O'Connor Field Camp Scholarship, The James O'Connor scholarship is given to a college geology or earth science major who is attending a geologic field camp course (typically over the summer) as part of their college degree program. The \$500 scholarship assists the student in covering the expenses of their field camp.

Digman Award For Excellence In Geoscience Education, The Digman Award is designed to recognize an individual who works to bring geoscience to the general public. We look for individuals who are not teachers, but work in a capacity that educates the general public in areas of the geosciences. Museum directors, curators and assistants, state survey employees, mine and quarry public relations people would all qualify for this award.

John Moss Award For Outstanding College Teaching, The John Moss award is reserved for instructors and professors who, at the college level, model and promote outstanding teaching in the geosciences.

\*None of these section awards were presented for the 2021-2022 year

### Eastern Section OEST Awardees

#### 2020-2021

Bonnie Keller, Colgan HS, Manassas, VA. Eastern Section Winner.

Donna Kurtis, Twin Valley Middle School, Elverson, Pennsylvania.

Kristina Brody, South County HS, Lorton, Virginia.

Alicen Patton, Moorefield School, Moorefield, West Virginia

Kevin Nohejl, Shoreham- Wading River HS, Shoreham, New York.

#### 2021-2022

Eastern Section (And Virginia) - Dr. Wendy Grimshaw, Andrew Lewis MS, Salem, VA  
New York - Zachary Miller, John Jay MS, Katonah-Lewisboro School District, NY  
Maryland - Sara Snook, North Carroll MS, Hampstead, MD

### Eastern Section Newsletter, "Bulletin"

The eastern section takes pride in our quarterly newsletter titled "The Bulletin". Edited by Callan Bentley, assistant professor of geology at Piedmont Virginia Community College; the Bulletin is issued electronically four times each year. Members without, or with limited internet can request hard copies mailed to them. Section members are encouraged to contribute their articles and narratives on geoscience education, field trips, and general geological knowledge. The Bulletin contains regular features that include "From The Archives" and "Outcrops". It serves the purpose of connecting with members in the months between our spring conferences, along with keeping them informed of ongoing interests and topics in the geosciences. Each issue of the Bulletin is now uploaded to the eastern section page that is provided on the national NAGT website. Members are kept informed that current and past issues of the newsletter can be accessed and downloaded from the national NAGT page.

### Tentative Schedule For The Spring, 2020 Conference, Cancelled.

It is important to note that plans for the in-person 2020 conference to be held at West Chester University, Pennsylvania proceeded until it was necessary to cancel.

Cancelled due to Covid-19, the spring 2020 eastern section conference was to be hosted by section member and Vice President Chris Roemmele of West Chester University, Pennsylvania. The planned schedule of events is provided here to illustrate the continued effort of the eastern section to provide an exceptional in-person conference to our members.

Thursday June 4. 5:00 – 7:00 pm Registration and very light refreshments (soft drinks/cookies) 7:00 pm Welcome and Keynote speaker Dr. Dorothy Merritts (F&M)

Friday June 5 8:00 – 9:00 am Registration plus coffee and light breakfast items available all morning  
9:00 – 11:30 Breakout sessions 1) Drones with Dr. Martin Helmke (WCU) 2) Geometrics/big data and data mining with Dr. Tim Lutz (WCU)

3) Pedagogy/NGSS with Dr. Missy Holzer (Chatham NJ HS) and Dr. Christopher Roemmele (WCU) 11:45 – 12:45 Lunch & section business meeting 1:00 – 5:30 Field trip(s) TBD – but in discussion – Local quarry Soils of Chester Co/SE Pa 5:30 – 7:30 Student and faculty poster session (light refreshments)

Saturday June 6 . Field trips (still tentative): Potholes and the Piedmont . Bells Mill Rd/Wissahickon/Wilmington outcrops 6:00 – 9:00 pm Dinner/Awards Keynote (Drs. Daria Nikitina and Heather Wholey, WCU): Impact of Sea Level Rise on Heritage Resources in the Delaware Bay; Geoarcheological Applications"

## Tentative Schedule For The Spring 2021 Conference

The spring 2021 conference was held on Friday, June 4. The meeting was held virtually and hosted by section Vice President Christopher Roemmele of West Chester University, Pennsylvania.

### **Friday, June 4**

- 9:00 – 10:15 Welcome and Keynote (hoping **Dorothy Merritts** Franklin & Marshall College can do this but not confirmed as of 2/14)
- 11:00 – 12:00 “Drones, Geophysics, and Robotics to Support Geoscience Education and Research in a Pandemic”  
Presenter: Dr. **Martin Helmke**, West Chester University
- 1:00 – 2:00 “Promoting Argument-Driven Explanations in Earth and Environmental Science: Model-Evidence Link, Claim-Evidence-Reasoning, NGSS and 3-dimensional teaching and learning.” Presenters: Dr. **Margaret Holzer**, Great Minds PBC and Rutgers University, Dr. **Insook Han**, Temple University
- 2:30 – 3:30 Piedmont geology, environmental concerns, stormwater management, invasive species. Presenters: Drs. **Tim Lutz** and **LeeAnn Srogi**, West Chester University
- 4:00 – 5:00 “Impact of Sea Level Rise on Heritage Resources in the Delaware Bay; Geoarcheological Applications. Presenter: Dr. **Daria Nikitina**, West Chester University
- 5:30-8:00 Presentation of **OESTA winners**  
Snap talks: Theme – “Growing a beard” What worked well and helped to meet the needs of students and faculty during virtual instruction. Networking and virtual happy hour. Geo-auction.



This one-day virtual event was well attended and served to fill our need to gather members for a conference after and absence of one year.

Spring 2022 Eastern Section Conference: Cancelled.

The spring 2022 eastern section conference was scheduled for May 19,20,21 as an in-person event to be hosted by eastern section member Steve Lindberg. The planned meeting was to be held at Berkeley Springs, West Virginia and all plans and meeting schedule were finalized. Due to low registration numbers, the meeting was cancelled in order to avoid non-refundable penalties (down payments on rooms and facilities) to the eastern section. The meeting was cancelled and all funds sent in to reserve rooms and other facilities were refunded back to the eastern section.

Spring 2023 Eastern Section Conference.

As of July, 2022 and the filing of this section report, the spring 2023 conference is scheduled to be held and hosted by *The Museum Of The Earth, Paleontological Research Institution*, located in Ithaca, New York.

We have already made preliminary arrangements with the museum to host the meeting at a date in spring 2023 to be determined. The museum will provide an excellent venue for the eastern meeting and we look forward to returning to an in-person meeting that includes workshops, presentations, field trips, and recognition of our section OEST awardees as well as other section individuals recognized for their contributions to geoscience education.

In conclusion, the eastern section continues to serve the members through our Bulletin newsletter, recognition awards which include OEST and our own “in-house “ awards, and virtual meetings. Section officers communicate on a regular basis though email and the Zoom format. Planning for the spring 2023 conference to be held in Ithaca, New York will proceed in hope of running an in person, three day event. Covid 19 has restricted and limited our activities; but successful planning and management has provided us the means to continue as a contributing section to the overall welfare of our members and the NAGT organization.

Respectfully Submitted,

Steve Lindberg  
NAGT Eastern Section Archivist  
Acting Secretary

July, 2022



# Bulletin

of the Eastern Section of the National Association of Geoscience Teachers



## **NAGT – Far Western Section 2021 Report**

February 2022

Submitted by Mark Boryta

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### Leadership 2020-2022: (leadership terms are 2 yrs)

President: Mark Boryta [mboryta@mtsac.edu](mailto:mboryta@mtsac.edu)

1st Vice-President: Paul Troop [paul.troop@sbcglobal.net](mailto:paul.troop@sbcglobal.net)

2nd VP/Newsletter editor (continuing): Richard Jones [rmjones7@hawaii.edu](mailto:rmjones7@hawaii.edu)

Secretary/Treasurer (continuing) Gene Pearson [epearson@pacific.edu](mailto:epearson@pacific.edu)

Scholarship Coordinator and contact for OESTA: Mark Boryta [mboryta@mtsac.edu](mailto:mboryta@mtsac.edu); newly-appointed to the post is Ryan Hollister [ryhollister@sbcglobal.net](mailto:ryhollister@sbcglobal.net)

Past President: Winnie Kortmeier [winnie.kortemeier@wnc.edu](mailto:winnie.kortemeier@wnc.edu)

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The FWS is slowly recovering from the pandemic. We were honored to select Dr. Nilo Bill for the OESTA Section award. Dr. Bill teaches at the Tahoe Expedition Academy, a private school in Placer County, where he is able to “tap into the resources available to him at TEA and provide a high-quality learning experience for his students... Nilo imparts creativity as an instructor by actively engaging the students in discussion and assessing student learning outcomes through alternative methods such as website development or map creation using GIS software.” (Aaron Barth).

Our plans to host Spring and Fall 2021 Field Trips were both canceled.

We have started to regroup, by holding virtual business meetings in Feb 2022 and another TBA in May, and have initiated plans to host a Fall 2022 meeting in the greater Los Angeles area.

We would like to thank Ian Taylor for providing lists of members current and lapsed, and will be using those lists to rekindle the section’s activities.

Respectfully,

Mark Boryta



## 2021 Section Officers

President:	Susan Meabh Kelly, Henry Abbott Technical High School, Danbury, CT
Vice President:	Lindsay Waack, Fairfield Ludlowe High School, Fairfield, CT
Treasurer:	Steve Winters, Holyoke Community College, Holyoke, MA
Newsletter/Secretary:	Richard Little, (retired) Greenfield Community College, Greenfield, MA
OEST Chair:	Tarin Weiss, Westfield State University, Westfield, MA
Councilor:	Lori Weeden, University of Massachusetts, Lowell, MA
Councilor:	Bruce Rueger, Colby College, Waterville, ME
Councilor:	Tom Vaughn, Northeastern University, Boston, MA
Councilor:	Karen Kortz, Community College of Rhode Island, Warwick, RI
Councilor:	Elizabeth Gordon, Fitchburg State University, Fitchburg, MA

## Section Activities

**December 2021:** Susan Meabh Kelly is an invited panelist at the 2021 American Geophysical Union meeting. The panel is entitled: Inclusion in the Geosciences.

**October 2021** NAGT New England Section officers met to organize a January 2022 virtual meeting.

**July 2021:** Lori Weeden facilitated two fee-free webinars dedicated to K-12 integration of climate change as part of the University of Massachusetts/Lowell's NSF-funded Climate Change Initiative.

**July 2021:** Susan Meabh Kelly convened an afternoon workshop at Earth Educators' Rendezvous dedicated to 9-14 integration of archived and real-time geoscience data. The workshop is entitled: *Facilitating Student Exploration of Local Environmental Challenges via Mathematics and Computational Thinking.*

**May 2021:** Susan Meabh Kelly co-presented a session on justice-centered climate change activities during the National Science Teaching Association's virtual conference on Saturday, May 1st at 3:30 PM Eastern. The session is entitled *Beyond Polar Bears: Disproportionate Impact of Climate Change on Low-Income and Marginalized Communities' Health.*



**March 2021:** The section organized a panel session during GSA Northeastern meeting on Sunday, March 14th -- "*Is Geology at a Crossroads?*" The panelists helped stir discussion about the status and future of K-16 geoscience education in New England.

## **NAGT Pacific Northwest Section 2020-21 Annual Report**

### **A. Executive Officers**

#### **President**

Derek Turner – Douglas College, Vancouver, BC, turnerd1@douglascollege.ca

#### **Vice-President**

Craig Nichol – University of British Columbia, Kelowna, BC, craig.nichol@ubc.ca

#### **2<sup>nd</sup> Vice-President**

Crystal Huscroft – Thompson Rivers University, BC, chuscroft@tru.ca

#### **Secretary**

Jodie Harnden – Sunridge Middle School, OR, jodie.harnden@pendleton.k12.or.us

#### **Treasurer**

Zachary Schierl – Yakima Valley College, WA, zschierl@yvcc.edu

#### **Past President**

Hillary Goodner – Yakima Valley College, Yakima, WA, hgoodner@yvcc.edu

### **B. Communications**

#### **Newsletter Editors**

Andy Buddington, Spokane Community College, WA, andy.buddington@scc.spokane.edu

Frank Hladky, North Bend, OR, fhladkys@gmail.com

#### **Website Coordinator**

Frank Hladky, 3225 Washington Avenue, North Bend, OR 97459, fhladkys@gmail.com

#### **Website Address**

<https://nagt.org/nagt/sections/northwest/index.html>

### **C. State-Province Councilors**

#### **Alaska**

Sonia Nagorski, University of Alaska, Juneau, sanagorski@alaska.edu

LeeAnn Monk, University of Alaska, Anchorage, lamunk@alaska.edu

#### **Idaho**

Shawn Willsey, College of Southern Idaho, swillsey@csi.edu

(second position open)

### **Oregon**

Hal Wershow, Central Oregon Community College, hwershow@cocc.edu

Steve Carlson, Portland State University, nativelement@me.com

### **Washington**

Nick Zentner, Central Washington University, nick@Geology.cwu.edu

Andy Buddington, Spokane Community College, andy.buddington@scc.spokane.edu

### **British Columbia**

Todd Redding, UBC Penticton, tredding@okanagan.bc.ca

(second position open)

## **D. Awards**

### **OEST Awards Coordinators**

Lynda Sanders, Marshfield HS, S. 10<sup>th</sup> and Ingersoll, Coos Bay, OR, lyndas@coos-bay.k12.or.us

Jodie Harnden, Sunridge Middle School, 700 SW Runnion Ave, Pendleton, OR 97801, Jodie.Harnden@pendleton.k12.or.us

## **E. Activities/Functions**

### **The NAGT PNW Annual Conference and Annual Business Meeting**

Due to the COVID-19 pandemic, the Pacific Northwest Section met online for our annual general meeting, using a Gather Town virtual space to conduct a poster and presentation session, share virtual field trips and hold our annual business meeting. A summary of the section's officer is shown above. As of the latest available figures, August 20, 2021, the section membership count was 156. We plan on having our next conference in person in Summer 2022.

### **Third Thursday Focus Groups**

During the pandemic, our section met the third Thursday of each month from September 2020 to April 2021 to host an online workshop focused on sharing online teaching tips and skills, virtual field trips, etc. This also provided an opportunity for members to continue networking and communicating with their colleagues from across the section, which was a welcome break from teaching online.

### **Section Newsletter**

The newsletter is produced by Andy Buddington and Frank Hladky three times a year (Winter, Spring and Fall). The newsletters collect information from section officers and members at large and are distributed electronically. They are available online at:  
<https://nagt.org/nagt/organization/northwest/news.html>

#### **F. Financial Report, NAGT Pacific Northwest Section**

The section financial report for the year ending August 31, 2021 can be found separately.

## Report to the NAGT Executive Committee from the Geo2YC Division

10 October 2021

### Current Division Officers

President: Sean Tvelia, Suffolk County Community College, Past President: Jackie Hams  
Vice President (& President-Elect): Karen Layou, Reynolds Community College  
Secretary/Treasurer: Gretchen Miller, Wake Tech Community College  
Newsletter Editor: Andrea Bair, Delta College  
Webmaster: Bridget James, De Anza College  
Archivist: Dave Mrofka, Mt. San Antonio College

Geo2YC is in its tenth year as a division of NAGT. We currently have 269 members in the division and lost 14 to attrition. Our account balance is \$11,230.17, currently residing with NAGT HQ.

Below is a summary of activities completed and/or in progress:

1. The Executive Board met (via teleconference) six times between October 2020 and October 2021 (30 October 2020, 15 January 2021, 5 March 2021, 7 May 2021, 18 June 2021, 24 August 2021).
2. The Geo2YC Division awards a Faculty Development grant to help community college faculty pursue professional development. Mini grants up to \$500 are available to support an activity, workshop, or field trip from multiple institutions. Travel grants of \$100 are available to help an individual attend a professional development activity. These opportunities were announced in the newsletter and published on the NAGT Geo2YC webpage. The division continues to struggle to award these grants, most likely due to travel restriction imposed at many institutions during the COVID 19 pandemic
3. In early 2020 the division newsletter editor stepped down. In fall 2020 we identified a new editor and reestablished regular publication of the newsletter, Foundations, which is distributed digitally through the Geo2YC website and the Geo2YC listserv. The newsletters was also reformatted to highlight the activities of 2YC faculty, provide a regular voice to 2YC adjuncts, and highlight ongoing professional development opportunities.
4. We awarded an Outstanding Adjunct Faculty Award (OAFA) to two quarterly winners. Each awardee is showcased in newsletters and awarded a membership to both NAGT and the division, and the annual awardee is also awarded \$750 of professional development funds provided by Pearson publishing.
5. We continue to work with members NAGT and GSA Sectional liaisons to help us identify members and promote the division at sectional, regional, and local events.

6. Our website is continually updated. This year we reformatted the site to bring timely information more front and center. We are also in the process of developing a page devoted to the history of the division.

## **NAGT-GER Division Annual Report**

Report to the NAGT Executive  
Committee Geoscience Education  
Research Division October 10, 2021

### **Current Division Officers**

Past President: Kelsey Bitting  
President: Emily Ward  
Vice President: Leilani Arthurs  
Treasurer: Cory Forbes  
Secretary: Peggy McNeal  
Media Director: Lauren Adamo  
Graduate Student Liaison: Bailey Zo Kreager

### **Division Officer terms beginning at the annual meeting of GSA Oct. 10, 2021**

Past President: Emily Ward (1-year term)  
President: Leilani Arthurs (1-year term)  
Vice President: Emily Scribner (1-year term)  
Treasurer: Cory Forbes (3rd year of 3-year term)  
Secretary: Peggy McNeal (2nd year of 3-year term)  
Media Director: Larry Collins (1st year of 2-year term)  
Graduate Student Liaison: Kristen Foley (1st year of 2-year term)

### **Division Priorities for 2020-2021**

The division is now seven years old and includes 379 members. We continue to focus on the priorities identified from our strategic planning efforts in 2019-2020 which include:

- building strategic collaborations with other DBER and education research communities;
- building GER community capacity for future workshop leadership;
- building upon the GER community framework;
- building awareness of other conferences for border-crossers.

A major focus of this year's activities was on reviewing NAGT GER policies and revising those policies to be more equitable and inclusive. In the last couple of years, we have sought to diversify the social identity characteristics represented by community members highlighted in our newsletter spotlights, and to select featured articles and invite conference speakers who can help our community explore antiracist and inclusive education research methods and theoretical frameworks. While those efforts may have diversified the content of our division newsletter, we needed to do the work in thinking about our GER community and consider myriad ways in which we could create a more inclusive and welcoming environment for researchers of color. To this end, the GER Past President, President, and Graduate Student liaison, along with the

Editor-in-chief of the Journal of Geoscience Education and two other GER members formed a working group (a.k.a pod) in the Unlearning Racism in Geoscience (URGE) project (<https://urgeoeducation.org/>). Over eight weeks this past spring, our pod drafted revised policies for review by our GER leadership and will reactivate this fall to revisit those policies for refinement and implementation. We used this anti-racist lens in creating a new Early Career Award opportunity through GER (spearheaded by Past President Kelsey Bitting). This effort and our draft deliverables will be described in more detail later in this report.

Of course, again, we continued to seek ways to support our community in weathering the challenges of COVID-19. As always, we continue to build community, promote GER, and provide networking and communication opportunities.

### **Professional Meetings**

The 2021 Earth Educators Rendezvous was held virtually again this year due to conditions of COVID-19. The division helped to sponsor the Geoscience Education Research: Statistics in Geosciences workshop. This workshop conveners, Dough Czajka and Josh Premo, focused this workshop on building knowledge on quantitative theory and the use of educational statistics in the geosciences. On Wednesday night, division officers Leilani Arthurs and Zo Kreager hosted a virtual happy hour via Zoom that was attended by almost 40 people. Finally, in what has now become a successful yearly workshop, Secretary Peggy McNeal hosted the third writing retreat during the Rendezvous for twelve attendees. Due to its popularity, it has extended into a writing circle which has met weekly over the last 15 months..

The GER Division officers (Led by Peggy McNeal) will chair a session at the 2021 Annual Fall Meetings of GSA. Both the past and current GSA sessions chaired by our division focus on GER Methods and Theoretical Frameworks. As in the past, both sessions received more abstracts than could be accepted as oral presentations; Vice President Leilani Arthurs and Secretary Peggy McNeal organized the 26 submissions into a single oral session and poster session.

At each of our sessions, we invite speakers from within our GER community and others selected from the broader disciplinary-based education research community. In alignment with strategic planning priorities of increasing diversity, equity and access, we invited Dr. Anita Marshall (University of Florida) to speak in our 2021 GSA Session. Dr. Marshall is the Director of Operations for the International Association for Geoscience Diversity (IAGD) where she focuses on geoscience education research. She describes her focus area as “the academic and social engagement in geoscience learning environments and the barriers to participation for underserved groups in STEM”. She is currently researching how to make field courses more inclusive and accessible through thoughtful design, use of technology and working in teams.

To disseminate information about methods and theoretical frameworks more widely, we continue to archive presenter’s public contact information and slides (if the presenter chooses to share them) on our website here: <https://nagt.org/nagt/divisions/geoed/methods>.



The Division has agreed to sponsor 6 sessions in 2021 focused on inquiry-based undergraduate geoscience laboratory experiences, impacts of COVID-19 on undergraduate instruction, undergraduate research experiences, assessment, and geoscience workforce development.

### **Communications**

In 2020-2021, we continued to send out our Newsletter (the GER Exchange) to our members on a monthly basis from September – December and February – April. Newsletters include job and funding opportunities, highlight research articles of relevance to the community, promote relevant webinars or other professional development opportunities, and advertise for any sponsored sessions or events. We have continued our “Spotlight” feature to highlight the type of work done by various researchers in the community, including recent profiles of Dr. Alison Jolley (AJ), an Academic Development Lecturer at the University of Waikato, Dr. Carolina Michel, a geology faculty member at Chandler-Gilbert Community College, and Dr. Ángel A. García Jr. an Assistant Professor in the Department of Geology and Environmental Science at James Madison University. A full list of “Spotlights” can be found at <https://nagt.org/nagt/divisions/geoed/spotlight>. In alignment with the priorities identified by the strategic planning process described above, newsletters also highlight conference opportunities outside the geosciences with relevance to GER professionals.

For this year, we are considering reducing the frequency of our newsletter to quarterly and using our GER Division email listserv more frequently to announce opportunities for our members.

To view past newsletters, visit the archive at <https://nagt.org/nagt/divisions/geoed/archive>.

### **Awards**

As established in 2018, the GER Division offers two awards to senior researchers to recognize their work. The Transformation Award honors “colleagues who have made significant contributions to the development of and capacity for geoscience education research.” In 2020, this award was presented to David McConnell (North Carolina State University), and in 2021, to Renee Clary (Mississippi State University). The Collaboration Award honors non-GER colleagues who have “infused the GER community with new approaches to GER.” No recent nominations have been received for the Collaboration Award. Awardees receive Division membership for a year, and will be recognized at the NAGT luncheon at GSA the next time an in-person event is held.

Beginning next year, the division will also offer an Early Career Award aimed at recognizing the contributions of GER scholars within 10 years of completing their Ph.D. Establishing this type of award has long been a priority for the division, and thanks to the contributions of the Awards Committee this year (Kyle Gray, Darryl Reano, Emily Scribner, and Leilani Arthurs, led by Kelsey Bitting), the division voted to approve the language of the new award at our October meeting.

In 2020, in response to the COVID-19 crisis and its impact on the community, the division also offered a Graduate Student Emergency Fund of up to \$500 per person. Three applications

were received and are currently under review. While the fund was primarily intended to cover GER graduate students' research-related costs, applications primarily requested support to cover the cost of housing and utilities.

### **Finances**

As established in 2018, the GER division account is nested under the NAGT main account. The treasurer submits expenses to the NAGT executive office for payment. The division has an account balance of \$8,544.83 (October 1, 2021). Please see our financial report for details on annual expenditure

### **URGE activities**

Over the 8-week program through URGE, Kelsey Bitting, Kim Hannula, Susan Meabh Kelly, Scott Werts, and I worked on the following documents for the GER Division: Complaints and Reporting Policy, Demographic Data, Policies for Communities of Color, Admissions and Hiring, Safety Plan, Resource Map and Management Plan. I have selected two activities to highlight that describe how our pod approached these topics: Demographic Data and Admissions and Hiring.

We gathered the demographic data for our membership since the inception of the Division with help from the NAGT office. Analysis of these data gave us insight to the current demographic makeup of our Division and re-enforced that we have work to do in order to recruit and retain a diverse GER membership. Our pod discussed how creating an inclusive environment is first and foremost so that our actions are effective in the recruitment and retention of scholars. We decided that drafting a statement for our webpage could set the tone in welcoming a broad array of scholars to our organization. With regard to admissions and hiring, some of the suggestions did not specifically apply to our Division, however, we used the concepts laid out as part of the project to consider how we advertise, recruit and select participants for our officer positions, awards, scholarships and researcher spotlights. Draft documents for this and other policies were presented to the larger GER group of officers for discussion and comments for revision. Other policies and procedures for our Division are closely aligned with the national NAGT organization and thus further discussion with the national leadership is required before we finalize our policies and post them to our Division website. The URGE project will continue this Fall 2021 to further refine and implement the new policies. We plan to revisit our draft documents and start up where we left off in our monthly Division meetings after the new officers have been installed.

### **Concluding Thoughts and Welcome**

Throughout another incredibly difficulty year dealing with a global pandemic, our division and the leadership team have worked hard to continue offering a space for networking, to spotlight and support GER researchers from diverse backgrounds and to work on making the GER Division a welcoming and inclusive community for GER scholars. I am excited to see continued growth in the division in the coming year.

I especially want to thank Dr. Kelsey Bitting for her service to the Division as she will be rotating off the leadership team this year. She has made incredible contributions to

the Division first as Communications Director and then in her leadership roles. I know that she has been an incredible support to me and others in the Division and we will miss her tremendously. Another big congratulations to our outgoing Graduate Student Liaison Dr. Zo Kreager who is now in a tenure track position at SUNY-Oneonta. Zo was integral in improving the networking among GER graduate students and made contributions to many GER activities throughout her term. Lastly, I want to thank Dr. Lauren Adamo for taking the lead on distributing the monthly GER newsletters. Collating and disseminating the materials for the newsletter is no small feat and Lauren handled the duty with ease. I also want to thank Drs. Leilani Arthurs, Cory Forbes, and Peggy McNeal for their continued service, and to welcome to our new officers Dr. Emily Scribner (VP), Dr. Larry Collins (Media Director) and Kristen Foley (Graduate Student Liaison). I look forward to our division's continued work together!

Emily Ward, on behalf of the 2020-2021 NAGT-GER Division Executive Board:

President Emily Ward, Rocky Mountain College  
Past President Kelsey Bitting, Elon University  
Vice President Leilani Arthurs, University of Colorado-Boulder  
Treasurer Cory Forbes, University of Texas-Arlington  
Secretary Peggy McNeal, Western Michigan University  
Media Director Lauren Adamo, Rutgers University  
Graduate Student Liaison Zo Kreager, SUNY Oneonta



NAGT Annual Report for  
2020-2021  
Prepared by  
Christopher Roemmele, President  
Bridget Mulvey, Secretary-Treasurer

*Officers:*

President – Christopher Roemmele  
Acting Vice President and Past President – George Bartuska  
Secretary/Treasurer – Bridget Mulvey  
Media Director – Suzanne Metlay

*Ex officio Members:*

NAGT Executive Committee Liaison – Christy Visaggi  
NSTA Liaison – Donna Governor  
NESTA Liaison - Rick Jones

**Period:** September 2020 - October 2021

**Submitted:** May 2022

**Activities:**

**1. 20 October 2020: Business Meeting at GSA**

- Treasury Report: \$2,536.68 in the bank. TED plans approved a \$1250 expenditure on the EER for swag, meal break, and travel grants.
- Accomplishment:
  - GSA: multiple sessions sponsored by NAGT.
- In Progress / Discussion:
  - Changes to TED Division by-laws will go into effect November 1, 2020.
  - NAGT is hosting a v Teaching Field Experiences Online webpage:
  - NAGT Council is creating a set of criteria and responsibilities for use during leadership transfers. This will be general and available for use by all NAGT divisions.
  - [https://serc.carleton.edu/NAGTWorkshops/online\\_field/index.html](https://serc.carleton.edu/NAGTWorkshops/online_field/index.html) AGU: NGSS Summit is working on the GIFT workshop and is seeking teachers to propose shar-a-thons for the alternative format this year. AGU attendance has always been free for K-12 teachers who are members (membership is \$50).
- Action Item:
  - Protocol for requesting NAGT-TED sponsorship of sessions or workshops at professional conferences is needed. An ad hoc committee of Christopher Roemmele and Suzanne Metlay will research and report.

**8 December 2020: Executive Committee Meeting**

- Treasury Report: \$2,536.68 in the bank
- Accomplishments:
  - Creation of a TED Diversity, Equity, and Inclusion Committee approved.
  - Updates of NAGT Position Statements. Volunteers added.
  - Approved sponsorship policy

- In Progress / Discussion:
  - Have not been able to update our TED webpage in a year.
- Action Items:
  - Drafting a letter responding to University of Vermont's move to eliminate geology program
  - By-laws will be changed to reflect issue with contact information provided online about leadership team
  - Earth Science Teacher Leader Standards: Need a mechanism for nomination, selection, and award for deserving K-12 educators. Potential corporate sponsor for recognizing teacher leaders.

### **8 February 2021: Executive Committee Meeting**

- Treasury Report: \$2,536.68 in the bank
- Accomplishments:
  - Communications: Members responding to the newsletter. Two reached out about DEI committee membership. This short, monthly version is increasing engagement. More activity on Facebook as well.
- Need candidates for elections by Memorial Day or earlier
- In Progress / Discussion:
  - NAGT Advocacy Committee: Any position statements need NAGT approval. Likely will need open comment period before we can adopt.
  - Consider including NAGT membership renewal option to donate funds for teacher awards. Need to investigate this possibility and logistics.
  - OEST awards: deadline has been moved up (but consolidated to one deadline)- March 31. Our division could help to advertise this. Could better use related organizations, departments to encourage applications. Will add to newsletter.
  - Consideration of social media moderator
- Action Items:
  - Asked to provide more specific details about phishing issue, using officer information from our bio page. Had not heard about this from other divisions. Possibility of NAGT email rather than our respective institutions. Solution would need to come from overall organization. Will watch out for spam/phishing emails to illustrate the issue.

### **6 April 2021: Executive Committee Meeting**

- Treasury Report: \$3,870.37 in the bank
- In Progress / Discussion:
  - Scholarship set-up: TED would need \$11,000+ for a fund to be endowed, if we wish to offer \$500, TED can donate certain amount each year.
  - Discussion on value of pre-college clubs and teaching of earth science; possible \$ to support local pre-college clubs - award/scholarship - PTA match possible, new annual expense for TED.
  - Teacher Leader Standards: Publication for In the Trenches; discussion on how to nominate, evaluate.
- Action Items:
  - TL Award criteria, monitoring, assessment, committee work. 5 year plan to work toward award technical aspects and funding/donations. Suzanne willing to commit funds to establish award endowment.
  - TED to pay for 5 \$100 teacher awards / sponsorship for EER
  - Earth Science Teaching Position Statement: create position statement for NAGT Advocacy Committee. Critical nature of teaching earth science at all levels. Complete by end of summer.

### **1 June 2021: Executive Committee Meeting**

- Treasury Report: \$3,870.37 in the bank. TED dues brought in \$1,333.69
- Accomplishments:
  - Earth Science Teacher Leader Standards: Article for *In The Trenches* has been submitted.
  - Teacher Leader Standards now on our TED website (live):  
[https://nagt.org/nagt/divisions/ted/ted\\_earth\\_science\\_teacher\\_lead.html](https://nagt.org/nagt/divisions/ted/ted_earth_science_teacher_lead.html)
  - EER: TED hosting round table discussion, TED sponsoring plenary session.
  - Calendar of agenda items: borrowed from GER, to assist with official duties and timeline.
- In Progress / Discussion:
  - TED and NAGT (and other sections) DEI: framework and communication structure development and initiatives brainstorming.
  - Collette indicated we need certain amount of \$ in bank before we can attach the \$ to an award.
- Action Items:
  - Advocacy: High School statement work committee needed
  - Create mechanism by which we can apply teacher leader standards for awards. Collette indicated we need certain amount of \$ in bank before we can attach the \$ to an award.

### **4 August 2021: Executive Committee Meeting**

- Treasury Report: \$2120.37 in the bank. TED division dues added \$1,333.69 on February 26, 2021. EER expenditure was for \$1,750.00 on May 31, 2021.
- Accomplishments:
  - Newly elected officers to start October 2021 at GSA.  
President: Christopher Roemmele  
Vice President: Tarin Weiss  
Past President: George Bartuska
  - *In the Trenches* articles in about Earth Sciences Teacher Leader standards  
<https://nagt.org/nagt/publications/trenches/v11-n3/index.html>
  - Earth Sciences Education Position Statement draft presented to NAGT Advocacy Committee:  
<https://docs.google.com/document/d/1o46OujpVLtvJFGVmxSoKccyaPa07yGrs/edit>
- In Progress / Discussion:
  - Earth Educator Rendezvous 2021: Members discussed various DEI focused session they led and presented and attended. Positions statements updating. STEM plenary sessions.

## **2021 Annual report**

### **Kim Hannula**

### **Editor-in-Chief, Journal of Geoscience Education**

I officially began as Editor-in-Chief of JGE on December 1, 2020, and appear on the masthead with Volume 69, Issue 1. I began working with Eric Riggs on some editorial duties starting in November, 2020.

### **Editorial Board**

In November, 2020, we recruited three new Associate Editors (Peggy McNeal, Anne-Marie Ryan, and Nick Soltis), and removed associate editors who had finished their terms or stepped down. In addition to the new AEs, Heather Petcovic and Katherine Ryker agreed to continue serving for an additional term.

In September, 2021, we began recruiting new AEs to serve from 2022-2024. I also asked the AEs whose terms are scheduled to finish this year if they would be interested in serving an additional term. Alexandra Davatzes, Ilyse Resnick, and Ben Wolfe will be continuing as AEs.

*Current Editorial Board:*

Curriculum & Instruction Editor: Karen Kortz

Research Editor: Alison Jolley

Associate Editors:

- Shondricka Burrell, *Duquesne University*
- Alexandra Davatzes, *Temple University*
- Michael Hubenthal, *IRIS*
- Charles R. Kerton, *Iowa State University*
- Peggy McNeal, *Towson University*
- Heather Petcovic, *Western Michigan University*
- Ilyse Resnick, *University of Canberra*
- Anne-Marie Ryan, *Dalhousie University*
- Katherine Ryker, *University of South Carolina*
- David M. Schultz, *University of Manchester*
- Nicholas Soltis, *University of Indianapolis*
- Wendy Smythe, *University of Minnesota Duluth*
- Ben Wolfe, *University of Kansas*

### **Upcoming theme issues**

Two new theme issues have been proposed and accepted, and one more has been discussed for a 2022 or later submission deadline.

*In Our VOICES: Voices Integrating Culture in the Earth Sciences*

The first of the proposed theme issues, *In Our VOICES: Voices Integrating Culture in the Earth Sciences*, is currently accepting submissions, with a deadline of December 1, 2021. The call for papers is online at [https://think.taylorandfrancis.com/special\\_issues/integrating-culture-earth-sciences/](https://think.taylorandfrancis.com/special_issues/integrating-culture-earth-sciences/) . The guest editors for one new theme issue have been added to the Editorial Manager and are beginning to handle manuscripts.

The *In Our VOICES* editors are:

- Wendy F. Smythe, University of Minnesota Duluth (also a regular AE)
- Gillian Bowser, Colorado State University
- Aradhna Tripathi, UCLA
- Carmen R. Cid, Eastern Connecticut State University
- Corey Garza, California State University, Monterey Bay
- Christopher Atchison, University of Cincinnati

*The Lasting Effects of the 2020-2021 COVID-19 crisis on geoscience education: insights, problems, and unanticipated benefits*

A second theme issue will begin soliciting submissions at the end of 2021, with a submission deadline of May 1, 2022. The guest editors for that volume will be:

- Mark Abolins, Middle Tennessee State University
- Catherine Riihimaki, 2NDNATURE Software, Inc.
- Reginald Archer, Tennessee State University
- LeeAnna Chapman, University of North Carolina, Charlotte



## Submissions

The number of submissions to JGE has remained robust, despite the ongoing time pressures on geoscience educators created by COVID-19 and the sudden shift to online teaching in March, 2020.

*Table 1. Monthly submissions, 2020 and 2021*

Month	2020			2021		
	New	Revised	Total	New	Revised	Total
<b>Jan</b>	5	12	<b>17</b>	9	9	<b>19</b>
<b>Feb</b>	10	7	<b>17</b>	8	7	<b>16</b>
<b>Mar</b>	4	1	<b>12</b>	8	12	<b>19</b>
<b>Apr</b>	3	5	<b>8</b>	4	10	<b>15</b>
<b>May</b>	4	4	<b>8</b>	2	9	<b>10</b>
<b>Jun</b>	10	7	<b>17</b>	3	16	<b>18</b>
<b>Jul</b>	5	10	<b>15</b>	4	9	<b>15</b>
<b>Aug</b>	2	5	<b>7</b>	5	11	<b>16</b>
<b>Sept</b>	8	7	<b>15</b>	3	7	<b>10</b>
<b>Oct</b>	4	2	<b>6</b>			
<b>Nov</b>	4	11	<b>15</b>			
<b>Dec</b>	8	11	<b>11</b>			
<b>Total</b>	66	82	<b>148</b>	48	90	<b>138 (as of 9/30)</b>

*Table 2. Types of articles submitted*

Article Type	2020	2021 (through 9/28)
<b>Commentary</b>	22	14
<b>Curriculum &amp; Instruction</b>	54	59
<b>Literature Review</b>	7	5
<b>Research</b>	66	58

### *International submissions*

The largest proportion of submissions to JGE continue to come from the United States, but the proportion of international manuscripts is increasing. In 2021, 72% (31 out of 43) came from the United States. In 2020, 81% (44 out of 54) manuscripts came from the United States. More than one submission in a year came from Canada, Indonesia, South Africa, and the UK. In 2020, 8 other countries had one submission to JGE, and so far in 2021, 6 other countries had one JGE submission.

## Publishing

### *Pages per issue*

Our contract with Taylor & Francis was renewed in 2020. As part of the renewal, we increased the number of pages per issue from 88 to 100, starting with Volume 70 (2022).

### *Backlog*

As of September 29, 2021, JGE's backlog (papers that are published online but have not yet been included in a print issue) is 24 papers, with another five papers being typeset. Those papers total more than 400 pages, which means that all of Volume 70 (published in paper in 2022) will consist of papers that were accepted and published online in the first ten months of 2021.

### *Turnaround time*

Since we began publishing with Taylor & Francis in 2018, JGE has averaged 53 days from submission to first decision, 86 days from submission to first post-review decision, and 27 days from acceptance to online publication. Turnaround time in 2020 was slower, particularly during the beginning of COVID-19 shutdowns (88 days to first decision average for the year). The turnaround time has shortened in 2021 (48 days to first decision).

### *Acceptance rate*

Since we began publishing with Taylor & Francis in 2018, JGE has averaged a 59% acceptance rate.

## Awards

The **Outstanding Paper Award** goes to Cole Kingsbury, Elizabeth Sibert, Zachary Killingback, and Christopher Atchison for their 2020 paper “Nothing about us without us:” The perspectives of autistic geoscientists on inclusive instructional practices in geoscience education, *Journal of Geoscience Education*, 68:4, 302-310, DOI: [10.1080/10899995.2020.1768017](https://doi.org/10.1080/10899995.2020.1768017). The award committee described this as a well-written, practical, grounded paper with a clear call to action. The recommendations in this paper will serve all students in the field, not just students who are neurodiverse.

The **Outstanding Reviewer Award** goes to Nicole LaDue of Northern Illinois University. The review committee thanks Nicole for her thoughtful, patient reviews of multiple revisions of multiple papers.

## Indexing and metrics

### *Journal metrics*

Taylor and Francis now provides a summary of journal metrics, available directly from the JGE home page

<https://www.tandfonline.com/action/journalInformation?show=journalMetrics&journalCode=ujge20> .

Usage: 52,268 article downloads in 2020; 37,736 article downloads so far in 2021. (Comparison: 33,372 downloads by September 30 in 2020.) Most downloads are from the United States, followed by the UK, Canada, Australia, China, and Mexico.

### Citation metrics:

- 2.8 (2020) CiteScore
- Q1 (2020) CiteScore Best Quartile
- 1.1 (2020) SNIP (Source-normalized Impact per Paper; a journal with a SNIP of 1.0 has the median number of citations for journals in that field) (2018: 0.862)
- 0.532 (2020) SJR (Scimago Journal Rank; average value for all journals in Scopus is 1.000) (2018: 0.414)

### *Metrics from Scopus:*

- CiteScore = 2.8 (2019: 2.4; 2018: 1.01)
- Ranked 310/1319 (76th percentile) in Education journals (2019: 75th percentile; 2018: 54th percentile)

### *Metrics from Scimago:*

- H-Index 34
- Average 9.6% international collaboration
- 44 documents were uncited and 75 documents were cited
- 1.548 external citations per document

**NAGT Annual Report  
2021  
Redina Finch  
Editor, *In The Trenches***

**January 2021:**

Published articles

- Teaching with Online Field Experiences: New resources by the community, for the community
- Geoscience Ambassadors: A change-making program that is reinventing what it means to be a geoscientist
- "I Don't Have A Clue" A Format for Introducing Problem Solving in the Earth Sciences

Additional material

- Outstanding Teaching Assistants Awards for January 2021

**April 2021:**

Published articles

- Climate Change in State Science Standards: A 2020 Snapshot
- Geoscience Education Advocacy 101: An NAGT Primer on Action Outside of the Classroom
- Run for Something: The Importance of Serving on a School Board / Part 1
- Engaging the Geoscience Community in International Climate Action

**July 2021:**

Published articles

- Focusing on Earth Sciences Teacher Leader Standards
- My Path into Teacher Leadership
- Earth Sciences Teacher Leader Standards
- Blazing the Trail: Offering a New Framework for Teaching Field-Based Geoscience at the Secondary and College Level
- Using Fruit Spreads to Aid Research in the Undergraduate Laboratory

**October 2021:**

Published articles

- The ESPRIT Listserv: Thirty Years of Peer-Driven Professional Development in a Vibrant K-16 Community of Practice

Additional material

- The NAGT, GSA, GEO-CUR, Totten, GEO2YC, Stout, and JGE Education Division Awards for 2021
- Outstanding Earth Science Teacher Awards and Outstanding Teaching Assistants Awards for 2021

### **January 2022 issue and beyond**

Starting with the January 2022 issue and moving forward, ITT will be online only. The online format allows us to include our normal “feet-on-the-ground” articles and much more. **January’s** issue will include: Letter from the President, Profiles of new officers, Advocacy column and Member highlight. **April’s** issue will include: What’s net in Teach the Earth, Highlights from divisions and sections and Member highlight. **July’s** issue will include: Letter from EER program conveners, EER program and Member highlight. **October’s** issue will include: Awards and Member highlight.

Ideas for future issues

- I have some ideas for themed issues.
  - Learning by Drone
  - Arduino
  - GIS
- I’ve suggested that ITT become a more broadly advertised magazine since most of the authors I’ve contacted were not NAGT members. It might be better to make this an outward facing magazine instead of an inward facing one. This requires action from the ExCom and would no doubt cost money to advertise the magazine to a broader audience. Broadening the audience may increase advertisements in the magazine.

Advertising

- August 6, 2020: I send Caroline contact information for groups who might be interested in advertising in ITT:
  - UNAVCO contact: Donna Charlevoix
  - AMS Data Stream Program: contact at [amsedu@ametsoc.org](mailto:amsedu@ametsoc.org)
  - GLOBE Program unable to spend money on advertising
  - UCAR Center for Science Education contact: John Ristvey, [jristvey@ucar.edu](mailto:jristvey@ucar.edu)
  - COMET program contact: [epage@ucar.edu](mailto:epage@ucar.edu)
  - SparkFun contact: 303-284-0979
  - \*\*\* I’m not sure if any of these were contacted. The original plan was to contact them after the EER last year, but I don’t think it happened.

Dorothy Stout Professional Development Awards Report  
Ben Wolfe, Chair

In honor of Dottie Stout's outstanding work and lifelong dedication to Earth science education, NAGT gives three \$750 awards annually to faculty and students at two-year colleges and K-12 teachers in support of the following:

- Participation in Earth science classes or workshops
- Attendance at professional scientific or science education meetings
- Participation in Earth science field trips
- Purchase of Earth science materials for classroom use

Additionally, award winners are given a one-year membership to NAGT.

Current Committee Members

	Term
Ben Wolfe (Chair)	2018-2022
David Voorhees	2019-2022
Alec Aitken	2019-2022
Diana Steller	Ex officio

**2021 winners:**

- 2YC faculty recipient:
  - Alexander Ullrich, Georgia State University - Perimeter College, Atlanta, GA
- 2YC Student recipient: No award this year as we did not receive a student proposal submission. The committee will be exploring ways to better recruit and solicit submissions from 2YC students
- K-12 faculty recipients (two awards in lieu of no student award this year):
  - LaChandra Hopper, Sheppard Air Force Base Elementary, Sheppard AFB, TX
  - and Pamela Baker, Alma Bryant High School, Irvington, AL

Recommendations:

- 1) As all three member terms expire in 2022, we will need to recruit individuals to serve on the committee.
- 2) The award currently is promoted by the Geo2YC division and has visibility to 2YC instructors, however greater awareness is needed to encourage students to apply for the award.

- 3) Encourage TED division to help promote the award to K-12 teachers to drive up number of quality applicants.
- 4) We need to expand efforts to remain linked with past winners so they continue to contribute to NAGT and Earth Science Education.

Respectfully submitted,

Ben Wolfe

## Field Camp Scholarship 2021 Report

Chair: Lydia K. Fox

The NAGT Field Camp scholarship field was smaller this year, likely due to the uncertainty of field camps due to COVID19. We had 33 complete applications to review from the best and brightest young geoscientists from around the country. For comparison, there were 85 applicants in 2018 and 76 in 2019, and 61 in 2020. A few of the awardees were also in the top pool for 2020 and were unable to use the scholarship because of COVID 19 cancellations. Committee members able to do the reviews this year were Bob Shuster and Claire McCleod, and Lydia Fox. Cindy Magruder was unable to review this year. Bob's term on the committee is up and I want to thank him for his work.

This year's awardees are:

Cecilia Albert-Black, Southern Illinois University at Carbondale  
Southern Illinois University - GEOL 454: Field Camp

Callia Cortese, Appalachian State University  
Appalachian State University - Geology Field Course in Montana

Theresa Duncan, California State University Fullerton  
Western Michigan University - Hydrogeology Field Camp

Virginia Ferry, Idaho State University, AWG Crawford Scholarship Recipient  
Idaho State University - Geology Field Camp

Emma Fuentes, Angelo State University, AWG Crawford Scholarship Recipient  
18th Annual International Geology Field Camp on the North Anatolian Fault

Jasmine Gomez Peach, San Diego State University  
18th Annual International Geology Field Camp on the North Anatolian Fault

Karlie Hadden, Colorado Mesa University  
Colorado Mesa University - GEOL 480: Summer Field Camp

Brianna Hibner, Appalachian State University  
Appalachian State Field Camp

Anastasia Ivanova, SUNY Potsdam  
Indiana University Geologic Field Station

Emma McElmeel, Northern Illinois University  
Northern Illinois University - GEOL 478: Geologic Field Work

Isabella Metts, Appalachian State University  
Appalachian State University - Geology Field Course in Montana

Carolina Olivera Donoso, Utah Valley University  
Utah Valley University - GEO 4600: Field Experience

Emma Palko, Miami University  
Miami University Field Camp

Jessica Patrick, Miami University  
Miami University Field Camp

Carissa Root, University of Pittsburgh  
Southern Utah University Field Geology Course

Emily Sonnenberg, University of Florida  
University of Florida - GLY 4790: Geology Summer Field Camp

Michael Keedy, University of Maine at Orono  
Juneau Icefield Research Program

Francesca Burkett, Southern Illinois University  
Southern Illinois University - GEOL 454: Field Camp

Calvin Block, Wheaton College  
Wheaton College - GEOL 345: Sedimentary Geology, GEOL 412: Field Geology

Amber Warden, San Diego State University  
SDSMT Field Study: Black Hills - SD, WY (Session Two)





## **ANNUAL REPORT 2021: NAGT/USGS COOPERATIVE SUMMER FIELD TRAINING PROGRAM**

The 2021 Field Season for the NAGT/USGS Cooperative Summer Field Training Program marked the 55<sup>th</sup> year of what is now one of the longest running science internship programs in the nation. More than 2,500 students have participated in this program since it was first conceived in 1965 by William “Bill” Pecora, then the newly appointed Director of the US Geological Survey. Many of these students have gone on to become well-known leaders, influential professors and outstanding contributors to the knowledge base of geoscience. (More information about the history, operation of this program, and this year’s interns can be found on our website: [www.usgs.gov/undergradintern](http://www.usgs.gov/undergradintern) (direct link to the brochure [here](#)).)

This year, 24 students were nominated by field camp directors, and 14 of those students completed an application for the program (in addition to 4 students who were nominated the previous year re-applying due to COVID complications). After receiving 35 geology-based proposals from USGS scientists and after the proposal review panel met and matched students to projects, a total of 15 students were placed with USGS science projects. Since bringing new life back into this historic program over a decade ago, we have now gone from 8 placements in 2002, to numbers that are consistent with the historical average for this program.

Summary of information and tasks completed in 2021:

- Letters went out from NAGT to field camp directors seeking nominations of qualified students in September.

The program maintained a restriction on the number of nominees from each field camp as follows:

- One student if the camp enrollment is 20 students or less
- Up to 2 students if the camp enrollment is 21-40 students
- Up to 3 students if the camp enrollment is 41-60 students
- Up to 4 students if the camp enrollment is greater than 60 students

In order to keep the program manageable we monitor the number of allowable field camp nominees on an annual basis. For the past several years, we have continued the practice of requesting that Field Camp Directors include a brief description of the attributes of the particular nominees selected. This greatly helps the USGS Placement Panel in their efforts to place a student with a project best suited to their abilities while also helping USGS mentor scientists in preparing to conduct their interviews with students.

- In October, letters were sent to all 24 nominees from both NAGT and USGS congratulating them on their nomination and instructing them on how to apply. The application is through USAJOBS. Of those, 14 students (58% of nominees) completed the application by the December 18 deadline.
- The USGS solicited internal proposals from scientists wishing to host an NAGT intern in the fall. A total of 35 proposals were received, and ultimately 15 were matched with interns (some projects hosted more than one intern). The USGS has a broad scientific mission that includes areas beyond traditional field geology like hydrogeology, ecology, and climate change. It continues to be a challenge to educate students about the value of doing an internship in a field they had not previously considered.
- The USGS maintains a running geology field camp list which was started to provide as a service six years ago (found at [www.usgs.gov/geosciencefieldcamps](http://www.usgs.gov/geosciencefieldcamps)), where the YES office and NAGT have cross checked and identified 128 active field camps. This year turned out to be very unusual because the COVID-19 pandemic caused all of last year’s field camps to close, though some were able to go virtual. The nominees the USGS received all came from either virtual camps, or were students still eligible to apply from the previous year. The field camp list for the upcoming year was updated as usual in the spring.
- Program evaluations are sent to both scientists and interns toward the end of the summer field season. USGS sends evaluations to the scientists and NAGT sends evaluations to interns. These evaluations, copies of information referenced in the bulleted items above, and detailed, multi-year comparative

program information, are usually provided in the full packets to those attending our Annual Joint NAGT/USGS Internship Meeting. Evaluation results are summarized (anonymously) and will be provided at the meeting via either printed copies or electronically, depending on whether the 2021 meeting can be held in person.

- The USGS, Youth and Education in Science Office provides cost-shared support for these intern's salaries by way of funding transfer to the science center where they will be working. This year, the YES office provided over \$4k for each project that was approved for cost-shared support. The collective support for this program is in excess of \$400,000.
- The YES office has continued the use of a new hiring authority, started in 2019, allowing us to keep these interns on board for up to 4 years (rather than the previous limit of 5 months) if the project has the need for extended assistance and the funds to support the intern for an additional amount of time. Many scientists have indicated that this is of great benefit to them, as we already know of several who wish to extend their intern's employment and plan to do so, as long as there are no conflicts with their graduate school or other plans. Many of these interns welcome the opportunity to stay with USGS longer as well, especially in times of uncertainty due to government hiring freezes and the often difficult process of obtaining a permanent federal position.
- The Federal Recent Graduates hiring program provides a much sought-after opportunity for NAGT/USGS interns to continue employment for up to three years, as long as the USGS is not under a hiring freeze, with the intent of permanent hire (if funding is available).
- The USGS continues its recently expanded partnerships with the Ecological Society of America, and the GIS Certification Institute. These new partner organizations have nominated additional exceptional students in other areas of expertise that are needed by our USGS scientists, particularly those with projects based in ecology, biology, and GIS. These partnerships have been a positive addition, as they have not only allowed the YES office to increase the number of students placed in internships using this exceptional hiring authority, but they have also served as a tool to garner additional interest in the program bureau-wide with additional geology-focused projects.
- In 2021, the lingering effects from the COVID-19 pandemic caused many of this year's internships to be virtual, as they were last year, though some were able to join in-person at least part time in the field or lab. The YES office worked extensively with HR staff, Administrative Officers, hiring scientists, and the incoming interns themselves to maximize opportunities where possible and find flexibilities in the work environment in order for these internships to continue, including utilizing the (until last year) unprecedented option to work virtually where possible.
- The YES office partnered with the USGS Early Career Scientist Network to host a series of virtual weekly Professional Development Webinars. Each week, a guest speaker or panel is invited to speak and have an open discussion with interns about various topics of importance to them, such as science communication, scientific integrity, publishing, networking, safe and inclusive workspaces, applying to graduate school, and more. These virtual sessions are meant to serve as a way to bring together all interns and early career scientists across USGS, especially during a time when they might be working remotely and have limited opportunities for collaboration with their fellow colleagues. These webinars have received an excellent attendance rate from interns and positive feedback from mentors and interns alike.

29 July 2021

Eleanour Snow /s/  
Youth and Education in Science Manager  
U.S. Geological Survey

Laura Corey /s/  
Education Program Analyst  
U.S. Geological Survey

Dr. Kurtis Burmeister /s/  
Executive Secretary, NAGT-USGS Cooperative Field Training Program  
California State University, Sacramento



# NGSS-ESS Implementation Working Group

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## NGSS-ESS Working Group 2020-2021 Annual Report

### Executive Summary:

Beginning in 2015 the American Geosciences Institute's Center for Geoscience and Society, the National Association of Geoscience Teachers, and the National Earth Science Teachers' Association collaborated on a working group focused on providing:

- A webinar series of 7-9 webinars per year
- Conference presentations
- Facilitating discussions, communication with, and seeking feedback from an Advisory Panel
- Teacher professional development workshops
- Developing additional programming to serve the NGSS-ESS community, such as GSA and AGU

### NGSS-ESS Working Group core team:

Aida Awad, NAGT

Ed Robeck, AGI

Missy Holzer, NESTA

### 2020-2021 Webinar Series

The webinar series is designed to touch on a variety of topics of interest to educators implementing the NGSS-ESS. Broadly, the webinars fall into four categories: classroom teaching resources, teacher preparation and support, learning about the NGSS (e.g., NGSS basics), and extending NGSS-ESS (e.g., through curricular integration). The webinars provide opportunities for learning, sharing, and discussion, but more broadly they serve as a concrete demonstration of the long-term value given to K-12 education by members of the geoscience and geoscience education communities.

The 2020-21 webinar series included the following webinars:

September 9, 2021 - [Welcome Back! Making science education meaningful through designing authentic ESS learning to reach all students](#)

May 13, 2021 - [Geoheritage Elements to Enrich ESS Teaching](#)

April 9, 2021 - [Social Media, from the chat room to the classroom](#)

March 11, 2021 - [Inspiring ALL Geoscience Learners Nationwide with PBS](#)

February 13, 2021 - [Soil Biology, Chemistry, and Physics... Oh My!](#)

November 12, 2020 - [Using an American Museum of Natural History Teaching Case to Analyze and Interpret Patterns of Ice Mass Loss in Greenland and Antarctica](#)

October 10, 2020 - [Passing the Sniff Test: What Matters Most When Looking at Earth and Space Science Instructional Materials](#)

### **2021-2022 Webinar series - year 7 continues:**

The 2021-22 webinar series kicked off September 9, 2021 with “Welcome back! Making science education meaningful through designing authentic learning to reach all students,” a webinar presented by representatives from 2 organizations: WestEd and NGSS Phenomena. It will be followed by webinars in October, November, January, February, March, April, and May (fall webinar topics and presenters are confirmed, some spring topics TBA).

October 21, 2020 - ESRI - title TBA

November 12, 2020 - NAP - Report and action items from the NGSS-ESS community from the NAP - Taking Stock of Science Standards Implementation: A Summit

January, 2022 - UCG, Understanding Global Change - UC Berkeley and HHMI

February, March, April and May 2022 TBA

### **GSA NGSS-ESS Working Group Workshop**

Collecting Field-Based Assets: Honoring Leave No Trace Principles While Preparing Instructional Resources - On Tuesday, October 5, 7-8:30 p.m. ET prior to the GSA field trips and other excursions, the NGSS-ESS Working Group is offering a 90 minute workshop and discussion session for anyone interested in geoscience education, including those who participated in a field trip as part of the GSA meeting, addressing ways that educators can collect instructional assets in the field while maintaining ethical field travel principles (e.g., such as the “Leave No Trace” principles used in the National Parks). An optional second session will be held on Sunday, October 10, at 4 p.m. ET (1 p.m. PT), which will be an open workshop session in which participants will have support in assembling assets into their own custom-designed instructional resources.

### **AGU GIFT Workshop**

The AGU GIFT (Geophysical Information For Teachers) workshop has been a project with collaboration between NESTA and AGU for several years. Following a successful transition to the NGSS-ESS Working Group, the GIFT Workshop continues in 2021 at the AGU Fall Meeting with a virtual workshop. We are still in the early stages of planning and recruiting presenters, and on a short timeline. The format for the half-day virtual workshop will be announced soon, but it is likely to include share-a-thon type presentations, and a longer deep dive workshop and a discussion segment. A call for presentations will be issued soon.

### **Needs Assessment**

Needs assessment surveys of the NGSS-ESS community provide valuable guidance as we consider programming for the upcoming year(s). The most recent needs assessment was conducted in 2018. During the summer of 2021 we developed a new [needs assessment](#) which was distributed widely through the NGSS-ESS Working Group listserv, the Earth Science Week listserv and NESTA’s network.

The results from this survey will inform our programming in the near future. At the time this report was written the survey was still open. Results will be reported once they are available.

**For those not familiar with the programming since 2015 please visit:**

[NGSS-ESS Working Group Programming History](#)

Please feel free to reach out to me if you'd like more information or have thoughts/suggestions:

Aida Awad

[aawad@tothecloudedu.com](mailto:aawad@tothecloudedu.com)

## NAGT webinar series planning committee 2020-2021 report

### **Executive Summary**

The NAGT webinar series planning committee designed and implemented an annual webinar series that serves the community needs and finds appropriate speakers to fill the webinar schedule. The webinars showcased the following NAGT sponsored projects, programs, and divisions: NGSS, GETSI, NAGT Advocacy, TWP, GER, EDDIE, and TTE. During 2020-2021, the NAGT webinar series delivered 25 webinars. The webinar planning committee had two meetings during the 2020-2021 academic year. The meetings focused on developing potential webinars from NAGT sponsored projects, programs, and divisions, formulating a list of themes the webinars should cover, developing a protocol to nominate and select new members, and populating the webinar schedule for the weekly webinar series. The committee helped refined guidance for scheduling, developing, and implementing interactive webinars. During 2020-2021 academic year we ran multiple webinars on strategies and resources for teaching geoscience online, as well as online approaches to internship programs and developing a sense of place. Through the webinar series, NAGT strengthened its partnership with CUAHSI (water education) and with the NASA earth education. Additional webinars addressed access and accommodations, inclusive teaching practices, online data resources (e.g. shakealert), EDDIE webinars on environmental datasets, and TTE overviews. For the 2021-2022 academic year, we have delivered three webinars and have six more scheduled. We will begin scheduling webinars for the spring semester in November.

### **Committee**

*Rory McFadden (chair, Gustavus Adolphus College), Aida Awad (AIU), Adrienne Leinbach (Wake Technical Community College), Cailin Orr (SERC), Beth Pratt-Sitaula (UNAVCO), Stefany Sit (University of Illinois at Chicago), Margie Turrin (Columbia University), and Sean Tvelia (Suffolk County Community College). The committee was supported by Bradlee Cotton and Mitchell Bender-Awalt*

*Sean Tvelia and Stefany Sit are leaving the committee for 2021-2022. We have elected two new members to serve a three-year term: Karen Layou (Reynolds Community College) and Emily Scribner (Clemson University)*

Throughout the 2020-2021 academic year, there were over 4500 registrants and over 1400 attendees. For the year, we had 50% more registrants and 40% more attendees than 2019-2020. On average, webinars had 179 registrants and 57 attendees. This represents a 32% increase in attendance and a 47% increase in number of registrants and a 21% increase in average number of attendees.

The webinar series evaluation had a 21% response rate, with 298 respondents completing end of workshop evaluations. These respondents reported an average satisfaction of 9.11 (scale 1-10), 3.67 (scale 1-4) for participant exchange during the webinar, 3.85 (scale 1-4) for webinar technology, and 3.90 (scale 1-4) webinar facilitation.

[2020-2021 webinar archive with titles and presenters](#) (table on next page)

Name and contact of next year's report: Rory McFadden (rmcfadde@gustavus.edu)

### NAGT Webinar Series 2020-2021

Date	Title	Registrants	Attendees
7/23/20	Teaching Online Introductory Geoscience Labs	325	165
8/19/20	Navigating the TTE Portal	107	30
8/27/20	Science Communication for Social Justice	216	120
9/10/20	NGSS-ESS Mini-series: Remote Teaching and Learning Resources, Part 1	189	49
9/17/20	Teaching undergrads about floods: frequency, modeling, and mitigation	820	158
10/7/20	Navigating life as a GER student: Getting involved and networking in the community	49	9
10/15/20	NGSS-ESS Mini-series: MORE! Remote Teaching and Learning Resources, part 2	138	36
10/21/20	Running online internship programs: successes and challenges	119	50
11/5/20	CUAHSI Services for the Water-Education community	71	19
11/12/20	Passing the sniff test: What matters most when looking at earth and space science instructional materials	189	56
11/17/20	Developing a sense of place during distance learning	260	94
12/1/20	Building inclusive STEM communities through partnerships with students: The Becoming Human in STEM (HSTEM) initiative	131	56
1/14/21	Using an American Museum of Natural History Teaching Case to Analyze and Interpret Patterns of Ice Mass Loss in Greenland and Antarctica	174	37
1/28/21	Creating compelling and effective teaching activities for Teach the Earth	148	42
2/4/21	The NAGT Draft position statement of climate change learning	58	20
2/11/21	Soil biology, chemistry, and physics, oh my!	158	73
2/23/21	Getting started with NASA data: Mapping hazards from space	234	93
3/3/21	Improving statistical skills through storytelling	120	*
3/11/21	Inspiring ALL geoscience learners nationwide with PBS	143	44
3/30/21	Graduate student onboarding courses: Exposing the hidden curriculum to help your students succeed	114	44
3/31/21	Shakealert: Educational resources for teaching about earthquakes and early warning in the US	200	56
4/8/21	Social media, from the chat room to the classroom	96	39
4/20/21	Geocode: Using GPS data to visualize plate movement and assess earthquake risk	208	47
4/28/21	Inclusion through STEM Experiences: Approaches to Increase Access and Accommodations	178	64
5/13/21	Geoheritage elements to enrich ESS teaching	104	39
	Total	4549	1440
	Average	179	57
	Median	148	48

## **Report from the 2021 NAGT Nominations Committee**

Participating committee members: Karen Viskupic (chair), David McConnell, Anne Egger, Randy Richardson

Overview of process: The committee solicited for open positions through announcements in NAGT newsletters and through emails to members of the Executive Committee. Nominations were made through the nominations form on the "[Get Involved in NAGT Leadership](#)" page.

The committee met on March 18 to discuss nomination materials (CVs and nomination letters).

The committee agreed on the nominations for all open positions, and a member of the committee communicated with each candidate to confirm that they were willing to be nominated.

Nominations: The committee put forward the following candidates for open positions

**Reginald Archer**, Tennessee State University; 2nd Vice President

**Mike Philips**, Illinois Valley Community College; Secretary/Treasurer

**Alex Manda**, East Carolina University; Councilor at Large

**Dana Thomas**, University of Texas at Austin; Councilor at Large



## Diversity, Equity, and Inclusion Committee Annual report Fall 2021

Tasks of NAGT Diversity, Equity, and Inclusion Committee (from Report to ExComm from Ad Hoc

Diversity Committee members: Aisha Morris, Don Haas, Susan Sullivan, Wendi Williams

November 1, 2018)

- In coordination with the Executive Committee and the strategic plan, **establish metrics** for and assess progress towards diversity goals in an annual report.
- Recommend activities to **promote and increase membership of groups that are currently underrepresented in NAGT** to the Executive Committee, and work with the Executive Director to implement approved activities
- Recommend activities to **increase and support participation of underrepresented groups in NAGT programming**
- Recommend strategies to **broaden nominations** for awards, committee positions, and leadership opportunities and work with committee chairs and Executive Office to implement them
- **Provide expertise on inclusive practices** to the organization as needed

### The Committee:

- Laura Rademacher (Chair) ('20-'22) - Chair
- Leah Courtland ('20-'21) – Vice Chair
- Amy Weislogel (Secretary) ('20-'23) - Secretary
- Steve Mattox ('20-'22)
- Mimi Fuhrman ('20-'21)
- Danielle Sumy ('20-'21)
- Yadira Ibarra (20-'22)
- Samuel Cornelius Nyarko ('20 – '23) – selected as 8<sup>th</sup> member, grad student, now Dr. Nyarko

The committee has been meeting almost fortnightly since May 19, 2020.

## NAGT Member Survey Input

Based on recommendations from the DEI Committee, Anne Egger and Sean Fox revised/updated the NAGT questions about demographics in the membership profile to reflect best practices and the information that will be most useful to us to setting and achieving diversity goals. You can find the questions by clicking on Member Login on the [Membership](#) page, and then selecting "Profile" in the left navigation.

Background:

- NAGT didn't manage its own membership information until 2013, so this is the earliest data we can access

- Most members that joined pre-2013 have not entered demographic information; since 2013 people who have joined are providing demographic information

#### **Future survey goals:**

- find out who our membership is
- find out what they want
- do they think DEI initiatives are a good goal
- will they be willing to participate
- Find out who is not a member of NAGT and why

#### **Membership demographics/ goal of diversifying NAGT**

- Existing data on NAGT membership is from 2007. 20-25% of people choose not to respond to the demographic questions.
- Need better data to move forward on other goals.

## **Outreach to Other Organizations**

2021 NABG meeting: “exhibit”, Danielle presented for 3-minutes and then Yadi had an open session for one hour. ... Student attendance was low this year. Seems there were other conflicting events - Black in Geoscience Week. We wonder if this is the right event to connect but we’d like to try in a non-COVID year. This is a great way to reach grad students and early career.

We are thinking of adding the SACNAS conference in 2022.

## **EER 21 - we completed a 3-day workshop.**

Three-day workshop titled: Developing Inclusive Teaching Practices

**Leaders:** Blair Schneider (U Kansas), Angel Garcia (James Madison) and Amy Weislogel, Yadira Ibarra and Mimi Fuhrman of the NAGT DEI committee.

**Description:** We facilitated a three-day workshop in which day one was an overview, introduction, and reflection on participants’ own practices in context of identity, intersectionality, implicit bias and impacts with respect to instructional design, course mechanics and assessment. Day two included discussion of scenarios where identity and experiences around identity impacts student learning, inclusive language in assignments and directions, inclusive practices in field instruction, recognizing and removing barriers to course content, and strategies for including multiple perspectives and cultural influences in student assignments. On Day three, participants worked in groups to develop a place-rooted, culturally-relevant lesson. The lesson included learning goals, contextual information, and 3 of the place-based essentials of Semken (2005). Participants shared a poster that outlined their lesson with the rest of the workshop.

After participating in this workshop, participants were able to:

- Define intersectionality and evaluate the different types of identity that exist in our society.
- Define and identify how unconscious biases impact our teaching and our students.

- Summarize and compare strategies to prevent negative impacts of unconscious biases in their course.
- Construct a sustainable action plan, based on strategies that can be implemented in the short-term.
- Develop strategies for searching and organizing culturally-relevant information that can be introduced in the developing of some geoscientific ideas (ex. place-based education).
- Introduce strategies to start collaboration efforts with communities in the co-creation of knowledge.
- Summarize ethical principles in sharing culturally-relevant knowledge.

Results:

- The workshop was full with about 50 registrants.
- Participants compiled resource lists that are archived in the EER 2021 workspace
- Participants developed and shared culturally-relevant lessons, compiled resources on inclusive practices around course design, student interaction in the classroom, online and in the field, and assessment/grading.

## **EER 21 - We hosted the discussion: Featured Diversity Stories**

### **NAGT DEI Hosted Blog Page - Diversity Stories**

- Danielle Sumy wrote a blog on the need for non-traditional paths in geology and her experiences as a ship-board scientist
- Samuel Cornelius Nyarko, Ph.D. and Munira Raji, Ph.D. wrote a blog on Highlighting “The GEOSness” of Black Scientists: A Week to Remember
  - Laura’s blog - working
  - Invitation to other’s to blog
  - Blog page provides space for comments and feedback

[https://nagt.org/nagt/dei/diversity\\_stories.html](https://nagt.org/nagt/dei/diversity_stories.html)

## **Webinar**

Recent and Ongoing Efforts of the NAGT Diversity, Equity, and Inclusion Committee

Wednesday, May 19, 2021

[https://nagt.org/nagt/profdev/webinars/nagt\\_dei/index.html](https://nagt.org/nagt/profdev/webinars/nagt_dei/index.html)

## **DEI Resources/Website**

- Created and began to populate a SERC DEI website with resources on recent peer reviewed academic publications, useful news articles, and identity-based organizations.
- We have reviewed the lengthy document (11 pages and 7 sections) and will seek NAGT webmaster help to make it a useful, easy to use document.

## **Awards- Excellence in JEDI Award**

First ever, we received several excellent nominations and some will carry over to 2022.

**2021 Awardee - Dr. Raquel Bryant, Texas A&M University, College Station, TX**

<https://nagt.org/nagt/awards/JEDI.html>

## **Other**

Provided feedback on Anne as needed.

Committee member on EER Organizing Committee

Committee member on AGU Interdisciplinary DEI Committee

**To do:** Connecting to the regional sections & their DEI committees/activities (Spring GSA to promote DEI sessions/activities)

Need for nominations.

Need for nominations for committee members

Book club idea - Unworthy Republic as a suggestion?

**NAGT Advocacy Committee**  
**Annual Report**  
**September 1, 2020—August 31, 2021**

The NAGT Advocacy Committee promotes (geo)scientific literacy, advocates for all levels of geoscience education, and encourages the use of geoscience information in public decision-making. The Advocacy Committee provides expertise to NAGT and works with affiliated organizations on matters of public policy and advocacy. The Advocacy Committee's Guiding Principles are to

- Serve the organization's mission
- Maximize the impact of NAGT work on behalf of members and all geoscience educators
- Support initiatives that reflect our mission by local, state, national, and international entities, including professional organizations, non-profits, and government institutions
- Recommend development of position statements or white papers, either as stand-alone NAGT documents or co-authored documents with partner organizations; or recommend endorsements of statements authored wholly by other organizations.
- Author, co-author, or sign letters of support for initiatives (e.g. legislation, public comments, non-profit programs).
- Respond to requests from other organizations, and from NAGT sections and divisions.
- Monitor emergent issues at federal, regional, and state levels

Committee membership is on three-year cycles, and currently consists of the following:

- Catherine Riihimaki, (chair) (Councilor-at-Large, *ex officio*) ('19-'22)
- Don Haas, *at-large* ('18-'23)
- Margaret Crowder, *at-large* ('19-'22)
- Frank Granshaw, *at-large* ('19-'22)
- Tamara Ledley, *at-large* ('18-'23)
- Suzanne Metlay, *at-large* ('18-'21)
- Euan Mitchell, *at-large* ('18-'21)
- David Szymanski , AGI Critical Issues rep ('18-'21)
- Wendi J. W. Williams, *at-large* ('18-'23)
- Janie Johnston ('20-'23)
- Joel Singley ('20-'23)

The committee meets bi-monthly on the fourth Friday of that month. During reporting year 2020-2021, the committee met six times via Zoom. Each meeting had 6-10 members present. Individual members continue their own personal advocacy on issues like climate change education and geoscience outreach. Committee accomplishments for this year include:

- An NAGT webinar led by Don Haas on January 21, 2021, entitled “The NAGT Draft Position Statement on Climate Change Learning”
- Crafting the initial draft of NAGT’s response to an NSF request for information about STEM education
- Continuation of revising existing NAGT [position statements](#), starting with the statement on Climate Change and the statement on The Importance of Dual Credit and Concurrent Enrollment to the Geosciences
- Finalizing the statement on Climate Change, with expected approval by the NAGT Council in October 2021
- Drafting of three articles for the April 2021 issue and one article for the July 2021 issue of *In the Trenches*
- Advocating to the ExComm that NAGT should sign on to the ACE National Strategy Framework for the United States
- Conducting a round table at the Earth Educators’ Rendezvous to discuss the NAGT position statements
- Drafting a policy statement on the selection of NAGT event venues in the context of discriminatory laws that might affect participants
- Revising the procedure for NAGT to sign on to positions from other organizations

Mike Phillips will be the Committee Chair for next year, a position that he has previously held. Among other goals, the Committee will strive in 2021-2022 to:

- Revise the terms of Committee membership, with nine total members serving a rotation of three years each
- Finalize the revisions of additional position statements
- Support Committee member Frank Granshaw in his participation in COP26

## **NAGT Executive Office**

Annual Report

Submitted by Amy Collette, SERC Finance Director

The Executive Office supports the work of the Executive Director, the management of the organization, and the management and implementation of the NAGT programs and activities. In March 2021, Sandy Lynn-Proshok left SERC for another opportunity outside of Carleton. For two months, we were a small team working on keeping the organization moving forward. In June 2021, Allison Jones also left SERC for another opportunity outside of Carleton. The same month, we welcomed two new staff members: Ian Taylor (SERC Administrative and Financial Assistant) and Pa Yao Vue (SERC Administrative and Events Assistant). Both have taken on a substantial amount of the day-to-day work of the organization. Along with myself and Monica Bruckner, we continue to make up the core staff that supports the organization. We meet every two weeks with the Executive Director, Anne Egger, to update her on our work.

Our ongoing efforts for NAGT included support for the Executive Committee, Council, Committees, Divisions, and Sections in their work. We worked to support an update to the Climate Change Position Statement, workspace management, virtual meetings, and for the Executive Committee's annual "face-to-face" meeting (which was held virtually over two days in April due to COVID-19). We also supported committees in their volunteer work for the organization, particularly supporting the formation of the new Development committee. We successfully executed the 2021 elections and supported a membership survey. We also updated the membership demographic collection system and began work on a redesign of the NAGT front page.

In supporting NAGT's membership management, we saw a decrease in membership for 2021 (1611 members; a 6% decrease from 2020). This past year we worked on consistently providing Sections and Divisions monthly updates on their membership. We are hoping that receiving this type of regular communication will help everyone support increasing memberships in the organization.

The Executive Office continued to manage the finances of the organization. We worked with the Executive Director and Treasurer to budget and present the FY22 financials to the Executive Committee. We also monitored and reported on the financials for FY21, specifically adding a financial dashboard to the quarterly reporting. We also continued to support Division treasurers in their role, specifically meeting with the new treasurer for the TED Division. Upon recommendations from the Investment Committee and approval from the Executive Committee, we set up and transferred half of our endowment to a new Vanguard mutual fund. Additionally, we managed the 2019 tax return, including preparation of supporting documents, reports for the Executive Director and Executive Committee, and filing with governmental agencies. Finally, we renewed the general liability insurance and D&O insurance for the organization, processed 1099s and signed an engagement letter with Clifton Larson Allen for an audit of FY21.

The Executive Office also worked in coordination with the publishers and editors for the Journal of Geoscience Education (JGE) and In The Trenches (ITT). We continued to support JGE in the individual subscriptions to our members and ensured that mailing lists were sent to the publisher upon request. Over the course of the past year, we have processed 36 publication charge invoices, receiving payment on 56% of those billed. The Executive Office worked with the ITT copy-editor and printer on reviewing and proofreading issues, managing mailings to current NAGT members, and mailing back issues to new members. The Executive Office also managed providing an online version of each issue of ITT, with the first issue of 2021 being offered only online (no paper copy).

We represented NAGT virtually at GSA Connects, through multiple activities, including booth staffing, planning, and attending meetings for the Executive Committee, Council, Divisions, and the NAGT/USGS Field Study Cooperative program. In lieu of an awards luncheon, we created a GSA awards page that highlighted all the awardees and sponsored an education social with Remo. We would have presented these at

a face-to-face luncheon, but opted for a virtual option for the awards and meetings due to COVID. We did not participate in a virtual booth at AGU, but did sponsor a xxxx instead. For the first time, we helped set up a virtual booth at the UTEACH STEM Conference and also at the NABG annual conference. We wrote and sent the NAGT newsletter each month via email, solicited advertising to IIT, and managed NAGT's social media platforms.

We worked with member volunteers on a variety of initiatives. We continued support for students and faculty to find both virtual and field-based field camps, a continuation of last year's efforts. In addition, we facilitated creating a web resource that supports this year's AGI Earth Science Week theme "Water Today and for the Future." And finally, we supported the Diversity Committee's initiative to collect and feature a set of Diversity Stories from our members.

We continued to support the awards process. In February, 34 Field Camp scholarship applications were processed, and we awarded 20. Due to the ongoing pandemic, some field camps continued to delay or modify their camps but all awards given were accepted. We also supported 14 OEST winners (6 Section, 8 state; two of these winners were both Section and state awardees), notifying partner professional societies of the awardees, and preparing for the announcements through our website and publications. In addition to plaque ordering and soliciting citations, we began to solicit videos for the Christman, Shea, Miner, Excellence in JEDI (new this year) awards since we are unable to celebrate in person this year.

Our close collaboration with and support of the USGS/NAGT Field Study Cooperative program continued. Dr. Burmeister worked with office staff on updating the forms and surveys. We also continued to support their listserv that fosters community-building for Field Camp leaders.

We continued to support the professional development programming of the organization. With the ongoing pandemic, we worked with NAGT leadership on executing the Earth Educators' Rendezvous (EER) virtually. This year's conference featured support for K-12 participants, 5 Monday-Wednesday morning workshops, 6 Thursday-Friday morning workshops, 14 afternoon mini-workshops, 12 roundtable discussions, 2 plenary speakers, 43 oral presentations, 42 poster presentations, 18 share-a-thon presentations, and 9 teaching demos. We also saw the largest attendance at an EER to date (430, surpassing last year's attendance record of 384). Similarly, the workshop for Early Career Geoscience Faculty: Teaching, Research, and Managing Your Career was offered virtually again and supported a large audience, which included 56 participants and 11 leaders. We also supported 10 traveling workshops (one was international), 21 webinars, a virtual Review Camp, and the Heads & Chairs workshop at AGU.

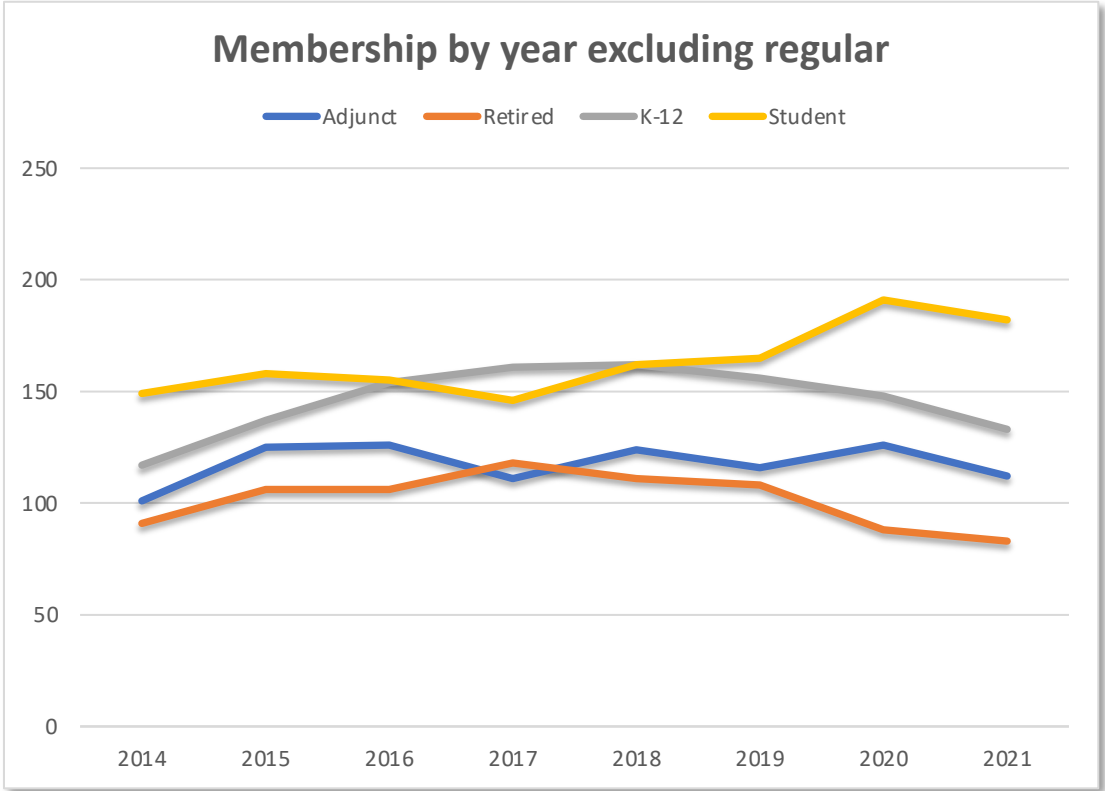
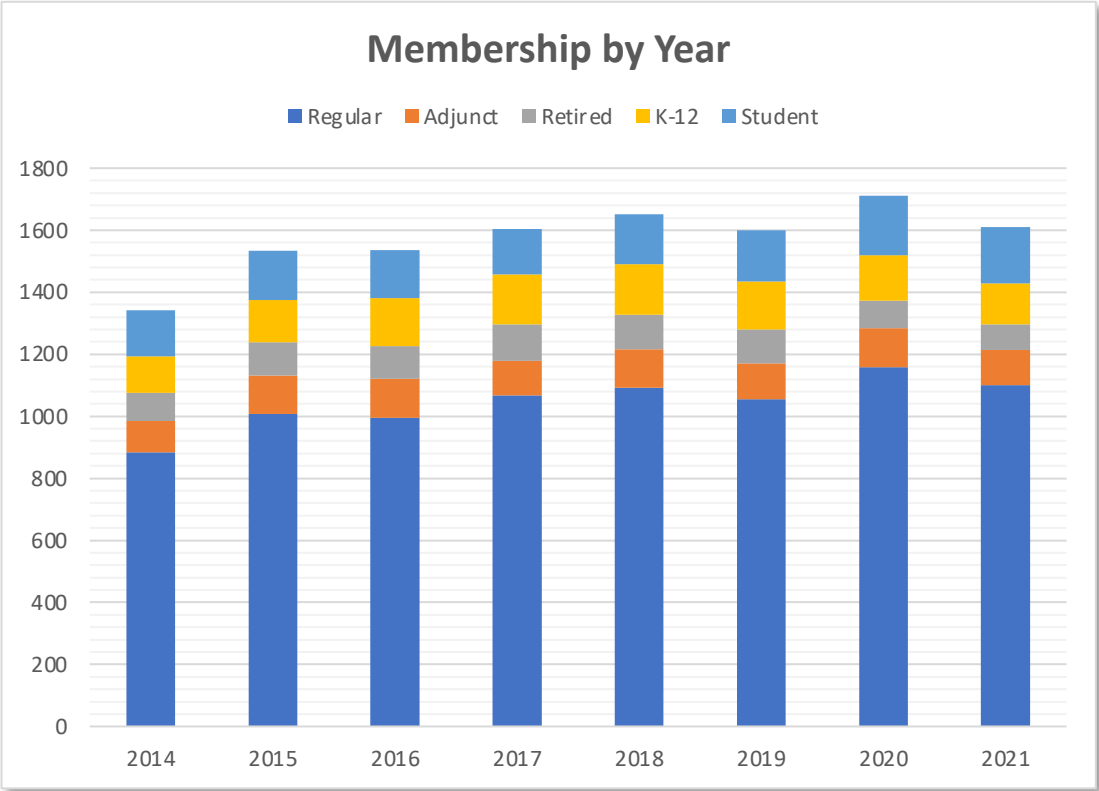


# NAGT Membership Report

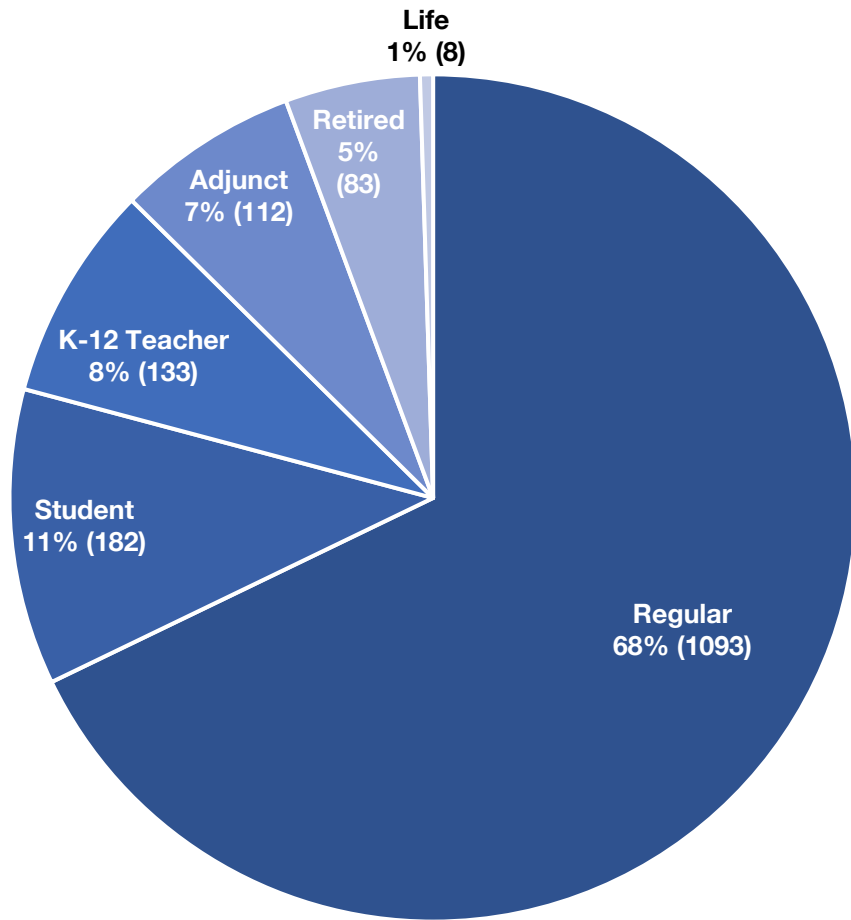
August 31, 2021

**Membership Highlights:**

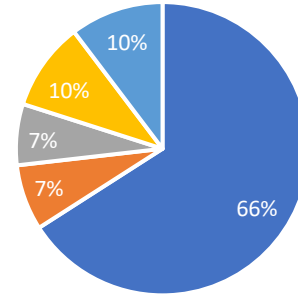
2021 Memberships = 1611; decrease of 6% from last year.  
 Auto-renew continues to increase and provide stability from 38% in 2020 to 40% in 2021.  
 Strongest section memberships are Eastern with 295 and Central with 268.  
 Division membership remained stable for the year.



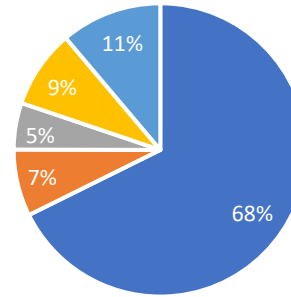
# Membership Type



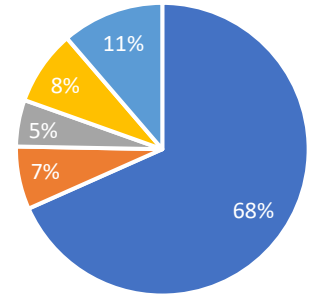
Membership Type (%) 2019



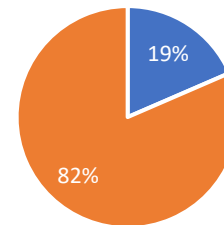
2020



2021

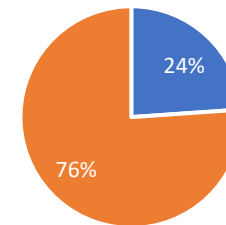


New vs. Renewing Members 2019



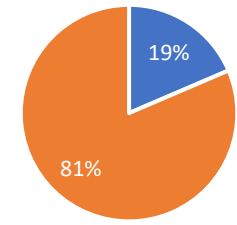
■ New ■ Renewing

2020



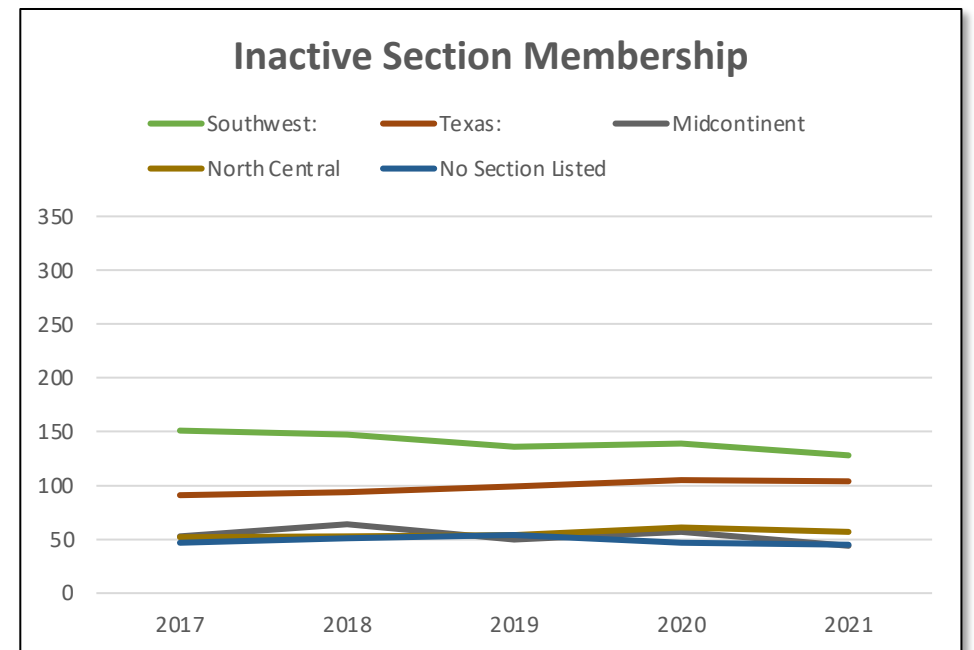
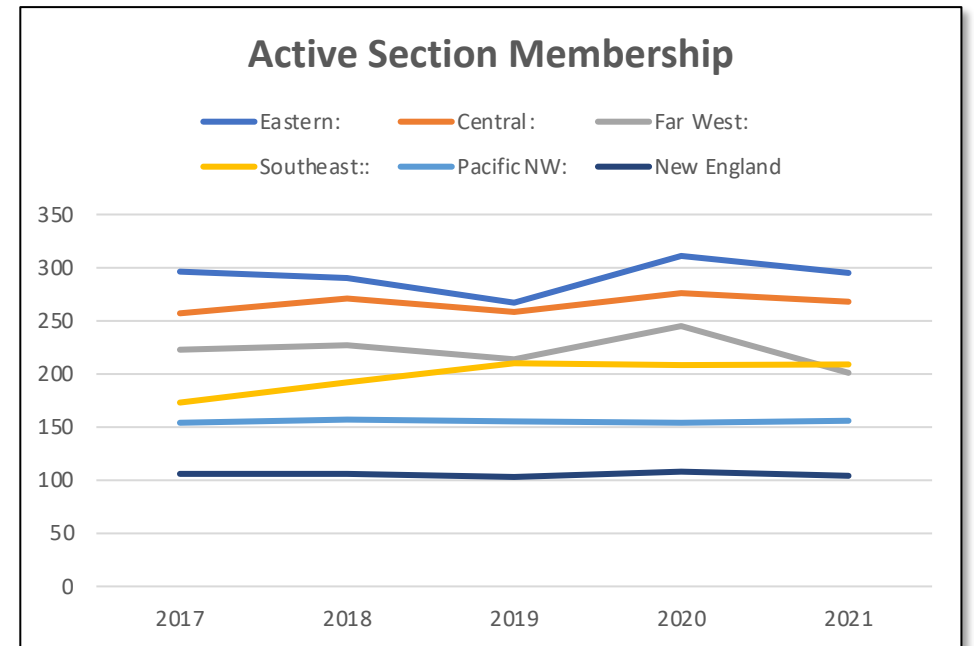
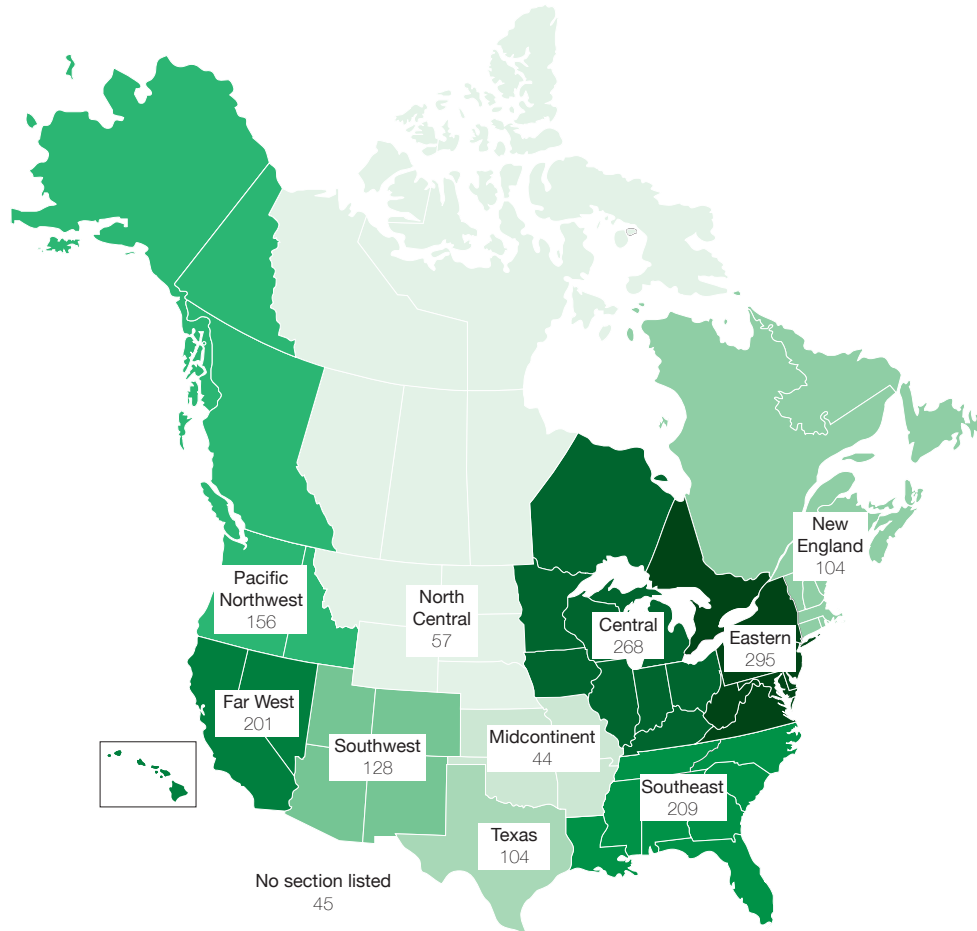
■ New ■ Renewing

2021

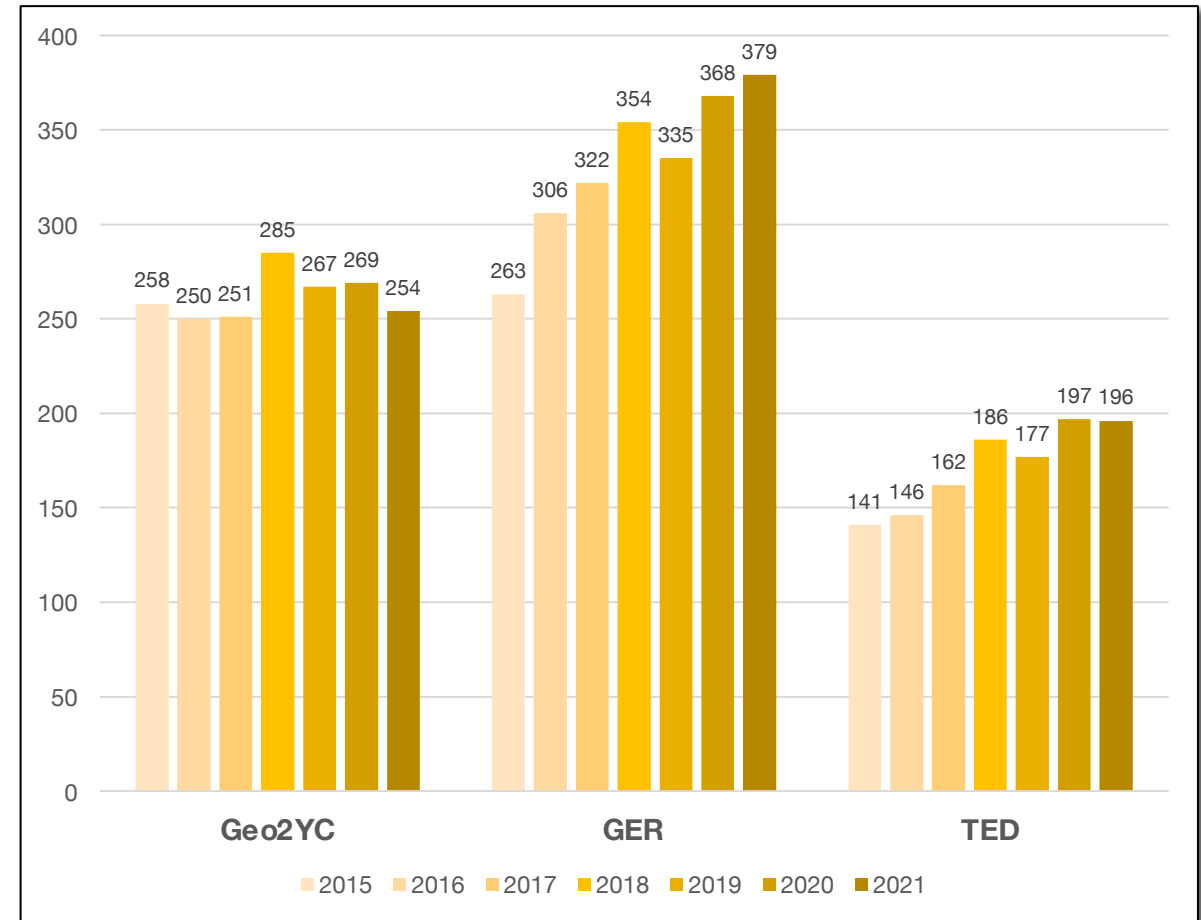
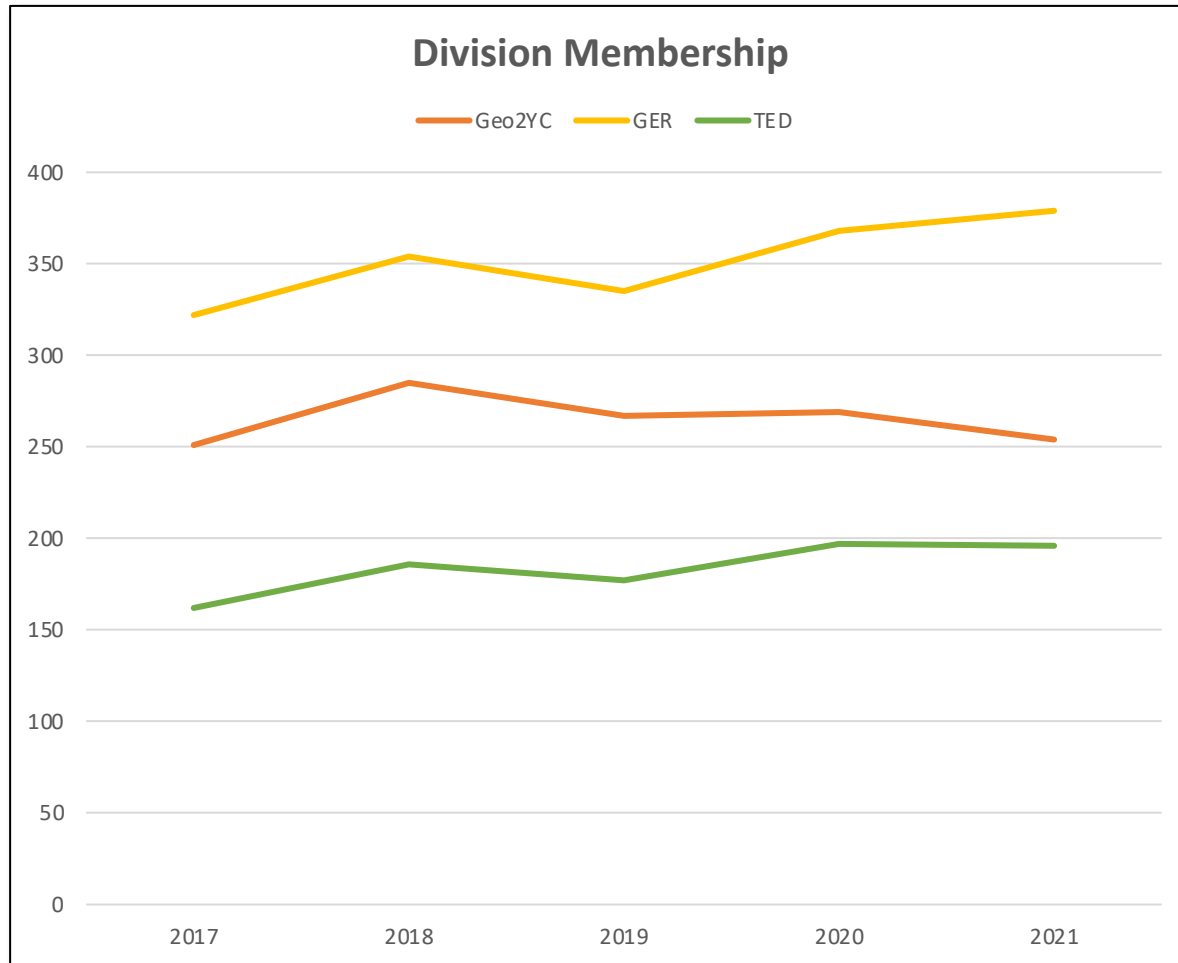


■ New ■ Renewing

# Sections



# Divisions



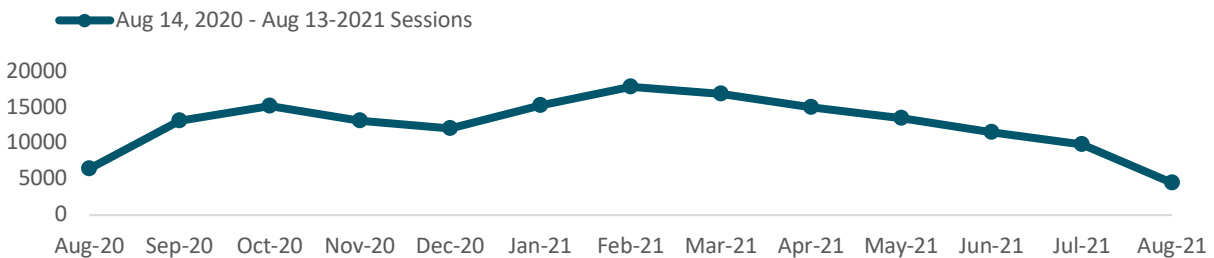
# NAGT Website Report

Ashley Carlson and Batmend Batsaikhan  
September 30, 2021

## OVERALL WEBSITE USE AND BEHAVIOR

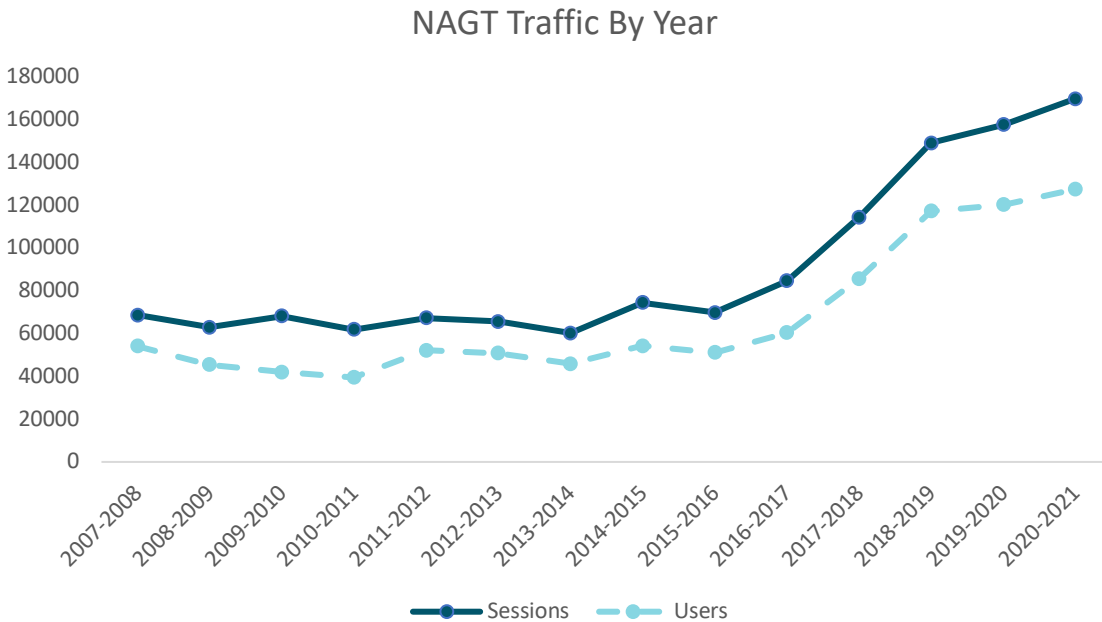
In the period between August 14, 2020 and August 13, 2021, the NAGT website use continued to grow in usage. Overall, through the COVID-19 Pandemic, site use increased over this period compared to the same period the previous year. The site received 4.53% more visits from 6.09% more users. The sessions through this period and the corresponding period last year are shown in Fig. 1. The overall behavior is fairly consistent with that of the previous year. There was a significant peak in sessions on February 1, 2021, resulting from an influx of bot traffic rather than human users. This is reflected in the most viewed page that day being [nagt.org/trafficbot.live](http://nagt.org/trafficbot.live).

Figure 1. The number of sessions per month for Aug 14, 2020-Aug 13, 2021.



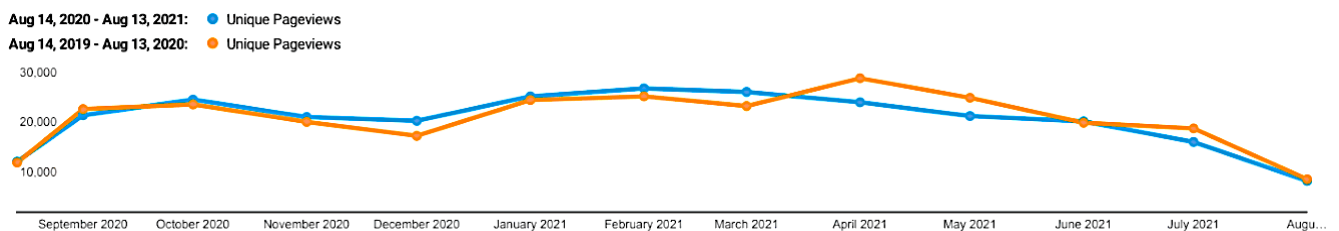
Between August 14, 2020 and August 13, 2021, the NAGT website received 164,917 visits (sessions) from 127,558 users of whom 9.9% were repeat visitors. This is an increase in both sessions and users from the corresponding period last year. The sessions and users per year are shown in Fig. 2, which shows that the annual users and sessions remained fairly consistent from 2007-2008 to 2015-2016. During the period between the years 2015-2016 and 2018-2019, the numbers of users and sessions approximately doubled.

Figure 2. The sessions and users per year (August-to-August) from 2007 to 2021.



Unique pageviews for Aug 14, 2020 to Aug 13, 2021 period were 241,662 versus 243,804 for the previous period, representing an 0.88% decrease. The most popular pages on the website for this period, as a percentage of unique pageviews, were Analysis Tools (6.5%), Index page (5.2%), and JGE (4.1%). The most popular webpages during Aug 14, 2019 to Aug 13, 2020, were also Analysis Tools (6.32%), Index page (5.51%), and JGE (3.83%). The unique pageviews per month are shown in Fig. 3. As shown in Fig. 3, the unique page views for this year (Aug 14, 2020 – Aug 13, 2021) have remained consistent with those of the previous year (Aug 14, 2019 – Aug 13, 2020).

Figure 3. The unique pageviews per month for Aug 14, 2019-Aug 13, 2020 and Aug 14, 2020-Aug 13, 2021.



## USER ENGAGEMENT

While no single measure of engagement exists, engagement can be characterized through various analytics proxies, including: 1) length of time on a page, 2) session length (time and number of pages), and 3) return use.

One interpretation of session information is related to “satisficing behavior,” where users quickly find the material that they need (NNGroup, 2019). The concept has proved important to

website design, as research has shown that most visitors decide to stay or leave within the first 10 seconds on a webpage (NNGroup, 2019b).

Table 1 shows the number of users, pages per session and average duration of session for sessions that are less than or equal to 10 seconds, greater than 30 seconds, and greater than or equal to 3 minutes across a three-month period. Google analytics limits this view to three months, so the numbers presented in Table 1 are averages across three-month periods during Aug 14, 2020-Aug, 13 2021. The table also shows the number of pages viewed per session and the average length of session for each category. The users who chose to stay over 10 seconds viewed approximately 3.5 pages with their session lasting 5.04 minutes on average. Those staying longer than 3 minutes view approximately the same number of pages (3.9) with a session of 7.12 minutes.

**Table 1. Users, number of pages viewed, and average session length for sessions less than or equal to 10s, greater than 10s, and greater or equal to 3 minutes across a three-month period<sup>1</sup>**

	Users (Average)	Pages per Session (Average)	Avg Session Duration (Average) [Min]
Less than or equal to 10-second session	24,962 (15%)	1.1	<0.02
Over 30-second session	8,295 (7%)	3.5	5.04
Over 3-minute session	3,225 (3%)	3.9	7.12

There are further considerations for the less than or equal to 10-second sessions. This category counts individuals who accidentally clicked on an NAGT page and immediately clicked away and bots. There were approximately 2,040 known bot users, decreasing the “less than or equal to 10-second session” category to 24,922 users. Unfortunately, the pages per session and average session duration without these bot users are not as easily calculable.

## SECTION AND DIVISION WEBSITE USAGE (FOR THOSE HOSTED AT SERC)

Traffic to Section Websites hosted by SERC, overall, decreased by 24%. North Central was the only section showing an increase in unique pageviews (+4%). Table 1 shows the values for each year and the percent increase for each section. Diverging from past patterns, the Central Section page has been exceeded by the Northwest page.

**Table 2. The August-to-August unique pageviews by year and percent change for each section.**

Section	2019-2020 Unique Pageviews	2020-2021 Unique Pageviews	Percent Change in Unique Pageviews [%]
Central	798	382	-52
Northwest	488	349	-28

<sup>1</sup> These numbers are averages calculated from the numbers from the period of Aug 2020 – Aug 2021 divided into three-month periods.

Section	2019-2020 Unique Pageviews	2020-2021 Unique Pageviews	Percent Change in Unique Pageviews [%]
New England	414	227	-45
North Central	166	168	+1

Traffic to Division Websites increased by 14.5% from the previous year. The GER Division had more unique pageviews with a 17% increase from 625 to 731. The Geo2YC Division showed a 6.8% decrease from 443 to 413 unique pageviews. The TED Division increased by 39.3% from 318 to 443.

**Table 3. The August-to-August unique pageviews by year and percent change for each division.**

Division	2019-2020 Unique Pageviews	2020-2021 Unique Pageviews	Percent Change in Unique Pageviews [%]
GER Division	625	731	+17
Geo2YC Division	443	413	-6.8
TED Division	318	443	+39.3

## NEW NAGT CONTENT

The new NAGT content included continuations of previous efforts to support faculty and students in finding field camps, sharing stories in diversity, and a feature for Earth Science Week

These efforts along with unique pageviews are as follows. Pageviews are included to indicate use and as most of the content is not housed on the NAGT website, the pageview counts are not included in the data presented earlier in this report.

### Field Camps

[https://nagt.org/nagt/teaching\\_resources/field/summer\\_2021\\_virtual\\_field\\_camp.html](https://nagt.org/nagt/teaching_resources/field/summer_2021_virtual_field_camp.html)

In continuing the efforts from Summer 2020 to support faculty and students find options for Summer 2021 offers open to all students, NAGT created this page as a compilation of programs open for enrollment. During the August 14, 2020 to August 13, 2021, this page received 3,019, which is consistent with the previous year's page.

### Earth Science Week

[https://nagt.org/nagt/teaching\\_resources/earth\\_science\\_week/index.html](https://nagt.org/nagt/teaching_resources/earth_science_week/index.html)

Annually, NAGT assembles reviewed k12 teaching resources from the Teach the Earth collection to address the theme of Earth Science Week. This year (2021), the theme was Teaching about Water and the Submit your Earth Science Week-themed Teaching Activities, Operationalizing the Earth Science Week theme in k12, and Earth Science Index page received 111 unique pageviews in total with the majority (62%) for the submission page across the Aug 14, 2020 – Aug 13, 2021 time period.



## Stories in Diversity

[https://nagt.org/nagt/dei/diversity\\_stories.html](https://nagt.org/nagt/dei/diversity_stories.html)

On May 14, 2020 pages for Stories in Diversity were first created to assist the NAGT DEI committee in seeking stories, thoughts, impressions, and artwork relating to discrimination in all its forms, as well as the opposite: stories of giving or receiving support, overcoming challenges, points of pride, experiences of belonging, etc. Currently the collection holds two stories. The top page providing information on the Stories in Diversity initiative received 131 unique page views; the browse which holds the individual stories received 122 unique pageviews; and the submission page for sharing Stories in Diversity received 59 pageviews during the period of Aug 14, 2020 – Aug 13, 2021.

## REFERENCES

- NN Group (2019) Satisficing: Quickly Meet Users' Main Needs. Nielson Norman Group. <https://www.nngroup.com/articles/satisficing/> Accessed 2/2/2020.
- NN Group (2019b) How Long to Users Stay on Web Pages? Nielson Norman Group. <https://www.nngroup.com/articles/how-long-do-users-stay-on-web-pages/> Accessed 2/6/2020.

## APPENDIX

Data tables for the figures presented in the text:

**Table 4. The Number of sessions by month (Aug 14, 2020 – Aug 13, 2021) as presented in Figure 1**

Month-Year	Sessions
Aug-20	6450
Sep-20	13208
Oct-20	15223
Nov-20	13189
Dec-20	12072
Jan-21	15340
Feb-21	17927
Mar-21	16909
Apr-21	15089
May-21	13570
Jun-21	11584
Jul-21	9844
Aug-21	4512

**Table 5. The sessions and users per year (August-to-August) from 2007 to 2021 as shown in Figure 2.**

Years	Sessions	Users
2007-2008	68653	54070
2008-2009	63006	45531
2009-2010	68267	42033

2010-2011	61893	39500
2011-2012	67351	52130
2012-2013	65610	50825
2013-2014	60298	45921
2014-2015	74549	54271
2015-2016	69798	51217
2016-2017	84667	60360
2017-2018	114460	85679
2018-2019	149179	117316
2019-2020	157764	120231
2020-2021	169917	127558

**Traveling Workshops Program  
Annual Report  
September 1, 2020—August 31, 2021**

**Executive Summary**

As with many programs at NAGT and beyond, the Traveling Workshop Program (TWP) continued to be disrupted in the FY 2020-2021 due to restrictions from the COVID-19 pandemic. The Traveling Workshop Program Management Team received and reviewed 8 applications for workshops, approving 7 of them. For the first time, Supporting the Success of All Students was the most requested workshop, with 5 applications. The other 2 approved workshops requested Building Stronger Geoscience and Environmental Science Departments and Programs. Nine virtual workshops, with a total participation of at least 95, were conducted during the year. These included our first international workshop in Spanish, for Universidad Técnica Particular de Loja in Ecuador and our first collaborative workshop with the Bridging to STEM Excellence program. All combined, the workshops received a weighted aggregate evaluation rating of 8.71 on a 10-point scale, consistent with previous years' ratings. Several workshops continue to be postponed until in-person workshops are readily available again.

This year marked two important efforts toward moving the TWP toward a more equitable program that can be a mechanism for helping the geosciences be more equitable. A series of NSF-funded diversity, equity, and inclusion workshops were held in Spring 2021 for TWP facilitators to revise TWP materials and to provide professional development on facilitation approaches. The workshops included two sessions facilitated by Nancy McHugh from Wittenberg University in collaboration with the facilitators from the Workshop for Early Career Geoscience Faculty and Preparing for an Academic Career Workshop, marking a first for collaboration across workshop types and for combining resources from distinct NSF grants (to TWP and the Early Career Workshop). The TWP also had a discussion pod as part of the Unlearning Racism in the Geosciences program, and several facilitators participated in pods at their home institutions.

**Management Team Leads: Names and Emails**

- Catherine Riihimaki (Chair) ('18-'22)
- Walt Robinson (Co-Chair, beginning in October 2021)
- Reginald Archer ('18-'21)
- SERC web team member - Mitchell Awalt (ex officio)

- Pete Berquist ('18-'21)
- David Blockstein ('18-'21)
- Diane Doser ('20-'23)
- Walt Robinson ('19-'22)
- Cindy Shellito ('20-'23)
- Rachel Teasdale ('19-'22)
- Gary Weissmann ('20-'23)

### **TWP Facilitators**

The list of active TWP facilitators is: Reginald Archer, Kathryn Baldwin, Julie Bartley, Rachel Beane, Patrick Belmont, Pete Berquist, David Blockstein, Kate Darby, Edith Davis, Diane Doser, Sue Ebanks, Anne Egger, Kathy Ellins, Carolyn Eyles, Sarah Fortner, David Gosselin, Richard Gragg, Deborah Gross, Cynthia Hewitt, Michelle Kinzel, Kaatje Kraft, Ellen Metzger, Steven Mulkey, Cailin Orr, Rod Parnel, Ginny Peterson, Laura Rademacher, Joan Ramage, Dallas Rhodes, Gigi Richard, Catherine Riihimaki, Walt Robinson, Mary Savina, Cindy Shellito, Stefany Sit, Rachel Teasdale, Sean Tvelia, Joshua Villalobos, Karen Viskupic, Gary Weissmann, and Karl Wirth.

A new procedure was put into place this year for using Google Forms for facilitators to indicate interest in facilitation. Finding volunteers to co-lead workshops has been straightforward, but ensuring engagement by all and equitable workload distribution across the group remain challenges for the program. Two facilitators formally removed their names from the list of active TWP facilitators. A few others have not participated in activities this year nor responded to the Google Forms surveys, even to indicate their disinterest in facilitating for now.

### **Meetings of TWP Management Team Members or Facilitators**

- Management Team meetings: The TWP Management Team met three times in FY 2020-2021, all to review applications received during that quarter: October 26, 2020, March 31, 2021, and July 1, 2021.
- Virtual Diversity, Equity, and Inclusion workshops for facilitators: Reginald Archer and David Blockstein obtained NSF funding to run a series of workshops for TWP facilitators to work on converting the workshops to a virtual platform and to incorporate anti-racism concepts into the materials. The workshop was broken into three parts:

- On January 8, 2021, the facilitators met to discuss how to transition to virtual Traveling Workshops.
- On May 20-21, 2021, facilitators from the Traveling Workshop Program, Workshop for Early Career Geoscience Faculty, and Preparing for an Academic Career Workshop, met for professional development led by Nancy McHugh entitled “Toward a More Equitable Geoscience: A Training Workshop for Facilitators.” This workshop marked a first for collaboration across workshop types and for combining resources from distinct NSF grants (to TWP and the Early Career Workshop).
- On June 22, 2021, the TWP facilitators met again to revise materials and plan for next steps.
- URGE pod meetings: In Spring 2021, the Unlearning Racism in the Geosciences program held eight two-week sessions on topics related to anti-racism, with live interviews for the full URGE participant pool, pod discussions, and deliverables that focused on structural barriers to anti-racism. There was widespread interest in participating, although several TWP facilitators opted to focus only on their home department’s pod. The TWP pod included Catherine Riihimaki (primary organizer), Reginald Archer, Julie Bartley, Rachel Beane, David Blockstein, Edith Davis, Katherine Ellins, Sarah Fortner, Deborah Gross, Laura Rademacher, Cindy Shellito, and Karen Viskupic. The group presented the pod outcomes as a virtual poster during the 2021 Earth Educators’ Rendezvous.

### **Applications During FY 2020-2021**

The Traveling Workshop Program Management Team received and reviewed 8 applications for workshops, approving 7 of them. For the first time, Supporting the Success of All Students was the most requested workshop, with 5 applications. One of those has been canceled because of local restructuring of the University of Texas at Austin program. The other 2 approved workshops requested Building Stronger Geoscience and Environmental Science Departments and Programs. One workshop was not approved because it was not appropriate for the TWP program; the applicant is from an institution in Monrovia, Liberia, and the management team felt that we could not meet their needs. The TWP has a backlog of 7 workshops that are still awaiting either resumption of in-person workshops or more clarity on whether a virtual workshop would meet their needs. Each local host has been contacted.

### **Workshops Conducted During FY 2020-2021**

Nine workshops were conducted during FY 2020-2021, despite the ongoing COVID-19 pandemic.

- University of Pennsylvania: December 14-15, 2020
- University of Minnesota at Duluth: January 11-12, 2021
- University of Lynchburg: January 19-21, 2021
- Colorado College: March 11, 12, and 19, 2021
- Universidad Técnica Particular de Loja: March 26, April 1, and April 2, 2021
- University of Montana: April 1 and 9, 2021
- California State University at Fresno: April 29-30, 2021
- University of Texas at Austin: May 10-11, 2021
- California State University at Chico: August 18-19, 2021 (in partnership with Bridging to STEM Excellence)

Six of the workshops were Building Stronger Geoscience and Environmental Science Departments and Programs, two were Supporting the Success of All Students (UT-Austin and CSU-Chico), and the last was Cross-campus Environmental and Sustainability Programs. All of these workshops were virtual; facilitators varied the schedules to decrease the continuous workshop time to limit Zoom fatigue and half of the workshops spread out the meeting times beyond two continuous days to offer more opportunities for reflection.

The UT-Austin workshop is notable because it was a faculty-version of a workshop that was run during August 2020 for their graduate students. Both workshops were very well received. The Loja workshop is also notable because it marks our first workshop for Spanish speakers and our first for a program outside of the US-Canadian education systems. To support this workshop, we had an additional facilitator who could translate any materials or conversations during the workshop. Finally, the CSU-Chico workshop was notable because it marked the first workshop held in collaboration with the Bridging to STEM Excellence program.

Overall, workshops reached approximately 95 participants across a mix of institution types, primarily research institutions (R1 and R2), but including one primarily undergraduate institution (PUI) and one international institution from a Spanish-speaking country. Demographic information by such traits as gender or race/ethnicity is not tracked by NAGT.

The End-of-Workshop (EOW) evaluations were overwhelmingly positive, with an overall rating of 8.71/10 from 59 participants. These are broken down as follows:

- University of Pennsylvania: 12 participants, 7 evaluations, rating 7.57/10
- University of Minnesota at Duluth: 11 participants, 11 evaluations, rating 7.73/10

- University of Lynchburg: 3 participants, 3 evaluations, rating 9.67/10
- Colorado College: 5 participants, 3 evaluations, rating 9.0/10
- Universidad Técnica Particular de Loja: 15 participants, 13 evaluations, rating 9.31/10
- University of Montana: 12 participants, 6 evaluations, rating 8.83/10
- California State University at Fresno: 6 participants, 6 evaluations, rating 10/10
- University of Texas at Austin: 27 participants, 7 evaluations, rating 8.29/10
- California State University at Chico: 5 participants, 3 evaluations, rating 9.33/10 (note that these ratings are from the road check evaluation after day 1, because there was no rating in the EOW evaluation, which used the BTSE evaluation form)

Positive comments focused on the importance of structured, facilitated dialogue with colleagues using breakout rooms and tools like Jamboards, and specific action planning. Almost all EOW evaluation respondents were able to articulate one or more things that were learned and that were valuable. Ongoing challenges include maintaining everyone's energy over long, virtual workshop days, managing diverse expertise and interest of participants, and assessing the long-term impacts of each TWP.

### **Progress on Workshop Development**

There are three needs facing the TWP that require development efforts moving forward.

- Revise materials based on NSF-funded workshops, including long-term tracking of impacts, incorporation of DEI content, and further training of facilitators in facilitation techniques; an extension of the NSF funding has been requested
- Determine whether workshop offerings should continue to include virtual workshops for programs who would prefer this style, while returning to offering in-person workshops, with a discussion of the appropriate fee structure
- A sustainable model for membership on the management committee and in the pool of facilitators to allow for distributed leadership responsibility, to ensure that our facilitators remain engaged throughout their time in the TWP, and to offer professional development as facilitators to more NAGT members
- Better marketing for the program to ensure that there continue to be robust numbers of applications

### **Next year's contact for report**

Catherine Riihimaki, TWP Chair, [catherine.riihimaki@gmail.com](mailto:catherine.riihimaki@gmail.com)

## Early Career Geoscience Faculty Workshop 2021

### **Executive Summary**

The aim for the Early Career workshop is to provide concrete skills to support faculty in their early years of their teaching and research responsibilities. We have sessions on topics including effective teaching strategies, course design, establishing a research program in a new setting, working with research students, balancing professional and personal responsibilities, and time management. The workshop is designed to promote attributes of faculty who are "quick starters", including developing regular work habits, avoiding procrastination, balancing work demands effectively, and seeking help when needed (Boice, 2000). Early years of a faculty position can be isolating, especially for women and underrepresented groups in science. Our program directly addresses this by fostering problem solving and utilizing a peer network of support. We rely heavily on best practices in the fields of mentoring and faculty development, including publicly available material from the National Center for Faculty Development and Diversity, and books such as *Advice for New Faculty Members* (Boice, 2000) and *Slow Professor* (Berg and Seeber, 2016). In addition to networking faculty and developing strategies for research and productivity, we aim to train faculty in empirically validated, discipline specific, teaching practices, in line with recent recommendations in STEM fields (e.g., PCAST, 2012; Singer et al., 2012). A new workshop goal of discussing and developing strategies for broadening participation in geosciences was supported by a workshop for NAGT Facilitators in May 2021 entitled, *Toward a More Equitable Geoscience*. The workshop was designed by Catherine Riihimaki (PI, Princeton University) and Nancy McHugh (Consultant, Wittenburg University) to help NAGT Facilitators to (1) develop their understanding of issues related to diversity, equity, and inclusion (DEI) in geoscience, (2) guide early career faculty in developing strategies for discussing DEI issues in departments, and (3) develop strategies for promoting equity in teaching and mentoring. Following the workshop, the Early Career Workshop leader team met in subgroups to develop plans for implementing topics related to DEI in workshop sessions. Finally, the workshop prepares faculty to submit strong research proposals through sessions on writing and reviewing proposals, mentoring students and a visit to the National Science Foundation.

### **Date and location**

July 25-July 29, 2021, and conducted virtually; Optional visit to NSF on August 3 & 4, 2021

### **Workshop conveners**

Martin Wong, Colgate Univ.; Josh Galster, Montclair State Univ.; Ben Laabs, North Dakota State Univ.

### **Demographics**

56 participants

Gender: 61% female, 36% male, and 4% selected neither male or female

Institution: 57% research, 13% public, 9% private, 11% comprehensive, 9% 2-year (1 participants did not identify their institution type)

Ethnicity: 11% Hispanic, 10% Asian, 9% African American, 0% American Indian, 1% Pacific Islander



## **Program**

<https://serc.carleton.edu/NAGTWorkshops/earlycareer2021/program.html>

The program content was similar to previous years, although the delivery was shifted to an online format for the second time. We continued to emphasize online teaching and DEI issues with plenaries.

## **Summary of end-of-workshop survey**

The end-of-workshop survey was completed by 70% of the participants (n = 39). The overall satisfaction with the workshop was 9.02/10, which is comparable to the previous years' workshops. Over 90% of the respondents reported increases in their confidence to succeed as professors. All but one of the respondents reported increased confidence to succeed as a professor. A majority (66%) of the respondents reported that the virtual workshop made it easier to attend. Participants reported that engaging with their peers was one of the most valuable components of the workshop, although there were also some who said this networking was challenging in an online environment. The effort to implement best practices for promoting equity and inclusion in geosciences will continue in future workshops. 82% of workshop survey respondents indicated that they learned valuable lessons from the activities or discussions related to promoting diversity, inclusion, and equity in their professional lives, and shared some specific strategies they will adopt within their departments, research groups, and classes.

## **Next year's contacts for report**

Josh Galster (galsterj@montclair.edu) Ben Laabs (benjamin.laabs@ndsu.edu) Martin Wong (mswong@colgate.edu)