

## **National Association of Geoscience Teachers**

## **2018 Annual Report**

Prepared for the 2018 Annual Meeting Indianapolis, Indiana

## **Table of Contents**

Table of Contents	
NAGT Officers' Reports	
President – Don Haas	3
1 <sup>st</sup> Vice President – <i>David McConnell</i>	6
2 <sup>nd</sup> Vice President – <i>Karen Viskupic</i>	9
Secretary/Treasurer – Aida Awad	12
Past President – Anne Egger	13
Executive Director – Cathy Manduca	15
JGE Editor's Report – Anne Egger	17
ITT Editor – Margaret Crowder	22
Website – John McDaris and Andrew Haveles	25
Councilors' Reports	
John Taber	28
Jen Wenner	31
Joshua Villalobos	35
Kathy Ellins	37
Aisha Morris	41
Mike Phillips	43
Section Reports	
Central – Alexa Sedlacek	47
Eastern – Jason Petula	51
Far Western – Winnie Kortemeier	
Mid Continent – Aida Farough	65
New England – Tarin Weiss	
Pacific Northwest – Frank Hladky	70
Southeastern – Frank Forcino	73
<b>Division Reports</b>	
Geo2YC – Callan Bentley	
TED – Suzanne Metlay	78
GER – Karen McNeal	82
Awards Reports	
OEST Awards – Mike Passow	86
Dottie Stout Grants – Ben Wolfe	89
Shea Award – Andy Buddington	91
NAGT Program Reports	
Field Camp Scholarships – Lydia Fox	92
NAGT/USGS Internship Program – Kurtis Burmeister	
NGSS Support – Aida Awad	95

## NAGT Annual Report Fall 2018 Don Haas President 2017-2018

#### Report prepared: October 1, 2018

#### **NAGT Executive Committee work:**

- meetings attended
  - o October 22, 2017 (GSA, Seattle)
  - o December 1, 2017 (virtual)
  - o January 29, 2018 (virtual)
  - o April 19-22, 2018, (Ithaca, NY
  - o June 25, 2018 (virtual)
- NAGT Presidential line call participation (multiple calls)

#### **NAGT Council work:**

- meetings attended
  - o October 22, 2017 (GSA, Seattle)
  - o February 9, 2018 (virtual)
  - o June 12, 2018 (virtual)
  - o October 8, 2018 (virtual)

#### **NAGT Committee work:**

- Ad Hoc Diversity Committee, transitioned chairmanship to Aisha Morris
  - Meetings attended:
    - May 3, 2018 (virtual)
    - May 7, 2018 (virtual)
    - May 21, 2018 (virtual)
    - May 31, 2018 (virtual)
    - June 4, 2018 (virtual)
    - July 5, 2018 (virtual)
    - August 13, 2018 (virtual)
    - August 28, 2018 (virtual)
    - September 10, 2018 (virtual)
  - Poster presented at 2018 EER "NAGT Diversity Committee: Seeking Input Toward Enhancing Inclusion Efforts" (Haas, D., Sullivan, S., & Williams, W.)
- Advocacy Committee
  - o Re-assumed chair from Mike Phillips, effective at GSA
  - o Meetings attended:
    - July 17 (F2F @ EER)
    - February 8, 2019 (virtual)
    - Meetings are now scheduled on a bimonthly basis, with the next scheduled for April
  - O Poster presented at 2018 EER "NAGT Advocacy: Outreach to Support Geoscience Education" (Phillips, M., Haas, D., & Williams, W.)
  - o See also Other Activities Relevant to NAGT below.

Liaison activity: New England Section

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

- Western New York Youth Climate Action Summit, Buffalo, NY, June 2, 2018
  - o Planning committee, workshop presenter
- CoRE Symposium & Change Agent Summit, June 4-6, 2018, University of Buffalo
- NAGT Eastern Section Meeting, June 7-9, 2018, Millersville, PA
  - Keynote Address, "Rewriting the user manual ain't enough: Why
    education reforms fail to improve outcomes and what we might do to
    change that"
- Earth Educators' Rendezvous, July 17-21, 2018 in Lawrence, KS
  - Teaching Demonstration, "Selected technical tools approaches for real and virtual fieldwork" (Haas, White, & White)
  - o Poster "NAGT Advocacy: Outreach to Support Geoscience Education" (Phillips, M., Haas, D., & Williams, W.)
  - Poster "NAGT Diversity Committee: Seeking Input Toward Enhancing Inclusion Efforts" (Haas, D., Sullivan, S., & Williams, W.)
- New York State STEM Education Collaborative Summer Symposium, July 29 31, 2018, Alfred, New York
  - Keynote Address, "Why Haven't Educational Reforms Improved Outcomes on a Broad Scale? What Can We Do To Change That?"
- New York City Summer STEM Institute, August 7 9, 2018, NYC
  - Climate To Go, three day teacher workshop (Haas, Moore, Ross, Holochuck, Cheng)
- Association of Earth Science Editors Annual Meeting, September 28 & 29, 2018, Niagara Falls, New York
  - o "Imagining Possible Futures of Geoscience Educational Media"
- A series of programs with New York State Master Teachers

#### Other activities relevant to NAGT:

- New York State Science Education Steering Committee; three-year term began with January 2018 meeting
- NSTA Climate Position Statement Committee
  - o The statement was published in September 2018.
- Many activities and press related to *The Teacher-Friendly Guide to Climate Change.*

#### **Upcoming Activities**

- West Virginia Science Teachers Association Annual Conference, October 25 & 26, 2018, Roanoke, West Virginia
  - o The Teacher-Friendly Guide to Climate Change
- Wildlife Appreciation and Education Day, October 27, 2018, Erie Community College, Amherst, NY
  - o The Teacher-Friendly Guide to Climate Change

- American Geophysical Union Fall Meeting, December 10 14, 2018, Washington, DC
  - o Co-author on three abstracts, first author on two of these.
  - o GIFT Share-a-thon
  - o CLEAN Workshop Facilitator

## NAGT Annual Report David McConnell Vice-president, 2017-2018 Report prepared Sept 17, 2018

#### **NAGT Executive Committee work:**

- Meetings attended
  - o October 22, 2017 (GSA, Seattle)
  - December 1, 2017 (virtual)
  - January 29, 2018 (virtual)
  - o April 19-22, 2018, (Ithaca, NY)
  - June 25, 2018 (virtual)
  - o October 3, 2018 (virtual)

#### **NAGT Council work:**

- October 22, 2017 (GSA, Seattle)
- February 9, 2018 (virtual)
- June 12, 2018 (virtual)
- October 8, 2018 (virtual)

#### **NAGT Committee work:**

- Co-chair, Executive Director search
  - Multiple virtual meetings to discuss status of search
  - Generated and redrafted job search ad

#### **NAGT Presidential Line meetings:**

- October 23, 2017 (GSA, Seattle)
- October 30, 2017 (virtual)
- December 18, 2017 (virtual)
- January 16, 2018 (virtual)
- January 22, 2018 (virtual)
- February 5, 2018 (virtual)
- March 21, 2018 (virtual)
- May 31, 2018 (virtual)
- September 18, 2018 (virtual)

#### Liaison activity:

Southeastern section

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

- GSA Annual meeting, Denver, October 22-25, 2017
  - Representative at joint AGI/GSA Societies meeting, October 23, 2017 (GSA)
  - FUGE workshop/discussion, October 21

- NAGT representative at GSA booth
- NAGT Exec Committee/Council/NESTA meetings, October 22
- NAGT representative at GSA Associated Societies meeting (virtual), April 4, 2018
- NAGT Awards luncheon, October 24, 2017 (GSA, Seattle)
- Learning Innovations Summit, Mountain View, June 14-16, 2018
- Earth Educators Rendezvous, Lawrence, July 15-19, 2018
  - Contributed teaching demo and grad student presentation

#### Other NAGT work:

#### Other activities relevant to NAGT:

- Attended GeoDes (GEOscience Diversity Experiential Simulations) Workshop, Boulder, November 13-15, 2017
  - Participated in subsequent three simulations, journal club meetings
- InTeGrate research project
  - Managed completion of project
  - Manuscript on teaching beliefs submitted
    - Czajka, C.D. and McConnell, D.A., The adoption of student-centered teaching materials as a professional development experience for college geoscience faculty. International Journal of Science Education.
  - Manuscript on learning outcomes in progress (Czajka et al.)
- Related publications:
  - Research-based Instructional Reform in the Geosciences: Building a Community of Practice, 2018, White paper commissioned by the American Association for the Advancement of Science to inform the *Levers for Change* working meeting (May 7-8; Bethesda, MD).
  - o McConnell, D., 2018, Making the first (and last) geoscience class count. Earth magazine, January, p.8-9.
  - Chapman, L., and McConnell, D.A., 2018, Characterizing the teaching beliefs of future geoscience professors. Innovative Higher Education, v.43, #3, p. 185-200. https://doi.org/10.1007/s10755-017-9416-9.
  - Czajka, C.D. and McConnell, D.A., 2018, An exploratory study examining geology students' conceptions related to geologic time and rates. Journal of Geoscience Education. V.66, #5, p.231-245.
  - <sup>1</sup>McConnell, D.A., Chapman, L., Czajka, C.D., Dixon, J., Jones, J., Ryker, K.D., and Wiggen, J., 2017, Instructional utility and learning efficacy of common active learning strategies. Journal of Geoscience Education, v.65, #4, p.604-625, https://doi.org/10.5408/17-249.1.
  - Shipley, T.F., McConnell, D., McNeal, K.S., Petcovic, H.L., and St.John, K.E., 2017, Transdisciplinary science education research and practice: Opportunities for GER in a developing STEM discipline-based education research alliance (DBER-A). Journal of Geoscience Education, v.65, #5, p.354-362.

\_

<sup>&</sup>lt;sup>1</sup> JGE Outstanding Paper Award (2018)

• Invited presentation: *Predicting the Future of What, How, and Where We Teach and Learn in University Geoscience Programs*, presentation for University of Kansas, Department of Geology Spring Celebration symposium, May, 2018

#### **Geoscience Education Grant Funding:**

- National Science Foundation, IUSE, Recalibrating Student Learning in Introductory Geoscience Courses Through the Use of a Web-based Assessment tool, 2017-2020, (PI)
- National Science Foundation, GEOPATHS-IMPACT, Expanding Geoscience Discovery Opportunities Beyond the Classroom, 2017-2020, (PI)
  - Two K-12 Earth/Environmental Teacher workshops, June 26-27 and July 9-10, 2018

#### **Upcoming Related Events:**

- GSA meeting, Indianapolis, I am involved in several talks as invited presenter or coauthor to grad student
- Invited Speaker (What Research Tells Us About Effective Teaching (and Learning)
   Strategies That We (and Our Students) Will Actually Use) at Gordon Research
   Conference in Chemistry Education Research and Practice, June 2019, Bates College, ME

#### NAGT Year-End Report Fall 2018

#### Karen Viskupic

#### Second Vice President, 2017-2018 Report prepared: September 28, 2018

#### **Goals from last Report:**

- Work with Anne and others to develop a NAGT higher education teacher certification for geoscience graduate students
- Improve connection with the Pacific Northwest section.

#### **NAGT Executive Committee work:**

- meetings attended
  - o October 22, 2017 (GSA, Seattle)
  - o December 1, 2017 (virtual)
  - o January 29, 2018 (virtual)
  - o April 19-22, 2018 (Ithaca, NY)
  - o June 25, 2018 (virtual)
  - o October 3, 2018 (virtual)
- assigned tasks
  - o Investment Committee
  - o Professional Development Planning Committee
  - o Executive Director Search Committee Co-chair

#### **NAGT Presidential Line Meetings:**

- o October 23, 2017 (GSA, Seattle)
- o October 30, 2017 (virtual)
- o December 18, 2017 (virtual)
- o January 16, 2018 (virtual)
- o January 22, 2018 (virtual)
- o February 5, 2018 (virtual)
- o March 21, 2018 (virtual)
- o May 31, 2018 (virtual)
- o September 18, 2018 (virtual)

#### **NAGT Council work:**

- meetings attended
  - o October 22, 2017 (GSA, Seattle)
  - o February 9, 2018 (virtual)
  - o June 12, 2018 (virtual)

#### **NAGT Committee work:**

- Professional Development Planning Committee
  - o Virtual meetings attended:
    - February 6, 2018
    - March 29, 2018

- May 4, 2018
- May 24, 2018
- June 4, 2018
- July 10, 2018
- September 19, 2018
- O Work completed:
  - New committee membership
  - Management of committee and relationship to other committees
  - Prepared bid to host GeoSciEd in 2022 (bid was unsuccessful)
  - EER committee membership and funding structure
- Opportunities and concerns: I will be chairing this committee during the next year while serving as 1<sup>st</sup> Vice President.
- Investment Committee
  - o Virtual meetings attended:
    - February 27, 2018
    - August 21, 2018
  - o Work completed:
    - Revised and updated the Endowment Policy
  - o Opportunities and concerns: Ongoing health of the endowment
- 2018 Earth Educators' Rendezvous (EER) Contributed Program committee member
  - o Virtual meetings attended:
    - None—all communication via e-mail
  - O Work completed:
    - Reviewed share-a-thon abstracts submitted to the 2018 EER and recommended a schedule for share-a-thon presentations to Contributed Program chairs Rachel Teasdale and Katherine Ryker
  - o Opportunities and concerns: None.
- NAGT Travelling Workshops Program (TWP)
  - o Meetings attended:
    - January 23, 2018; (virtual)
    - January 31, 2018; (virtual)
    - February 20, 2018; (virtual)
    - February 28, 2018; (virtual)
    - March 4-6, 2018; leader training meeting (Boise State University)
    - March 28, 2018 (virtual)
    - June 22, 2018 (virtual)
  - o Work completed:
    - Hosted leader training meeting at Boise State University
    - Helped develop programming for courses workshops
    - Agreed to serve on TWP management committee
  - Opportunities and concerns: I will be co-leading my first workshop in November, 2018 with David Gosselin
- Co-Chair, Executive Director Search Committee
  - Meetings attended:
    - Ongoing e-mail and phone calls with David McConnell

- o Work completed:
  - Posted advertisement for position
  - Recruited two additional search committee members (Susan Sullivan and Pete Berquist)
- Opportunities and concerns: Recruiting qualified applicants

#### Liaison activity:

- Pacific Northwest section
  - No meetings attended
  - o Submitted introductory article to section newsletter

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

- GSA Annual Meeting, Seattle, WA, October 22-25, 2017
  - Attended ExCom and Council meetings, division meetings, presidents' breakfast, awards luncheon
  - o Met with AGI and NESTA leadership
  - Helped staff the NAGT booth
- Levers for Change workshop, Bethesda, MD, May 7-8, 2018
  - Represented the geosciences community in discussions about researchbased teaching reform in undergraduate STEM disciplines
- AGI Spring Member Society Council Meeting, Salt Lake City, UT, May 21, 2018
  - o Represented NAGT in discussions
- Earth Educators' Rendezvous, July 16-20, 2018 in Lawrence, KS
  - Presented a talk about RTOP results and professional development participation

#### Other activities relevant to NAGT:

- Member of the leadership team for the On the Cutting Edge Classroom Observation project
- Member of research team analyzing data from the 2016 and prior administrations of the National Geoscience Faculty Survey
- NSF S-STEM project PI at Boise State University—scholarships to support undergraduate geoscience majors and interventions related to promoting student metacognition, career awareness, and computational skills.

#### **Upcoming Activities**

• 2018 GSA Annual Meeting, Indianapolis, IN November 4-7, 2018

#### Goals for next reporting period:

- Successfully recruit and select a new Executive Director for NAGT
- Solidify the reporting structures and timelines associated with the Professional Development committee
- Work with EER planning committee to promote a successful 2019 EER

## NAGT Annual Report 2018 Aida Awad Secretary / Treasurer Report prepared September 12, 2018

#### **Goals from last Report:**

- Work with the Executive Director's office to develop and present financial reports and a budget proposal.
- Document and distribute minutes for Exec Comm and Council meetings.
- Increase the impact of efforts around NGSS-ESS implementation.
- Contribute to various committees including: nominations and Miner Awards.

#### **NAGT Executive Committee work:**

- Attended meetings, presented financial reports, minutes, and NGSS-ESS reports:
  - o NAGT Exec Comm meeting at GSA, September 2016 (virtual attendance)
  - o November Exec Comm virtual meeting
  - o January Exec Comm virtual meeting
  - o Presidential line calls
  - o Spring Face-to-face meeting
  - o June Exec Comm virtual meeting
- officer reports
  - Ongoing intensive collaboration with NGSS-ESS Working Group, including organizing and moderating monthly webinars. Weekly planning calls.
  - o Ongoing work on NSF NGSS Summit proposal expected to be submitted fall 2018.

#### NAGT Council work:

• Attended meetings, presented financial reports, minutes, and NGSS-ESS reports:

#### **NAGT Committee work:**

- Nominations Committee
  - o Participated in online discussions related to nominations and rankings. Attended virtual meeting of Nominations Committee.
- Miner Award Committee
  - o Participated in discussions related to nominations and rankings.

#### Other activities relevant to NAGT:

- Contributed to NAS publication as a reviewer: Design, selection and implementation of instructional materials for the NGSS.
- Participated in reviews of speakers scheduled for the 2018 March for Science.
- Contributed to the EER Review Camp. Reviewed assigned materials.
- Co-developer of EER Afternoon workshop.
- Collaborated with AGI and NESTA on GIFT workshop proposal for AGU 2018.

# NAGT Annual Report Fall 2018 Anne Egger Past-president, 2017-18 Report prepared September 20, 2018

#### **NAGT Executive Committee work:**

- Meetings attended
  - October face-to-face meeting at GSA (Seattle); virtual meetings in December, January, and June; face-to-face meeting in Ithaca (April 19-21); occasional presidential line phone calls
- Gave feedback on the Executive Director advertisement and possibilities for applicants
- Worked with GER Division and the ExCom to develop a sponsorship policy that can include all of the divisions.

#### **NAGT Council work:**

- Meetings attended:
  - o October face-to-face Council meeting, virtual meetings in February and June

#### **NAGT Committee work:**

- Website Management committee: I continued to serve on this committee until my term as JGE Editor-in-Chief officially began in January, 2018. At my last meeting of this committee, I presented possibilities for how JGE could be more integrated into the Teach the Earth website.
- <u>Award committees</u>: I serve as an *ex officio* member of the Shea award committee. This year, the chair and the committee were less pro-active in seeking nominations, and we had fewer of them. The committee worked via email to select the awardee.
- Nominations committee: As past president, I serve as chair of the nominations committee. With support from the Executive Office, I developed an open nominations process and call to allow any member to nominate (or self-nominate) for national leadership. Our efforts were well-received when presented to the ExCom and Council, but we received vanishingly few nominations, and the ExCom should consider how to solicit a larger pool of nominations for national officers. Ultimately, we developed a complete slate of two new councilors-at-large, a new secretary-treasurer, and a new 2<sup>nd</sup> Vice President, along with one continuing councilor to complete one year of a departing councilor's term.
- <u>Traveling Workshops Program</u>: I continue to serve as a TWP leader. I attended the leader meeting in Boise, ID, in March, 2018, and am serving as a workshop leader for a course design workshop at Boise State University Sept. 28-29 and at AGU.

#### Liaison activity:

• As the editor of JGE, I've taken on the role as liaison to the GER division. This is a very active division with strong leadership. I attend their monthly virtual meetings. I've felt that my role has been to help remind the leadership that they are, in fact, part of a larger

organization, and they can benefit from the experience and support of that organization. They are currently establishing two new awards and policies around communications with their membership.

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

- GSA Annual Meeting, Oct. 2017, Seattle, WA
  - Participated in ExCom, Council, Geoscience Education collaborative, and division meetings, Past Presidents' Breakfast
  - Met with AGI and GSA leadership (separately)
  - o Staffed the NAGT booth
  - Attended the NAGT awards luncheon
- Earth Educators' Rendezvous, July 16-20, Lawrence, KS
  - Participated in two working groups: the faculty survey group and the NGSS working group
  - o Presented poster about the history of JGE at the "Meet the Editors" poster session
  - o Participated in the Transdisciplinary Research workshop

#### Other activities relevant to NAGT:

- <u>Updating America's Lab Report</u>: I am serving on a National Academies committee to update the 2006 book "America's Lab Report: Investigations in High School Science." More information about the committee and its charge is available here: <a href="https://sites.nationalacademies.org/DBASSE/BOSE/CurrentProjects/DBASSE\_178571">https://sites.nationalacademies.org/DBASSE/BOSE/CurrentProjects/DBASSE\_178571</a>
   The report is currently in the final stages of review and revision and should be available by late fall, 2018.
- REU Director: I am PI on an REU Site: Hazards and Risks of Climate Change in the Pacific Northwest, an interdisciplinary research program. This past summer was the second year in which 10 students came to CWU to conduct research with 5 different faculty, and I led a "grand challenge" project in which they had to develop a voter information guide for the midterm elections for their district. In September, I attended a workshop for all of the REU PIs funded by GEO and presented about the online research preparation course I teach for my incoming students.
- <u>JGE Editor</u>: I am in my first year as JGE Editor-in-Chief, and I led the transition to publishing with Taylor & Francis. The details of that transition will be provided in the Editor's report.

#### **Upcoming Activities**

- <u>GSA Annual Meeting</u>, Indianapolis: Karen Viskupic and I will be convening a session about how programs support graduate learning about teaching that we hope will support our pending proposal to NSF
- <u>Earth Educators' Rendezvous</u>: Abstract about faculty survey submitted to EER; leading a workgroup about InTeGrate and the NGSS

NAGT Executive Director's Office Report October, 2018

This year was one of transitions. We began the year with an new Assistant Director, Krista Herbstrith and a new Marketing and Communications Assistant, Lara Palmquist. We ended the year with the departure of MJ Davenport our administrative assistant who was managing the awards programs among other things, and Krista Herbstrith and the arrival of a new administrative assistant Lisa Nirva. While personnel changes are always disruptive and we miss all of these people, a positive outcome is that we have much better documentation of the work and are in a stronger position for the transition to a new Executive Director next August.

A second big transition occurred in our finances. After decades of strong revenue from the Lab Manual, this year we saw a major downturn in this revenue. This year we experimented with advertising and donations as new sources of revenue. We were successful in raising the funds needed to support travel stipends for the Rendezvous using a challenge grant put together by the Donor Development Committee. ITT turns out to be a good placement for advertisements, the Teach the Earth website has growing placements, and we learned that the newsletter is not a strong target so far. Lastly, we put in place a new contract for IGE publishing with Taylor & Francis that we hope will grow subscription revenues. We will learn in the coming year if they will meet their projections. Despite this activity, we spent the full \$65,000 budgeted as a draw on the reserve fund and ended the year with a \$14,500 shortfall. This required a rethinking of the staffing within the Executive Office and we have proposed a budget revision that substantially reduces staff support. To maintain a healthy society, this will require more volunteer effort. Fortunately, we have an enthusiastic and capable membership that is successfully running activities from awards to professional development programming. A recent call for volunteers to serve on committees yielded 9 applications – a strong response for a blanket call. We have and will continue to explore new revenue models.

As we look to the future, we anticipate that major activities for the next 6 months will focus on supporting increased volunteer leadership of activities; identifying a new executive director and preparation for this transition; formalizing the procedures for managing the professional development activities and website; and management of the budget to ensure the financial health of the association.

The NAGT director's office manages the daily operations and programming of the National Association of Geoscience Teachers. The operations include; membership database management, subscription database management, publication mailing lists, membership and subscriber renewal, member retention and new member recruitment, email list management, website management, finances and budgets, support for NAGT executive committee and council, the monthly news email, social media presence, and customer service. The programming includes; the Earth Educators' Rendezvous, the NAGT awards programs, the traveling workshop program and NAGT's presence at GSA and AGU.

In addition to these tasks, this year the executive director's office played a role in the following:

#### **NAGT Management**

- Successful transition and addition of key Executive office staff (Lisa Nirva as new Administrative Assistant, departure of Krista Herbstrith)
- Executive Director Transition Committee chairs named. Timeline, job description, and advertising approved by the Executive Committee
- New "Get Involved in NAGT Leadership" information page and submission form designed to foster broader participation in NAGT leadership

#### **NAGT Membership**

- Coordinated membership drive throughout the year resulting in an end-offiscal year membership of 1653, a record high for the first time in 10 years
- Initiated informal New Member survey
- Roll out of redesigned and enhanced monthly e-news
- Redesign of donation and member benefits webpages
- Increased NAGT's presence on social media (Facebook and Twitter)
- Revitalization of the Midcontinent section
- Increased engagement of divisions and sections. For example, new awards by GER division, sponsorships of events and socials at Earth Educators' Rendezvous, and exhibiting at GSA section meetings

#### **NAGT Programming**

- Hosted ~25 at the spring 2018 TWP Leadership Training
- Support of development of newly formed TWP Management Team
- Continued success of the Earth Educators' Rendezvous
- Continued collaboration with InTeGrate webinar series for cross-project opportunities
- Continued support of NGSS webinar series
- Approved sponsorship requests from Advance GEO (Earth Science women's Network) MATLAB, EarthConnections, and CIRTL. Workshop sponsorship of Nanoscience in the Earth and Environmental Sciences—From Theory to Practice (pre-workshop with the Goldschmidt 2018 Conference)
- Submitted proposal to co-host with EER the 2020 GeoSciED meeting

#### **NAGT Initiatives**

- Completed media kit, implementation of advertising (print and online) sales
- Initiated formation of the Donor Development committee
- Initiated formation of the Diversity task force
- Continued development of publishing portfolio including next edition of Lab Manual committee

### 2018 Annual report

Anne Egger Editor-in-Chief, Journal of Geoscience Education

#### **Editorial board**

I am nearing completion of my first year as Editor-in-Chief. Karen Kortz has been serving as Editor for Curriculum & Instruction for about a year, and Alison Stokes continues as the Editor for Research. There has been some turnover in Associate Editors: two AEs were asked to step down for not fulfilling expectations. Ten others were invited to become AEs, and two agreed. Current AEs:

- Caitlin Callahan, Grand Valley State University
- Alexandra Davatzes, Temple University
- Diana Dalbotten, University of Minnesota
- Todd Ellis, Western Michigan University
- Alexander Gates, Rutgers University
- Stephanie Hathcock, Oklahoma State University
- Kyle Gray, University of Northern Iowa
- Julie Libarkin, Michigan State University
- Karen McNeal, Auburn University
- Ellen Metzger, San Jose State University
- Elizabeth Nagy-Shadman, Pasadena City College
- Nir Orion, Weizmann Institute of Science, Israel
- **Heather Petcovic,** Western Michigan University
- Katherine Ryker, University of South Carolina
- **Rebecca Teed,** Wright State University

In addition, Susan Sullivan and Eric Riggs are serving as guest AEs for the theme issue *New Developments in Diversity and Inclusiveness in Geosciences*, along with Diana Dalbotten, Alec Gates, and Karen McNeal.

There is a lot of variability in the quality (and timeliness) of reviews and recommendations among the different AEs, and the editors and I have been working to improve both the quality and timeliness by providing guidelines and feedback. If expectations are consistently not met, the guidelines provide us the means to not ask AEs to continue or to ask them to step down early if necessary.

I make regular use of the AE listsery to communicate updates about Editorial Manager and the journal in general, towards the goal of building a stronger sense of community among the Associate Editors.

#### Goals for the coming year:

- 1. Develop and implement an application process to volunteer to serve as Associate Editor.
- 2. Recruit AEs from education research, other DBERs, and informal education.
- 3. Establish start and end times for 3-year terms to evaluate AEs.

#### **Submissions**

Since early January when our Editorial Manager site began accepting manuscripts to October 1, the journal has received 93 submissions, 23 of which were revisions of manuscripts previously submitted through Allen Track, leaving 70 new submissions in nine months. Given the transition to the new publisher, it is difficult to compare this submission rate to previous years, but previous one-year total submissions ranged from 45-73 over the last four years. I don't think we can yet call this an increase in submission rate, since (1) starting in December, 2017, authors were advised to wait to submit new manuscripts until the transition occurred, and (2) this year included a theme issue. We received 25 submissions to the theme issue *New Developments in Diversity and Inclusiveness in Geosciences*, mostly by the August 31 deadline; these submissions are currently all in the review process.

Of the full 93 submissions (including resubmissions), current status is:

Accepted: 16Rejected: 14Withdrawn: 5

• Currently out for revision: 16

• Currently in review: 42

The average number of days between receiving a manuscript and the first decision was 54.2.

Goals for the coming year:

- 4. Establish guidelines for theme issue management to streamline communication between AEs, editors, and authors.
- 5. Select and advertise a theme issue.
- 6. Recruit submissions more broadly and increase submissions overall.

#### **Publishing**

We largely met the production schedule for Volume 66:

	Page		Online Issue	
Issue	count	<b>Articles</b>	Published	Print Issue Published
1	96	7	February 26, 2018	March 2, 2018
2	76	6	April 26, 2018	May 4, 2018
3	96	7	August 21, 2018	September 4, 2018
4	(84)	8?	Planned for October 25, 2018	Planned for October 31, 2018

We continue to have very little backlog and are typically pushing to get papers revised and reviewed for production deadlines.

For each issue, I've selected and produced the cover image from one of the included papers. Typically, this involves working with the author to get high-resolution images and composing a final image in Photoshop and/or Illustrator. Authors are generally very excited to be asked to provide a cover image, but it is a time-consuming process that would be streamlined if they were

submitting high-resolution images (and additional images for the cover) in their original submission. While this option is available, no one has yet made use of it.

Goals for the coming year:

- 7. Meet production deadlines for volume 67, including editorials and cover images.
- 8. Publicize to authors the option to submit cover images that are related to (but not necessarily included as figures in) their manuscript.

#### **Awards**

The JGE Outstanding Paper Award this year went to David A. McConnell, LeeAnna Chapman, C. Douglas Czajka, Jason P. Jones, Katherine D. Ryker & Jennifer Wiggen for their paper entitled *Instructional Utility and Learning Efficacy of Common Active Learning Strategies*, Journal of Geoscience Education, 65:4, 604-625, DOI: 10.5408/17-249.1. In making this award, the nominators noted the explicit effort to link research to practice and make a large literature base accessible to a wide audience. In addition, the committee was pleased to award a literature review in a year that saw a surge of submissions in this relatively new category.

The JGE Outstanding Reviewer Award went to Glenn Dolphin at the University of Calgary. In making this award, the nominators noted his long record of thorough and insightful reviews, his repeated willingness to serve as a reviewer, particular attention to providing additional references to authors that would better inform and support their work, and his consistently turning in reviews early.

The awards will be presented at the joint GSA/NAGT/CUR Awards luncheon at the Annual GSA meeting. Awardees receive \$500 and an engraved plaque. The Outstanding Paper will be free access for the months of November and December, and both NAGT and Taylor & Francis will work to publicize the temporary access.

Goal for the coming year:

9. Revisit guidelines and develop timeline for deciding on awards.

#### **Subscriptions**

Subscriptions are now being managed by Taylor & Francis. We have 263 institutional subscriptions, of which 208 are in the US. We are also part of their Social Sciences & Humanities library and Education Subject Collection, but we are not included in these collections on the website, nor in the Earth Science collection, and we will not have any sales figures from this until 2019. This process has remained opaque.

As of September, GSA members have started receiving promotions for a special offer to subscribe to JGE at a reduced rate. This is a test to see if it generates individual subscriptions – these will not be processed through Taylor & Francis, but through NAGT.

We are currently in conversations with AGU and AMS to establish similar partnership agreements. AMS is enthusiastic; AGU was enthusiastic but have not responded to recent emails.

Goals for the coming year:

10. Clarify which collections we are included in and work with Taylor & Francis to promote our journal more broadly.

- 11. Assess the value of the GSA partnership.
- 12. Establish similar partnerships with AMS and AGU.

#### Reach

Since the new journal website opened in February, we've had a total of 6,671 full-text downloads, peaking in July and August (>1000/month) and down to 574/month in April. The top downloads come from the Big Ten Academic Alliance, followed by the Canadian Research Knowledge Network, Carleton College, and the University of Texas.

The top downloaded articles, not surprisingly, are Gold Open Access articles, those for which we have provided temporary free access as promotions, and editorials. Gold Open Access downloads are an order magnitude greater than downloads for non-open access articles.

Goal for the coming year:

13. Select 1-2 articles for free temporary access and promote these widely to generate broader reach and interest in subscriptions.

#### **Publisher**

We were informed on August 7 that Shrikrishna Singh (Krish), who established NAGT's relationship with Taylor & Francis, stepped down as Senior Publisher as of August 3. We have not heard anything since about a new Senior Publisher. I work most closely with our Managing Editor, Jen Paul, our Production Editor, Cathy Ott, and the Editorial Manager superstar, Katie Ormsby. I have reached out to our marketing contacts, Bryony Goodwin and Emily Matthias, but have received only sporadic communication from them. Jen Paul will be attending our editorial meeting at GSA, which will provide a good opportunity to discuss the publishing relationship further.

Goal for the coming year:

14. Focus on increasing marketing and subscriptions with Taylor & Francis.

#### **Miscellaneous**

Libarkin columns: For some reason, not all of the articles in the issues of JGE that NAGT digitized were scanned. At least one group of articles that was missing was columns written by Julie Libarkin on Research in Science Education—these were not available on the T&F site or the NAGT site and were not received from Allen Press. We provided PDFs of these files to T&F and they are now on the site.

JGE history: For the 2018 Rendezvous, I put together a poster with a timeline showing editors, columns, and miscellaneous other milestones in JGE's history. This was a very interesting process that gave me a much deeper understanding of both the journal and the organization. When all of the back issues were digitized, covers were not scanned, however – and the covers and front matter provide a whole lot of history. I am currently working with a student of Heather Macdonald's to scan the covers and lists of editors (if available). I hope to eventually create a web-based version of the poster I had at the Rendezvous.

JGE future: Informal conversations and feedback to my poster at the Rendezvous have suggested to me that there is a lot of enthusiasm around the idea of regular columns in the journal, as have appeared at various times in the past. Now that the submission and review process has stabilized, I plan to explore the possibilities more thoroughly and consider sustainable models for offering regular columns.

## NAGT Year-End Report 2018

#### Margaret Crowder Editor, *In The Trenches* Report prepared October 1, 2018

#### **Goals from last Report:**

- Continuing goals
  - o Updated style guidelines
    - Continuing
  - Possible creation of a column dedicated to contributions about NAGT member activities
    - Continuing (still no pieces being submitted by the different groups)
  - o Full transition to 12 page publication (instead of 16)
    - Completed, (now transitioning back to 16)
  - o Increased participation in online discussion areas. How do we better get readers to make the "leap" to the online space?
    - Continuing
    - Have had numerous online articles over this past year has that increased web traffic for ITT?
- New goals
  - o Publishing guidelines for usage (sharing our materials, etc.)
    - John Taber, Jen Wenner, Cathy Manduca previously expressed interest in this conversation
      - Open access for some articles?
      - One-year embargo?
      - Pdf format sharing?
      - Sponsorship of issues?
  - o Transition back to 16 pages
    - Inclusion of special additions such as My Favorite Demonstration, any approved letters to the editor, or occasional reports from different sections can help add consistent sections to issues

#### **NAGT Executive Committee work:**

- Meetings: participation in virtual meetings
- ITT editing duties
  - Work completed
    - Quarterly issues published for 2018
      - January 2018 "Seismology Lessons with Deep and Lasting Impact" (12 pages)
        - Four print articles and four online articles from seven authors; all but one article from a proposed theme by several of the authors; one article from online contributions

- April 2018 "Perspectives on Science and Religion" (12 pages)
  - Five print articles and two online extras (one is supplemental resources) from six authors; all authors invited contributors for this themed issue
- July 2018 "Making Earth Science Visible, Accessible, Engaging (12 pages)
  - o Three print articles, plus one letter to the editor
  - o Submitted materials; no theme
- October 2018 "Celebrating Teachers Who Inspire" (16 pages)
  - o Two print articles; one online article; awards
- Work in progress
  - Themed issues planned for next issue (January 2018):
    - possible topic on the intersection of art and the geosciences; using art to encourage and support science learning and engagement in the classroom
      - o -OR-
    - proposed topic on Economic Geology and the need to still teach the subject, while including environmental aspects
    - (Continuing question: Are there other theme ideas?)
  - A handful of articles have been submitted online/via email for consideration. Some are not feasible for various reasons; some authors do not respond to suggested draft submissions or edit prompts.
    - We had a submission issue earlier in the year (that seems to have now been fixed).
    - (Continuing issue: How can we make ITT more accessible for good potential authors to submit? How can we get people to consider ITT as a space for preliminary-types of pieces that could eventually be data/research supported and then grow to fit JGE?) I believe many people don't realize that we have a more informal style that invites authors who might not traditionally be publishing with other outlets.
  - A continuing idea from the past two years was creating a regular column with a rotating set of authors to share activities.
    - We have revived "My Favorite Demonstrations"
    - Still would like to have a regular column of contributors from the NAGT committees/liaisons/officers, etc. could report information on activities, activism, and NAGT member involvement in their own communities
      - (It would be helpful to have a rotating list of willing contributors from the committee to report on various topics.)

- o Advertising
  - Print advertising has increased, with two ads in the upcoming October issue
- o Opportunities & concerns
  - Continuing: We have an opportunity to build the relationships/connections between members in the online space of ITT. This platform could provide a springboard for collaborative efforts in educational research activities and lead to future publication in JGE, but we have to find ways to promote it and engage the audience. I don't see that the discussion space is being utilized. (What are our "click" counts for the online extras?)
  - (Continued concern: If the online extension does not get views, then do we decrease the effectiveness of ITT?)
  - (Continuing question: Could we have some material online available to non-members, to try and draw in an outside audience?) Some articles could be behind the member wall, but others could be "free." This would allow us to use social media/other outlets to promote ITT materials to a broader population and perhaps draw members.
  - The seismology (January 2018) issue of ITT was requested for workshop distribution by Randy Bechtel

#### Goals for next reporting period:

- Continuing goals
  - o Update style guidelines
    - I think we just need to better outline this online. I know this continues to be on my list it's not been a priority.
  - Possible creation of a column dedicated to contributions about NAGT member activities
  - Finding ways to increase participation perhaps some "open access"
- New goals
  - o Creation of publication guidelines

#### **NAGT Website Report**

September 2018

John McDaris and Andrew Haveles

In the period between September 2016 and September 2017, the NAGT website continued to add new content through collaborations with AGI and sponsored projects. Overall site use increased over this period compared to the same period the previous year. The site received 37% more visits from 44% more users.

#### **New Website Content since September 2017**

*In the Trenches* 

https://nagt.org/nagt/publications/trenches/index.html

Four issues of ITT were added to the site over the course of the year.

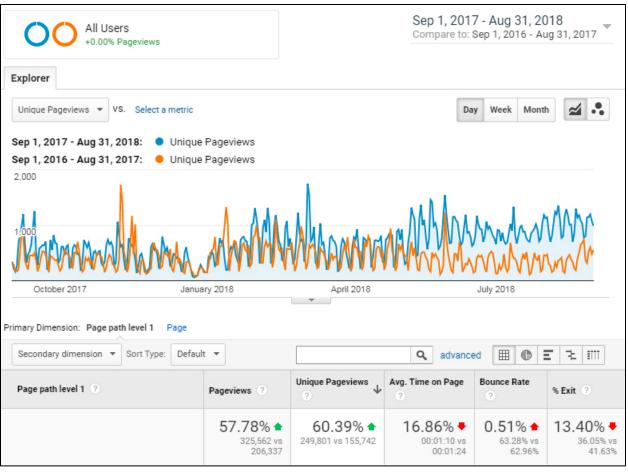
Implementing the NGSS

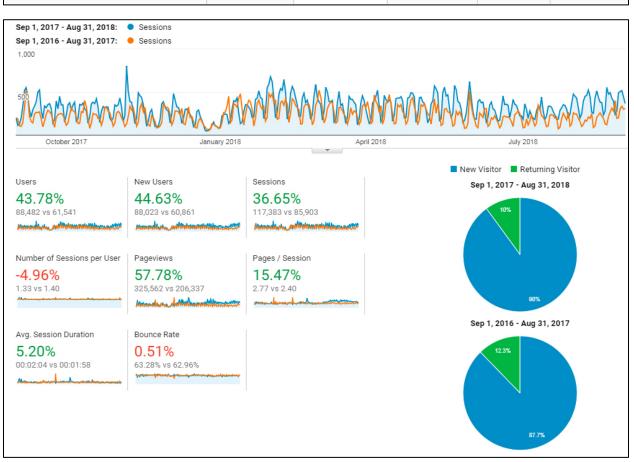
http://nagt.org/nagt/profdev/workshops/ngss\_summit/index.html

The NAGT collaboration with AGI on the NGSS webinar series has added the materials from six new webinars to the site.

Community Framework for Geoscience Education Research <a href="https://nagt.org/nagt/geoedresearch/GER">https://nagt.org/nagt/geoedresearch/GER</a> framework/index.html

The group led by Kristen St. John has published the Community Framework on the site, based on several years' work with the GER community at workshops and professional meetings. The framework lays out community-endorsed priorities for research in geoscience education.





#### Website Use

Between September 1, 2017 and August 31, 2018, the NAGT website received 117,383 visits from 88,482 users of whom 10% were repeat visitors. This represents a 37% increase in traffic over the previous year. Unique pageviews for this period were 249,801 versus 155,742 for the previous period, representing a 60% increase. The most popular parts of the website for this period (as a percentage of unique page views) were News (23%), Professional Development (21%), and Teaching Resources (18%).

For comparison, the same period the previous year saw 85,903 visits from 61,541 users of whom 12% were repeat visitors. The most popular parts of the website during that period were Teaching Resources (38%), Professional Development (22%), and About NAGT (8%).

#### Section and Division Website Usage (for those hosted at SERC)

Traffic to Section Websites hosted by SERC, overall, increased year-on-year. Central Section continues to be the section receiving the most traffic with just over 800 unique pageviews (an increase of 9%). New England grew from 149 to 267 (+59% change). North Central held relatively steady with 117 vs 121 last year. Southwest section traffic went from 86 down to 84, also essentially unchanged.

Traffic to Division Websites increased overall by 41% year on year. The GER Division saw a 57% increase from 1,464 to 2,303. The Geo2YC Division increased from 1,157 to 1498 unique pageviews (+29%). The TED Division increased by 43% from 598 to 854.

### NAGT Annual Report Fall 2018 John Taber Councilor-at-Large, 2016-2019 Report prepared 10/2/18/18

#### **Goals from last Report:**

- Improve connection with Eastern Section leadership
- Successfully organize Fall GSA Education Section sessions

#### **NAGT Executive Committee work:**

- · meetings attended
  - o September 25, 2017 (virtual)
  - o October 22, 2017 (F2F @ GSA)
  - o December 1, 2017 (virtual)
  - o January 29, 2018 (virtual)
  - o April 19-22, 2018 (F2F in Ithaca)
  - o June 25, 2018 (virtual)
- assigned task: NAGT representative on the GSA Joint Technical Program Committee
  - Reviewed and approved education sessions before abstract submission
  - 14 education sessions and 1 short course will be sponsored or cosponsored by NAGT
  - Assisted in populating and organizing sessions in August 2018

#### **NAGT Council work:**

- meetings attended
  - o September 28, 2017 (virtual)
  - o October 22, 2017 (F2F @ GSA)
  - o February 9, 2018 (virtual)

#### **NAGT Committee work:**

- Neil Miner Award selection committee
  - o Initial rankings provided and selection made

#### Liaison activity: Eastern Section

- officers, terms of office and contact information
  - President: Jason Petula, (717) 872-3422;<jpetula@millersville.edu>
  - Past President: Dave Ludwikoski, 443-840-4216,<dludwikoski@ccbcmd.ed>
  - Vice President: Mike O'Donnell <modonnel@blueridgectc.edu>
  - o Treasurer: Renee Aubry, <raubry@otunet.com>

- Secretary: Rosemarie Sanders, 914-721-0948;<Rose.Sanders@me.com>
- o Editor: Callan Bentley, (W)703-323-3276; <cbentley@nvcc.edu>
- Archivist: Steve Lindberg; 814-539-7723(H);<minerlight@atlanticbb.net>
- financial information
  - o Division Financial information not discussed
- meetings
  - Annual Eastern Section meeting and field trips held in Millersville, PA, June 7-9, 2018 (I didn't attend)
- significant accomplishments of division/section
  - Newsletters:
    - Volume 67, Issue 4, Fall 2017
    - Volume 68, Issue 1, Winter 2018
    - Volume 68, Issue 2, Spring 2018
    - Volume 68, Issue 3, Summer 2018

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

- NSTA regional conference, Baltimore, 10/6/18, two 1-hour PD sessions
- GSA Annual Meeting, Seattle, Oct 2017
  - NAGT & GSA Geosci Ed Div Awards luncheon
  - Geoscience Educators reception
  - Co-author on 1 presentation
- AGU Annual Meeting, New Orleans, Dec 2017
  - Assisted in NAGT booth
  - Co-presenter at GIFT workshop
  - Author or co-author on 2 presentations
- Educational and Citizen Science Seismology workshop, London, 2/15-2/16/18
  - Invited plenary speaker
- NSTA annual conference, March, 2018, Atlanta, IRIS booth and one 30-min PD session
- USA Science and Engineering Festival, Washington, DC, 4/6-4/8/18, IRIS booth
- InSight mission launch and outreach activities (seismometer going to Mars), Lompoc, CA, 5/3-5/6/18
- 11 National Conference on Earthquake Engineering, Los Angeles, 6/28/18
  - 2 presentations: seismic and geodetic educational resources; social media strategies
- Earth Educators' Rendezvous, Lawrence, KS, 7/16-7/20/18
  - Co-author for 3 presentations
  - Provided IRIS resources table
  - EarthConnections meeting

#### Other activities relevant to NAGT:

- INCLUDES pilot project: EarthConnections Helped conduct community meetings to develop educational pathways for Native American tribes and educational groups in Oklahoma, 10/10/17 and 8/20/18
- AGU Education Advisory Group, 1/25-1/26/18, assisted in drafting Education Section proposal
- Assisted with 1.5 days of Smithsonian Science Education Center (SSEC) Science Education Academy for Teachers, Washington, DC, 7/30-7/31/18
- Co-editor with Dave Gosselin and Anne Egger for InTeGrate compilation: Interdisciplinary Teaching about Earth and the Environment for a Sustainable Future, submitted to Springer 8/15/18

#### **Upcoming Activities**

• 2018 GSA Annual Meeting, Indianapolis, 11/4-11/7/18

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

• Improve connection with Eastern Section leadership

### NAGT Mid-Year Report Spring 2018 Jennifer M Wenner

Councilor-at-Large, 2016-2019 Report prepared: March 26, 2018

#### **NAGT Executive Committee work:**

- meetings attended
  - o October 22, 2017 (F2F @ GSA)
  - o December 1, 2017 (virtual)
  - o January 29, 2018 (virtual)
  - o April 19-22, 2018 (F2F in Ithaca)
  - o June 25, 2018 (virtual)
  - o October 3, 2018 virtual
- opportunities & concerns: None

#### **NAGT Council work:**

- meetings attended
  - o October 22, 2017 (F2F @ GSA)
  - o February 9, 2018 (virtual)
  - o June 12, 2018 (virtual)
- opportunities & concerns: None

#### **NAGT Committee work:**

- Professional Development Committee (serve as Chair of the Teach the Earth Website committee)
  - o meetings attended
    - February 6, 2018 (virtual)
    - March 29, 2018 (virtual)
    - May 24, 2018 (virtual)
  - Work completed
    - See Teach the Earth committee report below.
    - Prepared GeoEd bid
  - Work in progress
    - Expanding membership to make it more diverse

•

- Teach the Earth Website committee
  - o meetings convened and attended (virtual): November 9, 2017

December 5, 2017 January 18, 2018 February 22, 2018 March, 23, 2018 May 22, 2018 June 25, 2018 September 20, 2018

- o work completed:
  - Memorandum of understanding developed and implemented between Clay Mineral Society and NAGT

- Developed and posted description and application for Cutting Edge Editor positions.
  - (<a href="https://serc.carleton.edu/teachearth/tte\_editor.html">https://serc.carleton.edu/teachearth/tte\_editor.html</a> and <a href="https://serc.carleton.edu/teachearth/TTE\_editor\_app.html">https://serc.carleton.edu/teachearth/TTE\_editor\_app.html</a>)
- Developed a policy and format for linking external sites within SERC.
- Drafted policy on pop-ups on Teach the Earth (TTE) portal
- Discussed site review policies
- Solicited links from external geoscience education sites
- Solicited feedback on the portal at Earth Educators' Rendezvous
- Developed protocol for collecting, cataloging and managing external sites within TTE. This could be a potential application of the site review protocol in future years – this is how we vet the sites.
- Activity Review Camp completed in July 2018 at Earth Educators' Rendezvous (EER).
- Filled out membership with Sarah Fortner replacing Anne Egger on the committee and established terms of committee membership.
- Presented poster at EER
- o work in progress:
  - Filling out membership with 1-2 members (have one person in the works, need approval from committee and PD committee). Need to think about how best to fill out our membership with diverse and relevant membership. Working on a spreadsheet to determine how to stagger membership so that we retain some institutional memory.
  - Discussing how best to link Journal of Geoscience Education (JGE)/In the Trenches (ITT) with TTE. John McDaris is pulling together something for the upcoming Diversity and Inclusion special issue of JGE. This will include a new resource that aggregates the Diversity resources on SERC and will represent a model for something beyond a site guide. These will be linked to the Diversity and Inclusion special issue and vice-versa.
  - Continuing to work on plan for soliciting/recruiting editors (see Challenges 1-3 below)
  - Working on identifying gaps in content within Teach The Earth (See Challenge 2 below).
- o opportunities & concerns:
  - Below are the three challenges that the committee identified, I have included a plan for how we overcome these challenges:
    - Challenge 1: Understanding the current collection. The committee needs to create a landscape map of the site to identify gaps in content and where gaps need to be filled. We identified two ways to do this:
      - The committee examines parts of the site we think are important/popular and identifies gaps or updates

- Survey users (particularly at the Earth Educator Rendezvous) to see where they identify gaps or needed updates
- Challenge 2: Filling in gaps in content making the site as comprehensive as possible.
  - o Identify external sites that fill in gaps, or
  - o bring in editors who can fill those gaps
- Challenge 3: Updating content
  - Recruit editors who are committed to updating content in current collection
- One opportunity for the future is to think about things like site review of external sites and how those are funded those in the future.

#### Liaison activity: Council for Undergraduate Research

- meetings attended
  - o October 22, 2017 (@ GSA)
- significant accomplishments of division/section
  - o Presented 15 GeoCUR Awards for Excellence in Student Research
  - Undergraduate Research Mentor Award: Mark Wilson, College of Wooster, presented GSA 2017
  - Organized and sponsored Undergraduate Research Poster Sessions for North-Central, Southeastern (4 sessions), and Joint Rocky Mountain/Cordilleran (*upcoming*) GSA Sectional meetings
- opportunities & concerns: None

#### Liaison activity: Central Section

- officers, terms of office and contact information
  - o President: Beth Johnson (2015-2018)
  - o 1st Vice President: Alexa Sedlacek (2016-2019)
  - o 2<sup>nd</sup> Vice President: Kelsey M Arkle (2017-2020)
  - o Past President/Secretary: C. Renee Sparks
  - o Treasurer: Michael Wolf
  - o OEST Chair: Susan Wolf
- financial information
  - Section Financial information not discussed
- meetings attended/held
  - o none
- significant accomplishments of division/section
  - None reported
- opportunities & concerns

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

- GSA 2017 Annual Meeting
  - o October 22-25, 2017
  - activities relevant to NAGT: Educators reception, assisted at NAGT booth, NAGT/GeoED/GeoCUR luncheon

• 2018 Cordilleran Section Meeting, May 14-16, 2018, Flagstaff, AZ

#### Other activities relevant to NAGT:

• Incorporating InTeGrate materials into my introductory geoscience (Physical Geology) course. Working on developing this course into a science course that fits into our new general education program at UWO.

#### **Upcoming Activities**

• 2019 GSA Annual Meeting, October 4-7, Indianapolis, IN

## Goals for next reporting period:

- Continue chairing TTE committee and moving forward with items above
- Have new members of TTE in place
- Complete assessment of TTE and begin to recruit editors

#### NAGT Annual Report Fall 2018 (Joshua Villalobos) (Councilor at Large) Report prepared 10/22/18)

#### **Goals from last Report:**

- Help create NAGT Texas section.
- Continued goals:
  - o Help promote 2yC-4YC collaboration regionally and nationally
  - o Increase active learning in the geosciences
  - o Engage more geoscience educators to join and participate in NAGT

#### **NAGT Executive Committee work:**

- meetings attended:
- NAGT ExComm meeting (virtual meeting) 1/29/18
- NAGT executive meeting (virtual meeting) 6/25/18

#### **NAGT Council work:**

- NAGT Council meeting (virtual meeting) 9/28/17
- NAGT Council meeting (virtual meeting) 2/9/2018

#### **Liaison activity:**

- No work has been done regarding GSA field camp scholarships
- opportunities & concerns- None

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

- GSA 2017 Annual Meeting
  - o Oct. 12-25, 2017
  - o NAGT awards ceremony
  - o Educators reception

#### Other activities relevant to NAGT:

- Co-PI on two NSF (REU and IMPACTS) projects:
  - Research Opportunities for Community College Students (ROCCS) and Service Learning Activities Targeting Earth Science (SLATES)
  - o Both programs are geared to engage 2YC students both nationally and locally in the geosciences. These programs emphasize the importance of both research and community knowledge to help build a sustainable and educated student population for the geosciences.
  - o TWP co leader Pasadena Community College (Aug. 25-26<sup>th</sup>) 2017
  - TWP co leader Costa Mesa Community College San Diego (Aug. 11<sup>th</sup>) 2017

## **Upcoming Activities**

• TWP co leader University of Hawaii (Nov 31<sup>st</sup> –Dec 1<sup>st</sup>) 2018

## Goals for next reporting period:

- Continue to promote the role of 2YC in higher education
- Broaden the discussion with 4YC on the challenges we are facing with the lack of minorities in the geosciences
- Help develop talking points and strategies to encourage minorities to enter PhD programs.

# NAGT End-of-Year Report FALL 2018 Kathy Ellins Councilor-at-Large Report prepared 10-04-18

# **Goals from last Report:**

- Donor Development
  - o Provide feedback to NAGT on "test" phone calls to prospective donors.
  - Help refine processes to support strategic goals.
  - Continue to implement strategy by reaching out to prospective donors and identifying new prospects.
- Texas NAGT Section
  - o Follow up with the NAGT member who expressed an interest in trying to revive NAGT Texas Section to see if she is still interested. If so, schedule telephone conference call this person, Krista H. and Josh V. to determine next steps.
- TED
  - Continue to encourage secondary students, graduate and undergraduate with whom I interact to become members of NAGT and participate in NAGT TED.
  - o Follow-up with TED regarding review of CAEP SPA materials provided by Eric Pyle and implementation of Teacher Leader Recognition Program.

### **NAGT Executive Committee work:**

- Meetings attended
  - o October 22, 2017 ExComm (F2F meeting at GSA)
  - o November 17, 2017 ExComm (virtual meeting)
  - o December 1, 2017 ExComm (virtual meeting)
  - o January 29, 2017 ExComm (virtual meeting)
  - o April 19-22, 2018 (F2F in Ithaca). Participated via remote connection due to illness
  - o June 25, 2018 ExComm (virtual)
  - October 3, ExComm (virtual)

### **NAGT Council work:**

- Meetings attended
  - o October 22, 2017 (F2F meeting at GSA)
  - o February 9, 2018 (virtual meeting)
  - o June 12, 2018 (virtual meeting)
- Opportunities & concerns: None

### **NAGT Committee work:**

- Donor Development Committee
  - Meetings attended
    - December 19 (virtual meeting)
    - January 23(virtual meeting)
    - February 6 (virtual meeting)
    - February 27 (virtual meeting)
    - March 20 (Joined virtual meeting late)

- April 9 (virtual meeting)
- May 3 (virtual meeting)
- June 5 (virtual meeting)
- July 10 (virtual meeting)
- Work completed
  - Contributed to the development of Donor Development strategic plan, reviewed by ExComm in April and approved.
  - Participated in discussion on identifying prospective donors.
  - Contributed to the development and review of scripts for email and telephone solicitations, as well donor categories.
  - Reached out by email to two active NAGT members to schedule phone calls with them to "test" solicitation approach, and ask for their feedback and ideas about the donor initiative.
  - NAGT conducted successful Challenge Grant at the 2018 EER.
  - Work in progress
    - Continuing EER Matching Efforts to support donor initiative strategic goals and implement the strategy by reaching out to prospective donors and identifying new prospects.

### Liaison activity:

- Reviving NAGT's Texas section and finding a host institution
  - Identified NAGT member now at UT Austin who has expressed interest in leading the effort to revive NAGT's Texas section and put her in touch with Krista H.
  - o Follow-up suggested that NAGT member who expressed interest may not be available at this time.
  - Reached out at the Rendezvous to an Austin Community College faculty member who is interested.
  - o Follow-up required.

#### TED

- Meetings Attended
  - Oct. 22, 2017 TED (F2F at 2017 GSA)
  - January 9, 2018 TED (virtual meeting)
  - March 13 TED (virtual meeting)
  - May 8 (virtual meeting)
  - August 14 TED (virtual meeting)
- Information from meetings
  - Sponsorship at EER Rendezvous, July 16-20, 2018. TED sponsored travel grants for teachers and an event (e.g., coffee break)
  - GSA 2018, Indianapolis, 4-7 November 2018. Sessions: Collaborative Partnerships between K-12 Teachers/Informal Educators and Scientists Session ID#: 45539 and Exploring the ART in E(ART)h Science Session ID#: 45550 (sessions submitted in partnership with NESTA). Merged with another session.
  - TED has a presence on Facebook and publishes a quarterly newsletter.
  - TED continues to explore ways to increase NAGT TED presence at Association for Science Teacher Education ASTE (Eric Pyle)
- Teacher Leader recognition standards proposed and developed. Will help define teacher competencies, skills, and attitudes that benefit geoscience as a discipline.
  - Helped draft teacher-leader recognition letter with two levels of teacher-leaders: The first level recognizes a teacher-leader who meets seven of ten

- criteria. The second level recognizes a teacher-leader "extraordinaire" who meets nine of ten criteria.
- Proposed rewards for teacher leaders include: A certificate and one-year payment of NAGT-TED division dues for the first level. A certificate and one-year payment of NAGT membership dues for the second level. Or, Recognition may begin simply as an award letter.
- Presentations at GSA & AGU in late 2018.
- NAGT Council approval will be sought and TED implementation during FY19 if possible.
- Work in progress
  - Re: Teacher Preparation Programs. CAEP SPA reviews. Council for the Accreditation of Educator Preparation (CAEP). Specialized Professional Association (SPA)
  - TED geoscience teacher leader recognition program.
  - Follow-up with TED regarding review of CAEP SPA materials provided by Eric Pyle
  - Implementation of Teacher Leader Recognition Program.
- Other NAGT
  - o New TWP facilitator. Attended March 3-4 preparatory meeting in Boise, Idaho.

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

- GSA 2017 Annual Meeting
  - o October 21-25, 2017
  - Activities relevant to NAGT
    - Educators reception
    - InTeGrAte reception
    - NAGT awards luncheon
- AGU Annual Meeting, New Orleans, Dec 2017
- Earth Educators' Rendezvous, Lawrence, KS, 7/16-7/20/18
  - o Announced Donor Matching Challenge on field trip and at Opening Ceremony
  - o Present at events (coffee breaks, etc.) sponsored by TED
  - o Participated in EarthConnections meeting and related events

### Other activities relevant to NAGT:

- INCLUDES pilot project: EarthConnections Tribal National Alliance
  - Co-leader of regional pilot with Norma Neely. Collaborated with Dr. Neely and John Taber to plan and conduct community meetings to develop educational pathways for Native American tribes and educational groups in Oklahoma, 10/10/17 and 8/20/18.
  - Lead author on 1 presentation about EarthConnections Tribal National Alliance and co-author on 1 other presentation.
  - Supported transition of EarthConnections Tribal National Alliance to the Oklahoma Geologic Survey.

### **Upcoming Activities**

### Goals for next reporting period:

### **GSA** Teacher Leader.

- Donor Development
  - Help refine processes to support strategic goals.

- Continue to implement strategy by reaching out to prospective donors and identifying new prospects.
- Texas NAGT Section
  - Follow up with the ACC NAGT faculty member interested in reviving NAGT Texas Section.
  - Schedule telephone conference with Josh V. to determine next steps.
- TED
  - Continue to encourage secondary school teachers, JSG graduate and undergraduate students to become members of NAGT and participate in NAGT TED.
- TWP
  - o Explore opportunities to serve as a TWP facilitator

# NAGT Annual Report Fall 2018 Aisha R. Morris Councilor-at-Large Report prepared 09-25-18

# **Goals from last Report:**

- Continuing goals
  - Explore mechanisms to raise visibility of broadening participation efforts (Develop new initiatives? New partnerships?)
  - Engage with professional development activities, particularly for early career professionals
  - o Learn more about NAGT activities and how I can best serve!
- Develop plan and activities for Diversity ad hoc committee recruit new members as appropriate

### **NAGT Executive Committee work:**

- October 2017 ExComm face to face meeting at GSA
- November 2017 ExComm virtual meeting
- January 2018 ExComm virtual meeting
- April 2018 ExComm face to face meeting in Ithaca, NY
- June 2018 ExComm virtual meeting

### **NAGT Council work:**

- February 2018 Council virtual meeting
- June 2018 Council virtual meeting

# **NAGT Committee work:**

• Chaired biweekly meetings of ad hoc Diversity Committee – developed recommendations for ExComm

### Liaison activity:

• North Central Section – not active

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

- Fall AGU; December 2017; Volunteered at NAGT booth; attended educators reception and diversity reception; co-chaired undergraduate poster showcase
- Council on Undergraduate Research Alexandria, VA July 2018
- Earth Educators' Rendezvous co-authored poster about NAGT Diversity Committee activities July 2018 (did not attend in person)
- National Association of Black Geoscientists (NABG) Technical Conference Atlanta, GA – September 2018

# **Upcoming Activities**

• GSA Annual Meeting (co-chairing session on broadening participation in the geosciences;) – Indianapolis – November 2018

# Goals for next reporting period:

- Assist with start up of more permanent diversity committee
- Identify any adjustments in committee work that need to occur with job change

# NAGT Mid-Year Report Fall 2018 Mike Phillips

# Councilor-at-Large, 2015-2018 Report prepared: October 2, 2018

# **Goals from last Report:**

- Lead Advocacy Committee
  - o hold quarterly meetings
  - o develop a strategic goals and plan
  - o develop formal processes to support strategic goals

### **NAGT Executive Committee work:**

- meetings attended
  - o September 25, 2017 (virtual)
  - o October 22, 2017 (F2F @ GSA)
  - o December 1, 2017 (virtual)
  - o January 29, 2018 (virtual)
  - o April 19-21 (F2F @ Ithaca)
  - o June 25, 2018 (virtual)
- assigned tasks (other than that reported in other sections below)
  - o Chair Advocacy Committee assigned tasks listed under Advocacy
- opportunities & concerns: None

### **NAGT Council work:**

- meetings attended
  - o September 28, 2017 (virtual)
  - o October 22, 2017 (F2F @ GSA)
  - o February 9, 2018 (virtual) unable to participate
  - o June 12, 2018 (virtual)
- opportunities & concerns: None

### **NAGT Committee work:**

- Advocacy Committee
  - o Committee members
    - Mike Phillips (Chair)
    - Frank Granshaw (2019-2022)
    - Tamara Ledley (2018-2020)
    - Suzanne Metlay (2018-2021)
    - Euan Mitchell (2018-2021)
    - David Mogk (2018-2020)
    - Sherry Oaks (2018-2019)
    - David Szymanski (2018-2021) AGI Critical Issues Rep
    - Wendy Van Norden (2018-2019)
    - Wendi Williams (2018-2020) NAGT Liaison to AGI Geoscience Policy Advisory Committee

- ex-officio: Don Duggan-Haas (NAGT President)
- o meetings attended:
  - September 29, 2017 (conf call w/ Cathy, Don & Anne)
  - December 8, 2017 (virtual)
- o work completed:
  - Reorganized and updated the Advocacy Workspace pages on the SERC web site
  - Strategic Plan finalized and approved by Exec Comm
  - Split Advocacy email lists into two lists: Committee & Interest
  - Letter response to proposed changes to New Mexico Science Standards
  - Approved sign-on the AAAS Multiorganization Letters:
    - Immigration
    - Impact of Proposed Tax Reform Language on Graduate Students
  - Presented (with co-author Don Duggan-Haas) "NAGT Advocacy: Growing an Organization's Outreach Program" at Fall 2017 GSA Annual meeting.
  - Approved partnership with 2018 March for Science
  - Recruited and received Exec Comm approval of new members
- o work in progress:
  - update web site (ongoing)
  - develop process to review and update existing position statements and identify, develop new position statements, endorse position statements of other organizations
  - develop a process for identifying issues and writing letters as needed
- o opportunities & concerns:
  - Advocacy Committee needs to finalize guidance documents for preparing advocacy letters and position papers
  - I was not able to make much progress on my goals.

# Liaison activity: 2YC Division

- officers, terms of office and contact information
  - o President: Callan Bentley, 2017-2018, cbentley@nvcc.edu
  - o Vice President: Joy Branlund, 2018-2019, Joy.Branlund@swic.edu
  - o Sec/Treas: Wendi Williams, 2015-2019, wwilliams@nwacc.edu
  - o Newsletter Editor: Suki Smaglik, 2017-2018, suki.smaglik@gmail.com
  - o Webmaster: Chris Johnson, 2015-2019, christopher.johnson@slcc.edu
  - o Archivist: Peter Beerquist, 2017-2020, berquistp@tncc.edu
  - o Past President: Brett Dooley, 2017-2018, bdooley@msjc.edu
- financial information
  - o N/A
- meetings held (and attended)
  - o October 22, 2017 (F2F @ GSA)
  - o December 11, 2017 (virtual)

- o April 13, 2018 (virtual)
- o September 14, 2018 (virtual)
- significant accomplishments of division/section
  - o Preparing a Position Paper/White Paper on Field Studies
  - o Outstanding Adjunct Faculty Awards for 2017:
    - Wendi J. W. Williams (Spring)
    - Sherry Oakes (Summer)
    - Martha Murphy (Fall)
  - Yellow mechanical pencil/scale continues to be very popular! Additional supply purchased with the assistance of NAGT.
  - o Publishing the newsletter, "Foundations"

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

- GSA 2017 Annual Meeting
  - o October 21-25, 2017
  - o activities relevant to NAGT
    - Helping students @ 2YCs Workshop
    - Educators reception
    - InTeGrAte reception
    - YBRA reception
    - assisted at NAGT booth
    - NAGT Past Presidents' Breakfast & NAGT lunch
    - GSA Geology & Society Div Meeting
    - Co-authored three oral presentations (two for an Integrate session and one regarding NAGT Advocacy)
- SAGE 2YC Workshop @ Waubonsee College
  - o November 10, 2017
  - o activities relevant to NAGT
    - Supporting student success through active learning & metacognition
    - Participants were 2YC geoscience faculty from around the state
- Earth Educator's Rendezvous
  - o July 15-20, 2018
  - o activities relevant to NAGT
    - Review Camp
    - Earth Educator's Forum
    - Geo2YC social
    - Co-Lead Mini workshop w/ Dr. Dan Wildcat "Exploring Applications of Indigenuity"

### Other activities relevant to NAGT:

- Illinois Board of Higher Education Faculty Advisory Council
  - The FAC is an advisory group to the Illinois Board of Higher Education (IBHE), is a representative group of faculty in the State of Illinois. It has 36 members; 12 each from public universities, public community colleges, and private proprietary institutions. I have been appointed to a three year

term as a representative of public community colleges. The FAC meets monthly to discuss issues such as funding, trends in textbook publication, and addressing the needs of students. The acts as an advocate for higher education in general and faculty in particular.

- Illinois Federation of Teachers
  - Higher Education Constituency Council An organized labor group that discusses issues effecting higher education in Illinois and organizes faculty and staff to address those issues.
  - Participated in endorsement sessions interviewing candidates for state and federal office as a member of IFT and AFL/CIO
- Lostant School Board of Education (president)
- Interaction with local media
  - o Interview to discuss the importance of voting in the Primary election
  - o Interview with local news reporter discussing college freshmen enrollment issues facing Illinois.
- Outreach at IVCC
  - o Visit to 4<sup>th</sup> grade classroom at local school to discuss rocks and fossils
  - o Presented "You Be The Geologist" at Career Day
  - o Organizing activities at IVCC SciFest with the assistance of students: fossil identification, mineral identification, and augmented reality sandbox
  - o 4H Fair Judge for Natural Sciences

# **Upcoming Activities**

- 2018 GSA Annual Meeting at Indianapolis, IN
  - o Oral presentation: "Building Trust And Promoting Scientific Realism In The Classroom And Community: A Pathway To Climate Sanity"
  - o Recognition as a newly elected GSA Fellow
  - Participation in NAGT Exec Comm, Council, Geo2YC, and Lunch meetings

### Goals for next reporting period:

• Participate in Advocacy Committee (rotating off Exec Comm)

# National Association of Geoscience Teachers Central Section Report (2018)

### **President:**

Alexa Sedlacek

Department of Earth and Environmental

Sciences

121 Latham Hall

University of Northern Iowa

Cedar Falls, IA 50614

alexa.sedlacek@uni.edu

### 1<sup>st</sup> Vice-President:

Kelsey M. Arkle

Department of Geology

Augustana College

639 38th St.

Rock Island, IL 61201

kelseyarkle@augustana.edu

# 2<sup>nd</sup> Vice President:

Vacant

### **Treasurer:**

Michael Wolf

Department of Geology

Augustana College

639 38<sup>th</sup> St.

Rock Island, IL 61201

michaelwolf@augustana.edu

# Past President/Secretary

Beth A. Johnson

Department of Geography and Geology

University of Wisconsin-Fox Valley

1478 Midway Road

Menasha, WI 59452

beth.a.johnson@uwc.edu

# **OEST (Outstanding Earth Science**

# Teacher) Award Chair:

Susan Kornreich-Wolf

Augustana College

Fryxell Geology Museum

Rock Island, IL 61201

susanwolf@augustana.edu

### **Activities in the Section- 2018**

- 1) The Central Section officers met during the North Central Geological Society of America meeting on April 16, 2018 at the section's annual luncheon.
- 2) Central NAGT co-sponsored a theme session at North Central Geological Society of America meeting in Ames, Iowa in April 2018. The session included 19 presentations: Collaborative Learning in Geoscience Classrooms and Labs: Examples, Demonstrations, Best Practices, and Assessment. Cosponsored by the GSA Geoscience Education Division and the National Association of Geoscience Teachers.
- 3)Susan Kornreich-Wolf (Augustana College) organized the solicitation and selection of the 2018 NAGT Central Section Outstanding Earth Science Teacher Awards (OEST). A total of six nominations were submitted, and five nominated teachers submitted applications to be considered for the award. The Central Section requires both a nomination and an application. The following are the details for each winner as provided by Susan (Thanks for all the hard work, Susan!):

The Central OEST committee chose high school earth and space science teacher, Collin Reichert, (collin.reichert@ames.k12.ia.us) from Ames High School, Ames, Iowa as the NAGT Central Section OEST 2018 winner. The Central Section Committee of the National Association of Geoscience Teachers was particularly impressed with Mr. Reichert's passion for, and promotion and teaching of model-based reasoning in the geosciences, and his ability to get his students actively involved in a variety and a number of community impact projects. In addition, his clarity in writing and detailed examples of his teaching content gave us a clear picture of his passion for earth science teaching and his philosophical devotion and dedication to an ideal education system.

The Central OEST committee chose **Dennis Rohr** ( drohr@seymour.k12.wi.us ), science teacher at Seymour Community High School, in Seymour, Wisconsin as the **NAGT Wisconsin OEST state winner for 2018**. The Central Section Committee of the National Association of Geoscience Teachers was particularly impressed with Mr. Rohr's ability to involve his students in real-world groundwater research and testing, his development of summative earth science projects, including field experiences, and his work to share his lessons with fellow teachers through teacher associations' workshops, web pages and field trips.

The Central OEST committee chose **Dan Gruhlke** (dan.gruhlke@monticello.k12.mn.us), STEM Specialist at Eastview Education Center, in Monticello, Minnesota as the **NAGT Minnesota OEST state winner for 2018.** The Central Section Committee of the National Association of

Geoscience Teachers was particularly impressed with Mr. Gruhlke's passion for nature-based science education, and his creative methods to instill in his students a sense of wonder of the natural world and a love of science

The Central OEST committee chose Cayeann Cowan

(cayeann.cowan@robertson.kyschools.us), 6-12 grade science teacher at Robertson County School, Mount Olivet, Kentucky, as the NAGT Kentucky OEST state winner for 2018. The Central Section Committee of the National Association of Geoscience Teachers was particularly impressed with Ms. Cowan's ability to create and implement inquiry-based lessons that engage all learning styles, and her compassionate, enthusiastic way of teaching earth science to many grade levels and student abilities.

The Central OEST committee chose **Andrew Peterson** (ajpeterson2@cps.edu), science teacher at Whitney M. Young Magnet High School, in Chicago, Illinois as the **NAGT Illinois OEST state winner for 2018**. The Central Section Committee of the National Association of Geoscience Teachers was particularly impressed with Mr. Peterson's ability to adapt college-level concepts by developing rigorous inquiry-based earth science labs, enabling 7th graders to tackle challenging geologic questions.

### **Plans**

The 2019 National Association of Geoscience Teachers – Central Section is considering co-sponsoring a Tri-State field trip with Great Lakes Section, Society for Sedimentary Geology (SEPM) during the fall, 2019.

### **Financial Section**

The total incomes for 2018 were \$642.50 and the total expenses were \$1,075.00. As of September 30, 2018 the ending balance for NAGT-Central Section is \$5,900.80.

The corresponding financial report includes additional details.

# Section/Division Financial Statements Name of Section/Division Year Ending **Bank Information** Bank Name & Location Type of Account Please fill out the following information Current Year **Bank Account Previous Year** Beginning Balance Beginning Balance Ending Balance Ending Balance **Previous Year** Income **Current Year** National Dues Interest Field Guides/Publications Total **Expenses Previous Year Current Year** Awards Meetings/Conferences Bank Fees Total **Current Year Previous Year** Summary Beginning Balance Income Expense Ending Balance Ending Balance from Above Difference

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

# National Association of Geoscience Teachers Eastern Section Report (2018)

**President:** Jason Petula, Millersville University, 221 Stayer Hall, 51 Lyte Street, Millersville, PA 17551; (717) 872-3422; jpetula@millersville.edu

**Vice-President:** Mike O'Donnell, Blue Ridge Community and Technical College, 13650 Apple Harvest Dr, Martinsburg, WV 25403; MODONNEL@blueridgectc.edu or modonnell@lfcc.edu

Treasurer: Renee Aubry, 1179 Glen Rd., Shrub Oak, NY 10588; raubry@otunet.com

**Editor:** Callan Bentley, Northern Virginia Community College, 8333 Little River Turnpike, Annandale, VA 22003; [w] (703) 323-3276; cbentley@nvcc.edu

**Archivist:** Steve Lindberg; (h) (814) 539-7723; minerlight@atlanticbb.net

**Past President:** Dave Ludwikoski, Community College of Baltimore County, 800 S. Rolling Road, MASH 015, Catonsville, MD 21228; [w] (443) 840-4216

**2nd Vice-President:** Deb Hemler, Coordinator of Geoscience Education, Fairmont State University, 1201 Locust Avenue, Fairmont, WV 26554; 304-367-4393; dhemler@fairmontstate.edu

**Secretary:** Vacant

**Publicity Chairperson:** Vacant

**NAGT Geo2YC Division Representative:** Rich Gottfried; Dept. of Science, Frederick Community College, 7932 Opossumtown Pike, Frederick, MD 21702; [w] (301) 846-2581; [h] (540) 822-5561; RGottfried@frederick.edu

### **Annual Section Meeting**

The annual NAGT-ES meeting was held June 7-9, 2018 at the Millersville University of Pennsylvania. The event, hosted by Jason Petula and Randy Newcomer, was attended by 35 members.

Registration was Thursday evening and the meeting opened with a demonstration of a web-based interactive technology – Kahoot – *Are You Smarter Than A Scout?* The icebreaker asked questions related to geoscience merit badges. Next, the opening keynote speaker, Don Duggan-Haas, provided an engaging talk: *Rewriting the Use Manual Ain't Enough: Why Education Reforms Fail to Improve Outcomes And What We Might Do To Change That.* 

The meeting continued Friday morning with a round of snap chats; these are brief presentations (8 minutes) followed by (2 minutes of questions). Snap chats are intended to serve as previews for further conversations during the meeting. The snap chats were:

- Supporting Earth & Space Science Education in High School for NGSS (Martin Schmidt, Finksburg, MD)
- Undergraduate Students Attitudes and Understanding of Geology and Unearthing Geologic Blindness: From Research to Practice (Christopher Roemmele, West Chester, PA)
- Megarachne; The Giant Carboniferous Spider That Never Was (Steve Londberg, Johnstown, PA)
- Informal Approaches to Geoscience Educational Outreach (Jason Petula, Millersville, PA)
- The History of Mining in Lancaster County PA, The Nickel Tour (Randy Newcomer, Akron, PA)

# Workshops followed the snap chats:

- (1) Introduction to ArcGIS Online for Geoscience Educators by Martin Schmidt
- (2) World Café Pedagogy for Collaborations around Geoscience Education by Jason Petula
- (3) Digital Geology Teaching Tools by Callan Bentley, Fort Valley, VA

The workshops were followed by the NAGT-ES Business Meeting. Then, meeting participants climbed into vans for a whole group field trip led by Dr. Lynn Marquez, Professor of Geology: *A Brief Walk through the Eocambrain through Ordovician in South Central Pennsylvania*.

The evening activities included a poster social with the following posters displayed:

- Telling North America's Geologic Story with Ultrahigh Resolution Gigapan Photography, the Gigamacro Viewing Platform, 3D Modles, and Google Earth by Callan Bentley
- Using Fossils of the Paleobiology Database (PBDB) to Explore the Tectonic Linkage of the Americas by Callan Bentley
- Kill-A-Watt Meter Lesson by Marjorie Boyd
- How Effective are Station Labs in Teaching Plate Theory by Samantha Blair
- Does Research-Based Instruction Help Students Understand the Rock Cycle and How to Identify Minerals? by Nikki Moriarty
- Do Hands-On and Literacy Activities Change Student Misconceptions about Earth's History? by Emily Helton
- Earth & Space Science (ESS) Passport: Using Professional Development as a Pathway to Certification for West Virginia Teachers by Sean Harwell and Deb Hemler
- STEM/Nova Freeze! By Jason Petula

The evening concluded with the World Famous Geo-Auction starring Stephen Lindberg, raising approximately \$500.00 on items donated.

Saturday offered two all-day field trips for participants to join:

(1) *Mineral Resource Trip* with Sam Earman (Associate Professor of Geology) and Randy Newcomer

(2) Geomorphology and Tectonics along the Susquehanna River with Talor Walsh (Assistant Professor of Geology) and David Brink-Roby

The closed with the annual NAGT-ES Awards Banquet. The Master of Ceremonies was David Ludwikoski from the Community College of Baltimore. The awards ceremony was presided by Steve Lindberg. David Ludwikoski final act as NAGT-ES President was to present the section gavel to incoming President Jason Petula.

### **Awards**

# NAGT-ES Outstanding Earth Science Teacher (OEST) and New York OEST

Tom Gazda

Tom Gazda has taught Earth Science and Physics in upstate New York for 17 years. Coming to teaching as a second career, he is intensely focused on one goal: to build a lifelong interest in the physical world in his students. Knowing that the key to good science learning is hands-on experiences, he immediately set out double student class time on hands-on activities. He wrote new labs from scratch, scrapped old tired ones and re-worked others, all with the goal of more and more meaningful hands-on experiences for his students.

Mr. Gazda strives to show students the wonder of the physical world and how it works. He recognizes that showing real-world examples is the backbone of any successful science class. To do this he began filming videos outside the classroom as a way to expand the scope of his lessons beyond the 4-walls of his room. As YouTube and other online platforms grew, he spent hours scouring the internet for videos that could help bring the real world into the classroom, building an extensive library of high quality science videos. To share these resources with other teachers, in 2016 he built his own website.

Focusing on his motto of "The world is big, your classroom is small," GazdonianProductions.com is designed to present "Best of the Web" teaching resources. While some of the resources on the site are content he has created (The Sand Lab), most are from a wide variety of sources, from top-tier professional organizations to the backyard DIY-er with a Smartphone. Such a wide variety of material helps teachers present a rich and diverse learning environment for their students, leading to deeper student engagement.

# Virginia OEST

Jeanette Dellinger

Jeanette Dellinger has been teaching for eight years. In 2007 she earned a B.S. in Geology with a minor in Environmental Sciences from Virginia Tech, and in 2017 a M.A.Ed. in Science Curriculum and Instruction from Virginia Tech. She taught high school Earth Science for the past five years, and helped bring back Geology as an upperclassman elective at her school.

Three years ago, she helped students at her school start a science club and an Envirothon team. She strives to demonstrate best practices through her teaching and classroom structure. She believes students should have engaging opportunities to explore concepts through guided inquiry-based activities. She also aims to provide opportunities for students to understand how the concepts they explore are used in and relate to the world around them. This year, her students have been able to talk to three Smithsonian scientists, a NASA JPL engineer, and to PHD students investigating ocean currents and remote sensing.

Ms. Dellinger in 2008-2010 completed hydrogeophysics research through a NSF fellowship while working on a M.S. at Rutgers University. In 2017 she earned NBCT in AYA Science Curriculum and Instruction, and in 2018 received a Stafford Education Grant to develop opportunities for 2018- 2019 Geology students to explore, analyze, and interpret local geology.

# **Plans**

The 2019 National Association of Geoscience Teachers – Eastern Section (NAGT-ES) meeting is being organized by Mike O'Donnell, Blue Ridge Community and Technical College. The conference is set for June 6-8, 2019 in Martinsburg, WV. More details will be provided in future NAGT-ES newsletters.

# **Financial Section**

The total incomes for 2018 were \$5,023.22 and the total expenses were \$3,011.42. As of August 31, 2018 the ending balance for NAGT-ES is \$9,952.13.

The attached financial report reveals additional details.

# Section/Division Financial Statements Name of Section/Division Year Ending **Bank Information** Bank Name & Location Type of Account Please fill out the following information Current Year **Bank Account Previous Year** Beginning Balance Beginning Balance Ending Balance Ending Balance **Previous Year** Income **Current Year** National Dues Interest Field Guides/Publications Total **Expenses Previous Year Current Year** Awards Meetings/Conferences Bank Fees Total **Current Year Previous Year** Summary Beginning Balance Income Expense Ending Balance Ending Balance from Above Difference

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

# National Association of Geoscience Teachers Far Western Section 2017-18 Annual Report

# **Submitted by Winnie Kortemeier**

### A. Section Officers.

New officers were elected in October, 2018:.

• President:

...... Mark Boryta, Earth Sciences and Astronomy, Mt. San Antonio College, Walnut, CA mboryta@mtsac.edu

2016-2018: Winifred Kortemeier, Geosciences, Western Nevada

College, Carson City, NV, Winnie.kortemeier@wnc.edu

2015-2016: Paul Troop paul.troop@sbcglobal.net

1st Vice President:

Paul Troop, Geology, CSU Fresno, Fresno, CA paul.troop@sbcglobal.net

2016-2018: Brigitte Dillet, Geosciences, Western Nevada College,

Fallon, NV brigitte.dillet@wnc.edu

2015-2016 not filled

2<sup>nd</sup> Vice President/Newsletter Editors:

Richard Jones, Science Education, University of Hawaii, West Oahu, HI, rmjones7@hawaii.edu

2016-2018 Richard Jones, Science Education, University of Hawaii, West Oahu, HI, rmjones7@hawaii.edu, and Mark Boryta, Earth Sciences and Astronomy, Mt. San Antonio College, Walnut, CA mboryta@mtsac.edu

2015-2016 not filled

Secretary/Treasurer: Gene Pearson, Geologic and Environmental Sciences, University of the Pacific, Stockton, CA epearson@pacific.edu 2016-2018: Gene Pearson, Geologic and Environmental Sciences, University of the Pacific, Stockton, CA epearson@pacific.edu 2015-2016: Greg Wheeler, Geology Emeritus, California State University, Sacramento, Sacramento, CA, wheelergr@csus.edu

 Publications Coordinator: current, 2015-2016 and 2016-2017 Paul Troop, Geology, CSU Fresno, Fresno, CA paul.troop@sbcglobal.net

# Past Presidents (Councilors):

- Winnie Kortemeier, Western Nevada College, Carson City, NV winnie.kortemeier.wnc.edu
- Paul Troop, CSU Fresno, CA paul.troop@sbcglobal.net
- Lynn Fielding, El Camino College, Torrence, CA Ifielding@camino.edu
- Mark Boryta, Mt. San Antonio College, Walnut, CA mboryta@mtsac.edu
- Garry Haves, Modesto Junior College Modesto, CA havesg@yosemite.edu

- Brigitte Dillet, Western Nevada College, Fallon, NV brigitte.dillet@wnc.edu
- Greg Wheeler, Emeritus, California State University, Sacramento, Sacramento, CA, wheelergr@csus.edu

### **OEST and other Awards Coordinator**

Craig Poole, Geology, Fresno City College, Fresno, CA craig.poole@fresnocitycollege.edu

Executive Committee Liaison Gene Pearson

# B. Awards/Scholarships

Our 2018 OESTA Section winner is Diane Tom-Ogata. From her Biography:

Diane has been in education for over 20 years teaching pre-school for 8+ years, K-2 for 2 years and Science/STEM Service Learning in High School the past 14 years. She is also Advisor to the LEO Club and STEM Club and a member of the School Community Council. She is a Teacher Facilitator under the Maui Economical Development Board/Women in Technology STEMworks program for 10 years. This unique program has students find their passion on how to make the world a better place and infuses technology for successful projects which range from conceptual to actually real-world applications.

ōlelo no'eau #203

'A'ohe pau ka 'ike i ka hālau ho'okahi

All knowledge is not taught in the same school

One can learn from many sources

The heart of my teaching is integrated culture place base STEM where there is a strong belief that understanding the world around them and experiential discovery, learning outside of the 4-walls of a classroom, can, and will, make an impact to inspire students to learn.

'Ōlelo No'eau #2088 Ma ka hana ka 'ike In working one learns

She aspires to excite the minds of students by merging teaching methodologies that will hook students at all levels, activities and desires. Hence, she actively pursues professional development and community partnerships for herself and students.

The objective: to cross fertilize the expected Western pedagogy, and merge sense of place with ancestral and indigenous knowledge producing students who value who they are, where they've come from and better engage and understand what and why they are learning.

I ka wa mamua, ka wa mahope The future is in the past We are pleased to note and honor Diane's enthusiasm for the earth sciences and her dedication to teaching with the NAGT Far Western section's OEST award.

This year, the section also awarded a California state winner in the OEST competition to Dr. Len Bloch. From our summer newsletter:

The 2018 NAGT-FWS OEST Awardee for the state of California is Dr. Len Bloch. Len teaches 6 th, 7 th and 8th grade science at Saint Andrew's Episcopal School in Saratoga, California. Head of Saint Andrews, Tom Burgess wrote: "St. Andrew's has gone through a lot of changes in the last several years, including a major reform of our science curriculum. Len was integrally involved in and a major contributor to this process." "Dr. Bloch employs a range of teaching techniques in his sixth and eighth grade classes. In sixth grade, examples include an Environmental Science unit, which is framed as a mystery that students must solve, and an Astronomy project in which students work in groups to design a pod to sustain life on one of the Moons of Jupiter. In eighth grade, projects include a mock trial around oil and gas drilling in the Arctic and a capstone project at the end of the year in which the students choose their own topics as a culmination of their middle school science experience." Len is also a volunteer docent at Año Nuevo State Park. Len enjoys using his skills as an educator to support the state parks and engage with those visiting them.

This year Ms. Sheila Morrissey of Palo Alto received a NAGT-FWS Geoscience Teaching Scholarship to pursue her M.S. degree and teaching credential at Western Governors University. Sheila earned her B.S. in Geology at UCLA and her M.S. in Environmental Hydrogeology at CSU Los Angeles. She will be teaching 8th grade science at Greene Middle School in Palo Alto this fall.

### D. Field Conferences

We planned a field conference in Beatty, NV for Nov. 3-5, 2017: Geology and Mining Districts near Beatty Nevada. It was a conference that required a four-wheel drive vehicle, so we anticipated a small turn-out. We were hoping for 10 individuals, and had about 8 people signed up. Unfortunately, we had to cancel the conference the week before it was scheduled due to an emergency in the leader's personal life. We were not able to schedule a field conference in 2018.

### C. Newsletters

Thanks to Gene Pearson, we sent out our first newsletter in many years in the summer of 2018:



# SUMMER 2018 NEWSLETTER

# 2018 NAGT-FWS OEST AWARDS

Outstanding Earth Science Teacher [OEST] Award recipients are precollege teachers and educators who have made exceptional contributions to the stimulation of interest in the earth sciences and who are outstanding teachers.



The 2018 NAGT-FWS OEST SECTION Awardee is Diane Tom-Ogata. Diane teaches Earth Science at Governor Wallace Rider Farrington High School in Honolulu, Hawaii. One of her nominators wrote: "As a teacher, Diane always strives to challenge her students to do their best, and go beyond. However, she is cognizant of the varying abilities that each student has. She teaches at a school that enrolls a high percentage of English language learners, and must accommodate their needs. When Diane volunteers to do education outreach for the Polynesian Voyaging Society, she must constantly adjust to a new group of students, with various ages and abilities. Due to the nature of the outreach, she may be teaching to a third grade class, and then immediately move to a group of high school

students. Being able to differentiate instruction in such a setting can be a challenge, but Diane does an outstanding job! She knows the content well enough to determine how to appropriately "chunk" the learning material for the various ages."



The 2018 NAGT-FWS OEST Awardee for the state of California is Dr. Len Bloch. Len teaches 6th, 7th and 8th grade science at Saint Andrew's Episcopal School in Saratoga, California. Head of Saint Andrews, Tom Burgess wrote: "St. Andrew's has gone through a lot of changes in the last several years, including a major reform of our science curriculum. Len was integrally involved in and a major contributor to this process." "Dr. Bloch employs a range of teaching techniques in his sixth and eighth grade classes. In sixth grade, examples include an Environmental Science unit, which is framed as a mystery that students must solve, and an Astronomy project in which students work in groups to design a pod to sustain life on one of the Moons of Jupiter. In eighth grade, projects include a mock trial around oil and gas

drilling in the Arctic and a capstone project at the end of the year in which the students choose their own topics as a culmination of their middle school science experience." Len is also a volunteer docent at Año Nuevo State Park. Len enjoys using his skills as a educator to support the state parks and engage with those visiting them.

# 2018 NAGT-FWS SCHOLARSHIPS

Students interested in pursuing a career in earth science education residing in California, Hawaii, and Nevada are eligible to apply for any of the following NAGT-FWS Scholarships: Dottie Stout Field Camp Scholarship; Graduate School Fellowship; High School/College Transition Scholarship; or Geoscience Teaching Scholarship.

This year Ms. Sheila Morrissey of Palo Alto received a NAGT-FWS Geoscience Teaching Scholarship to pursue her M.S. degree and teaching credential at Western Governors University. Sheila earned her B.S. in Geology at UCLA and her M.S. in Environmental Hydrogeology at CSU Los Angeles. She will be teaching 8th grade science at Greene Middle School in Palo Alto this fall.

# ELECTION OF FWS OFFICERS

Election of FWS Officers occurs every two years. The next election will take place this fall. Please contact Winnie Kortemeier, President, or Paul Troop, Past President, if you want to find out more about officer responsibilities and/or are interested in serving as a FWS officer.

### FUTURE FWS CONFERENCES

The FWS is actively seeking host institutions/individuals for Fall and Spring Conferences, 2018 and beyond. Traditionally an institution from the northern part of the section hosts the Fall Conference and institution from the southern part of the section hosts the Spring Conference. Please contact Winnie Kortemeier, President, or Paul Troop, Past President, if you would like to find out more about the role of the conference host or are interested in hosting a FWS conference.

### FWS OFFICERS

### ELECTED:

President: Winnie Kortemeier, Western Nevada College winnie kortemeier@wnc.edu

First Vice President: Brigitte Dillet, Western Nevada College brigitte.dillet@wnc.edu

Second Vice President & Newsletter Editors: Mark Boryta, Mt. San Antonio College <u>mboryta@mtsac.edu</u>, and Richard Jones, University of Hawaii, Western Oahu, <u>rmjones7@hawaii.edu</u>

Secretary/Treasurer: Gene Pearson, University of the Pacific, epearson@pacific.edu

Past President: Paul Troop paul.troop@sbcglobal.net

#### APPOINTED:

Publications Coordinator: Paul Troop paul.troop@sbcglobal.net

Scholarship Coordinator: Craig Poole, Fresno City College craig.poole@fresnocitycollege.edu

# E. Board meetings.

We held an on-line video conference board meeting in Zoom on Aug. 20, 2018. Following are the minutes from that meeting.

NAGT –FWS VIP on-line (Zoom) meeting Agenda for 12:00 meeting, August 20, 2018 Meeting called to order at 12:04

### **Members Present:**

Winnie Kortemeier, Richard Jones, Gene Pearson, Brigitte Dillet, Mark Boryta, Paul Troop, Craig Poole, Dee Trent.

# 1. Elections

Winnie is not willing to continue as president, but is willing to continue in leadership.

Brigitte is not willing to continue as 1<sup>st</sup> VP.

Gene is willing to be on ballot as secretary/treasurer.

Richard is willing to continue as 2<sup>nd</sup> VP/newsletter editor.

Mark is willing to continue as 2<sup>nd</sup> VP/newsletter editor.

Gene wrote the last newsletter.

Craig is willing to continue with scholarships. He is fine with being contact for scholarships as well.

Mark is willing to be president, with Paul and Winnie helping. Gene proposes that Mark be president, and Paul be the 1<sup>st</sup> VP. Richard would remain as 2<sup>nd</sup> VP.

Winnie will organize the ballot/election process.

# 2. Possible future conferences

Tania Anders and Mark Boryta is interested in doing a conference. Somebody at UC Riverside does DV field trips for high schoolers and could do this for us. Winnie is not sure who that is. Paul says the hydrologist and hydrologist technicians have interest. This could be the Mt Sac trip.

Elizabeth Neisse at UT Brownsville does Napa Wine Geotours.

Gary Hayes says he would do one more field conference with the help of Laura and Ryan.

Paul says there is a possibility with Winnemucca BLM is interested and waiting to hear back with instructor there.

Mario Caputo says he has a field trip to southern Utah and Arizona that is already set up and he would be willing to do that for us.

Paul is willing to follow-up with these possibilities.

# 3. Web page updates - how to get them done

Crystal still gets all scholarship applications. Paul will call the contact for the page to try and coordinate changes. Paul is the only one that has access to make changes. It is difficult to use. National has simple sites for the sections and National does the updates on those. Paul brings up the issue of sales. Winnie will call National to find out what they can do in terms of the website. Gene is mentioning that the person in the administrative assistant position at SCRC is new and that Cathy is still in position but is running a search for a new executive director.

# 4. Future of NAGT-FWS - changes, adjustments, etc

Winnie has brought up at National that FWS has been based on conferences but it is very hard to get people to do conferences any more. Could we pair up/piggy back with Friends of the Pleistocene? Mark mentioned that there are many groups in southern California, such as Southern Coast Society, Inlands Geologic Society, all pulling at the same people. Would we lose our identity if we piggy-back with them? The meetings do not have to be large to be successful.

# **5.** Other business

Richard is participating in an Earth Science share-a-thon in Reno on October 12<sup>th</sup>.

Richard will work on having another newsletter out in the Fall: information about elections, future conferences, job opportunities, all things Kilauea.

There is a conference in Kona in September.

# National Association of Geoscience Teachers Far Western Section Treasurer's Report 2017-2018

Opening Balance (8/31/2017) \$26,313.95

# **Income**

Field Conference Registration	\$ 0.00
Field Guide Purchases	\$ 667.90
National Dues	\$ 557.50
Bank Interest	\$ 5.31

Total Income \$1230.71

# **Expenses**

Field Conference Expenses	\$ 0.00
Postage/Mailers	\$ 41.84
Web Site	\$ 102.43
California Sales Tax	\$ 58.61
Scholarships	\$ 750.00

Total Expenses \$ 952.88

Closing Balance (8/31/2018) \$26,591.78

Tri Counties Bank, Modesto, CA

NAGT - Far Western Section Name of Section/Division

#### **Bank Information**

Bank Name & Location

August 31, 2018

nation

ne & Location Tri Counties Bank, Modesto, CA

ne of Account Checking

Type of Account Checking

Please fill out the following information

Bank Account	Curre	nt Year	Previous Year		
	Beginning Balance	26,313.950	Beginning Balance	*26,257.38	
	Ending Balance		Ending Balance	+24313.95	
Income	Curre	nt Year	Previ	ous Year	
National Dues	* 65	7.50	\$ 51.	5.00	
Interest	5	5.31		5.54	
Field Guides/Publications	66	7.90	85	54,23	
Other (Please specific Engle	h'a-		275	50,00	
Other (Please specify)	1071	-		·	
Total	1230.	<b>7/</b> \$.0.00	4/2	<b>4.77</b> \$000	
Expenses	Curre	nt Year	Previ	ous Year	
Awards	750.00		1500.00		
Meetings/Conferences		0.00	2269.78		
web-site		102.43		68.64	
cyarypass specify Sales 7	4×	58,61	,	100.00	
Other Pleton / M		41.84	/	129,78	
Ţotāl	952,	<b>CS</b> \$ 0.00	406	\$ <b>8.22</b> \$ 0.00	
Summary	Curre	nt Year	Previ	ious Year	
Beginning Balance		\$ 0.00		\$ 0.00	
Income		\$ 0.00		\$ 0.00	
Expense		\$ 0.00		\$ 0.00	
Ending Balance		\$ 0.00		\$ 0.00	
Ending Balance from Above		\$ 0.00		\$ 0.00	
Difference		\$ 0.00		\$ 0.00	

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

enco.	COLUMN TO SERVICE STREET	ensere.	THE STATE OF	anner:	zwana.
340		3(1.70)	23.25	200	19 3 3 6 B

### Midcontinent section annual report Oct 2017- Dec 2018

- Section was reactivated (after more than a decade of inactivity) with the leadership of:
   Aida Farough, President
   Michael DeAngelis, Vice president
   Brendan Hanger, Secretary/Treasurer
- 2) Volunteered at NAGT booth at AGU 2017
- 3) Led and volunteered at the NAGT booth in GSA SC 2018 meeting
- 4) at EER 2018, we co-sponsored a roundtable on using Virtual Reality in teaching: <a href="https://serc.carleton.edu/earth\_rendezvous/2018/program/roundtable/rt">https://serc.carleton.edu/earth\_rendezvous/2018/program/roundtable/rt 13.html</a>
- 5) We also sponsored the Town Hall of EER 2018 and provided ice cream: https://serc.carleton.edu/earth\_rendezvous/2018/program/townhall.html
- 6) First executive committee meeting happened online in July 2018.
  - [this part forward is related to 2019]
- 7) First newsletter shared with section members in January 2019.
- 8) Updated the Midcontinent representative to NAGT executive board, Joshua Villalobos about section activities.
- 9) We are sponsoring an NAGT social at GSA joint sectional meeting 2019.
- 10) We will be leading and volunteering for the NAGT booth at the GSA joint sectional meeting 2019.
- 11) Section T15 at GSA sectional meeting 2019 is co-sponsored by Midcontinent NAGT: <a href="https://www.geosociety.org/GSA/Events/Section\_Meetings/GSA/Sections/sc/2019mtg/techprog.aspx">https://www.geosociety.org/GSA/Events/Section\_Meetings/GSA/Sections/sc/2019mtg/techprog.aspx</a>

# Section/Division Financial Statements Name of Section/Division Year Ending **Bank Information** Bank Name & Location Type of Account Please fill out the following information Current Year **Bank Account Previous Year** Beginning Balance Beginning Balance Ending Balance Ending Balance **Previous Year** Income **Current Year** National Dues Interest Field Guides/Publications Total **Expenses Previous Year Current Year** Awards Meetings/Conferences Bank Fees Total **Current Year Previous Year** Summary Beginning Balance Income Expense Ending Balance Ending Balance from Above Difference

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

# **NAGT New England Annual Meeting**

November 10, 2018 Greenfield Community College, Greenfield, MA

### Agenda

- 1. Voting of executive committee
- 2. President's Welcome & Introductions
- 3. OEST Awardee: Melanie Culter
- 4. Review of Annual Report (add information)
- 5. News & Future Plans
- 6. Newsletter

# NAGT New England Annual Report October 2018

Submitted by Tarin Weiss

# The NAGT-New England Annual Meeting took place Saturday, November 10, in conjunction with the Gem and Mineral Show at Greenfield Community College, Greenfield, MA.

Celebrating the past, present & future of the Connecticut River Valley

Schedule

9:30am-4pm — Gems, Rocks & Fossils Show and Sale and Jurassic Roadshow (See local specimens and talk to expert collectors. Bring in your specimens for discussion and show.)

10am — The Hole Truth: The stories behind Meteorite Craters — Peter H. Scherff,

12pm — National Association of Geoscience Teachers, New England Section, Annual Meeting in N350 (the Geology Lab). All educators, students and others are welcome to attend.

Section Officers voted in:

President: Tarin Weiss, Westfield State University (year 2 of 2 year term)

VP#1: Melissa Lombard, USGS, New Hampshire office of the New England Water Science Center (year 2 of 2 year term)

VP#2 Susan Meabh Kelly, Danbury High School, Danbury, CT

Treasurer: Steve Winters, Holyoke Community College, Holyoke, MA

1pm — From Fossils to Feathers: The Dinosaur-Bird Connection — Steve Winters, geologist and Professor of Earth Science at Holyoke Community College, NAGT NE-section Treasurer

2:15pm — GCC Geology Path Tour — Join GCC Professor Emeritus Richard Little (NAGT Newsletter editor)

2:45pm — Walking Tour of Turners Falls Geology with Steve Winters (HCC, NAGT).

# **2018 New England Section OESTA Awards**



NE Section Winner - Melanie Cutler

Melanie Cutler has been teaching Environmental Science and Biology at Andover High School for 14 years. She has a BS in Biology from Bates College and a Master of Environmental Management degree from the Yale School of Forestry and Environmental Studies. Her true passion is teaching Environmental Science, especially focusing on the positive actions that we humans can take to improve our environment. In her Environmental Sustainability Internship Course, each student is paired with a community member to work

on a project that improves sustainability in their town. In addition to teaching, Melanie also advises the

school's Environmental Club, started the AHS Sustainable Garden Project, and is a member of the town's Green Advisory Board.

# 2018 GSA-NE Section Meeting, Burlington, VT

- NAGT members Tarin Harrar Weiss, Lori Weeden, and Melissa Lombard sponsored a theme session at this year's annual meeting of the NE Section of GSA entitled:
- Geolore: Local geology field trips merge geology and history to motivate students, teachers, and community members to explore natural areas
- New science standards (NGSS) promote active engagement in authentic environments. Field trips focused on natural features and their histories motivate K-16/community learners to venture out and meaningfully explore familiar places. This session provides a venue for discussion and presentation of geolore-themed trips that encourage relevant geoscience and history learning of local areas.
- The session featured 10 presentations on topics related to geoscience, science education, and community resources. Lori Weeden presented on Eastern MA Geology, the Colonial Expansion and Industrial Revolution in and around Lowell. Tarin Weiss gave a presentation titled Tipping rock: A teaching tool for over 100 years.

# **Community Geoscience Hikes:**

June, September 2018: Westfield State University geoscience professors (and NAGT members) Michael Young and Tarin Weiss led 2 naturalist hikes for the community at AMC's Noble View, Westfield, MA, titled Schist and Ice.

# 2019 GSA Northeastern Section • Portland, Maine

At the annual meeting of the NE section of GSA, the NAGT New England section is sponsoring a theme session entitled <u>T4</u>: <u>Best Practices in Geoscience Education.</u>

Cosponsored by GSA Energy Geology Division, GSA Soils and Soil Processes Division.

Tarin Weiss, Westfield State University; Lori Weeden, University of Massachusetts—Lowell.

Geoscience education employs multiple pedagogies that support meaningful learning. As educators, our role goes beyond preparing future geoscientists, it includes promoting scientific literacy for all. The Next Generation Science Standards supports our efforts. In this session, colleagues share best NGSS-aligned practices in geoscience education that include, engage, and challenge diverse learners.

# NAGT-New England Section is active on the state and national front representing a variety of earth science education issues

In the fall of 2017 Tom Vaughn, a Past President of our section, and current counselor on our board was invited to Washington, DC to help review advanced technological and geoscience proposals.

The purpose of this meeting was to provide advice and recommendations concerning proposals submitted to NSF for funding. With an emphasis on two-year colleges, the **Advanced Technological Education (ATE)** program focuses on the education of technicians for the high-technology fields that drive our nation's economy.

The NAGT-New England Section has had a long involvement with the state of Massachusetts in supporting K-12 Earth and Space Science. Back in 1996 when science standards were first formulated, the then president of our section, Tom Vaughn, gave input to the creation of the standards. Ever since that time, NAGT-New England Section has given input and support as the standards have evolved. Our organization was instrumental in helping to revise the 2001 standards by introducing satellite imagery into the standards. Tom Vaughn, Past President of our Section and presently Counselor, is dedicated to

support the teaching of Earth and Space Science in Massachusetts by being an frequent presenter at the Massachusetts Association of Science Teacher Conference. For the conference held in November, 2017, he presented a lesson for teachers to use with their students entitled, Carbon Dioxide and Global Warming: What is the Evidence? The session was well attended with about 25 attendees. NAGT-New England Section has also had input on the assessment of the Earth and Space Science Standards. Tom Vaughn has served on the Assessment Development Committees (ADC) as an earth science consultant. He is presently serving on the Grade 8 General Science Committee. Just recently Tom was invited by the Massachusetts Department of Elementary and Secondary Education to serve as the earth science expert to review all the current earth science questions on both the Grade 5 and Grade 8 assessments. In addition, NAGT-New England Section has represented the earth science community in teacher licensure. Tom Vaughn has served on the Review Panel for earth science Massachusetts Test for Educator Licensure (MTEL). Presently he is on the committee as the earth science expert that is revising the Grade 8 General Science MTEL. Our organization will continue to support the teaching and learning of Earth and Space Science standards to the students of Massachusetts.

Editor's note: you can contact Tom at tvaughn17@comcast.net

# NAGT Pacific Northwest Section 2017-18 Annual Report

### **A. Current Section Officers**

### a. Executive Officers

### **President**

Frank Hladky – 3225 Washington Avenue, North Bend, OR 97459, <a href="mailto:fhladkys@gmail.com">fhladkys@gmail.com</a> **Vice-President** 

Hillary Goodner — Yakima Community College, Yakima, WA 98902, <a href="mailto:hgoodner@yvcc.edu">hgoodner@yvcc.edu</a> **Secretary-Treasurer** 

Eriks Puris – Portland Community College, Portland, OR 97217, <a href="mailto:eriks.puris@pcc.edu">eriks.puris@pcc.edu</a>
<a href="mailto:Past President">Past President</a>

Cassandra Strickland – Columbia Basin College, 2600 N 20th Avenue, Pasco, WA 99301, CStrickland@columbiabasin.edu

### **b.** Communications

### **Newsletter Editors**

Andy Buddington, Spokane Community College, <u>Andy.Buddington@scc.spokane.edu</u> Frank Hladky, North Bend, Oregon, <u>fhladkys@gmail.com</u>

### **Website Coordinators**

Frank Hladky—3225 Washington Avenue, North Bend, OR 97459, <a href="mailto:fhladkys@gmail.com">fhladkys@gmail.com</a> Cassandra Strickland — Columbia Basin College, 2600 N 20th Avenue, Pasco, WA 99301, CStrickland@columbiabasin.edu

### c. State-Province Councilors

### Alaska

Sonia Nagorski, University of Alaska, Juneau, <a href="mailto:sanagorski@alaska.edu">sanagorski@alaska.edu</a> LeeAnn Monk, University of Alaska, Anchorage, <a href="mailto:lamunk@alaska.edu">lamunk@alaska.edu</a>

# Idaho

Shawn Willsey, College of Southern Idaho, <a href="mailto:swillsey@csi.edu">swillsey@csi.edu</a> (second position open)

### **Oregon**

Eriks Puris, Portland Community College, eriks.puris@pcc.edu (second position open)

# Washington

Nick Zentner, Central Washington University, <a href="mailto:nick@Geology.cwu.edu">nick@Geology.cwu.edu</a>
Andy Buddington, Spokane Community College, <a href="mailto:andy.buddington@scc.spokane.edu">andy.buddington@scc.spokane.edu</a> **British Columbia** 

Tark Hamilton, Camosun College, Victoria, B.C., <a href="mailton@cmosun.bc.ca">thamilton@cmosun.bc.ca</a> Todd Redding, UBC Penticton, <a href="mailto:tredding@okanagan.bc.ca">tredding@okanagan.bc.ca</a>

### d. Awards

### **OEST Awards Coordinators**

Lynda Sanders, Marshfield HS, S. 10<sup>th</sup> and Ingersoll, Coos Bay, OR 97420, LyndaS@coos-bay.k12.or.us

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

# **B.** Reports

# i. Annual Business Meeting

The business meeting of annual conference of the NAGT Pacific Northwest Section was held Wednesday, June 27<sup>th</sup> during the annual conference at Mount Hood Community College. Attending were Andy Hilt, Eriks Puris, Frank Hladky, Hillary Goodner, and Todd Redding. The next annual meeting was discussed; it is being hosted by Todd Redding, Okanagan College, in Penticton, British Columbia. Prior to the meeting, nominations for officers were solicited from the section. The existing officers offered to continue in their roles with Hillary Goodner advancing to vice president. A summary of the section's officer is shown in part A, above. As of March, 2018 the section membership count was 138.

#### ii. 2018 OEST Awards

- State (Oregon):
  - o Connie Robbins, Crane Union High School, Crane, OR
- State (Idaho)
  - o Marc Brouseau, Spalding STEM Academy, Boise, ID
- PNW Region:
  - o Jeff Karlin, Lewiston High School, Lewiston, ID

#### C. Annual Activities/Functions

# a. Events Sponsored by Pacific Northwest Section NAGT 2017-18

The NAGT PNW Annual Conference, was held June 27-29, 2018, Mount at Hood Community College hosted by Daina Hardisty (MHCC), with the help of Niki Miller (MHCC), Hillary Goodner (YVCC), Eriks Puris (PCC), Andy Hilt (PCC) and Frank Hladky (ret). Forty-four people participated of which 26 are NAGT members. Two K-12 teachers and four students attended their conference registration fee was waived.

The conference schedule was as follows:

- 1. Wednesday, June 27: Conference, Mt. Hood Community College
- 2. Thursday, June 28: Field Trip Mount Hood
- 3. Friday, June 29: Field Trip Silver Falls State Parks

The section website continues to be updated by Frank Hladky: www.nagtpnw.org

The section newsletter is produced by Andy Buddington and Frank Hladky. Newsletters collect information from section officers & members at large, and are distributed electronically, or available for download at: www.nagtpnw.org/News-or-Reviews.html.

- b. Planned 2019 Activities
- Future conferences: 2019 Annual Conference, Okanagan College, Pentiction, BC.

# D. Financial Report, NAGT Pacific Northwest Section

Form 990 was e-filed with the IRS on August 8, 2018 for the 2017 tax year.

The section 2018 financial report can be found separately or below:

### Section/Division Financial Statements Name of Section/Division NAGT Pacific Northwest Section Year Ending 9/12/18 **Bank Information** Bank Name & Location Banner Bank, 10 South First Ave, Walla Walla, WA 99362 Type of Account Checking Please fill out the following information **Bank Account** Current Year Previous Year Beginning Balance \$ 14,780.35 Beginning Balance \$14,010.69 **Ending Balance** \$ 15,882.00 Ending Balance \$14,780.35 Income Current Year Previous Year National Dues \$790.00 Interest \$ 7.44 \$ 26.16 Field \$20.00 \$45.00 Guides/Publications Other (Please \$ 2,325.00 \$698.50 specify) Annual Mtg Other (Please specify) \$3,142.44 Total \$ 769.66 Expenses Current Year Previous Year

Awards	\$ 150.00	
Meetings/Conferences	\$ 1,763.50	
Bank Fees		
Other (Please specify) Business	\$ 72.29	
Other (Please specify) Seattle Div	\$ 55.00	
Total	\$ 2,040.79	\$ 0.00
Summary	Current Year	Previous Year
Beginning Balance	\$ 14,780.35	\$ 14,010.69
Income	\$ 3,142.44	\$ 769.66
Expense	\$ 2,040.79	\$ 0.00
Ending Balance	\$ 15,882.00	\$ 14,780.35
Ending Balance from Above	\$ 15,882.00	\$ 14,780.35
Difference	\$ 0.00	\$ 0.00

## Southeastern Section of NAGT 2018 Annual Report

## Frank Forcino

## I. Leadership Updates

Since taking over as president 1.5 years ago, I have reached out to many people to try to have the position of VP filled. Our full list of officers and state representatives can be found at: <a href="www.georgiarocks.us/nagt/">www.georgiarocks.us/nagt/</a>.

#### II. SEGSA 2018 - Knoxville, TN

The annual business meeting for the section was held over lunch on Thursday, April 12 at the Downtown Grill and Brewery in Knoxville, TN. Attendance was 15 members. At the 2018 meeting, we discussed session possibilities for the 2019 SEGSA meeting as well as field trip options.

#### III. OEST Awards

This year's winners were:

Louisiana: Lacey Hoosier North Carolina: Phillip Cox Puerto Rico: Elizabeth Torres South Carolina: Robin Wright Tennessee: Jana E. Young

This year's section winner was: Phillip Cox

#### IV. Facebook Page and Section Newsletter

Thanks to Bill Witherspoon, we have a wonderful newsletter that is distributed every March and September to our membership. To enhance our communication with geoscience educators in our region and in hopes of recruiting new members for SENAGT, we started a Facebook page in the last year. This new means of communication has allowed us to share opportunities and news to our members (and beyond) more frequently.

 $\underline{https://www.facebook.com/National-Association-of-Geoscience-Teachers-Southeastern-Section-400556276800591/}$ 

#### V. Financial Report

The Southeastern Section of the National Association of Geoscience Teachers maintains a single bank account for the sectional treasury. The account is held at Cadence Bank N.A. in Starkville, MS. For the period of September 1, 2017 – August 31, 2018, the following financial transitions took place:

September 1, 2017 Balance: \$5288.22

March 20, 2018 membership dues deposit from NAGT \$430.00 Balance: \$5718.22

August 31, 2018 Balance: \$5718.22

Total Deposits 9/1/17 - 8/31/18: \$430.00

Total Withdrawals: 9/1/17 - 8/31/18: \$0.00

## Section/Division Financial Statements Name of Section/Division Year Ending **Bank Information** Bank Name & Location Type of Account Please fill out the following information Current Year **Bank Account Previous Year** Beginning Balance Beginning Balance Ending Balance Ending Balance **Previous Year** Income **Current Year** National Dues Interest Field Guides/Publications Total **Expenses Previous Year Current Year** Awards Meetings/Conferences Bank Fees Total **Current Year Previous Year** Summary Beginning Balance Income Expense Ending Balance Ending Balance from Above Difference

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



## **Geosciences for Two-Year Colleges**

National Association of Geoscience Teachers c/o Carleton College B-SERC One North College Street, Northfield, MN 55057 • Phone 507-222-5634 • Fax 507-222-5175

# Report to the NAGT Executive Committee from the Geo2YC Division 1 October 2018

#### **Current Division Officers**

President: Callan Bentley, Northern Virginia Community College Past President: Brett Dooley, Patrick Henry Community College

Vice President (& President-Elect): Joy Branlund, Southwestern Illinois College

Secretary/Treasurer: Wendi J. W. Williams, South Texas College Newsletter Editor: Suki Smaglik, Yakima Valley Community College

Webmaster: Chris Johnson, Salt Lake Community College Archivist: Peter Berquist, Thomas Nelson Community College

Geo2YC is in its seventh year as a division of NAGT. We currently have 284 members in the division, having gained 57 new members since last year and lost 24 to attrition. Our account balance is \$6,354.80, currently residing with NAGT HQ.

Below is a summary of activities completed and in progress:

- 1. The Executive Board met via teleconference three times this past year to discuss ongoing projects, brainstorm solutions to problems, and share Geo2YC related news.
- 2. We publish a quarterly newsletter, <u>Foundations</u>, which is distributed digitally through the Geo2YC website and the Geo2YC listserv. The newsletters include a variety of content, including field tips, reports from recent workshops, contributions of teaching pedagogies for 2YC faculty, photographs of our distinctive "scale pencil" in the field, and incorporation of geoscience educational resources in the classroom, just to name a few. This year, our new newsletter editor has initiated a new "gallery" feature that showcases member-submitted photographs.
- 3. We award an Outstanding Adjunct Faculty Award (OAFA), with three "quarterly" winners showcased in newsletters. Last year, we switched to a new OAFA paradigm wherein one outstanding adjunct is profiled in three of the four editions of the newsletter, and one nominee is chosen (by poll of the membership) for the annual award to be presented by the end of the calendar year. Each individual awardee is awarded a membership to both NAGT and the division, and the annual awardee is also awarded \$750 toward professional growth in partnership with Pearson publishing. We have had three major issues with this initiative:
  - a. Too few nominations (though as of this fall, we have had a fresh glut of nominations, so we're good for a little while).

- b. Issues getting Pearson to pay the annual awardee their \$750 stipend. This has been addressed anew, and (we are told) fixed.
- c. Issues w/ access to the nomination website and formalizing the process/ membership on the committee. We have new language intended to be public-facing about OAFA selection committee membership and procedures, and will publish that online prior to the GSA annual meeting next month.
- 4. We reached out to the AAPG "Inspirational Educator" award committee about their minimum criteria including a PhD, pointing out that many Geo2YC members are inspiring educators without PhDs. They responded that they would reconsider the requirement.
- 5. We had a large presence at the Earth Educator Rendezvous (EER) and co-hosted a happy hour social one evening (with the Geoscience Education Research division of NAGT). Dozens of people attended this event, which was very lively with delicious food and libations. Our sponsorship of workshops and technical sessions at GSA also helps promote the division and its mission.
- 6. We will be participating in GSA 2018 activities:
  - a. Geo2YC is a sponsor for one technical session and one short course:
  - b. The seventh business meeting of the Division will be held Sunday, November 4<sup>th</sup>, 2018, at 4:30pm, at GSA.
  - c. We will continue to promote the Division with the use of Geo2YC brochures and newsletters and our distinctive scale pencil, co-sponsored with NAGT national and Little River Research and Design.
- 7. We continue to work with members to serve as NAGT and GSA Sectional liaisons to help us identify members and promote the division at sectional, regional, and local events. We are always working to recruit liaisons.
- 8. Our website is continually updated. We will work to make the website more robust, as well as have a greater presence in social media. In the past year, we have established a Twitter account (@geo2YC) and have added detailed descriptions to the website's posting of newsletter issues.
- 9. One method of outreach has been the distribution of the Geo2YC scale pencils. In 2018, we placed an order for 1000, half of which stayed w/ NAGT, and half of which we hold and plan on distributing. We appreciate the financial support of this initiative from NAGT, who report that it is their most popular promotional give-away.
- 10. We have elected
  - a. An incoming Vice-President, Jackie Hams, from Los Angeles Valley College, who is President-Elect for the following year.
  - b. Suki Smaglik of Yakima Valley Community College as Newsletter Editor, who stepped in when needed (Sherry Oakes unfortunately fell ill shortly after being elected to the position, and later died.) and has now been elected in her own right.
- 11. Joy Branlund of Southwestern Illinois College will assume duties as President of the division (and Callan Bentley will transition to Past-President) at our division business meeting at GSA.

Respectfully submitted,

Callan Bentley, Northern Virginia Community College, Geo2YC Division President



## **NAGT Annual Report for 2017-2018 29 September 2018** Prepared by Suzanne Metlay, TED President

Officers (2017-2018):

President – Suzanne Metlay, Western Governors University Vice President – Eric Pyle, James Madison University Past President – Jeff Thomas, Central Connecticut State University Secretary/Treasurer – Peggy McNeal, Towson University Media Director – Steve Mattox, Grand Valley State University

Ex Officio Members (2017-2018):

NAGT Executive Committee Liaison – Kathy Ellins, University of Texas-Austin NSTA Liaison – Paul Adams, Fort Hays State University

Incoming Officers (2018-2019):

President – Eric Pyle, James Madison University Vice President – Laura Hollister, Pitman High School (Turlock, CA) Past President – Suzanne Metlay, Western Governors University Secretary/Treasurer - Peggy McNeal, Towson University Media Director – Steve Mattox, Grand Valley State University

Incoming Ex Officio Members (2018-2019):

NAGT Executive Committee Liaison – Kathy Ellins, University of Texas-Austin NAGT Eastern Section Liaison – Christopher Roemmele, West Chester University NSTA Liaison – Paul Adams, Fort Hays State University

## **Goals from 2017 TED Report:**

## Accomplished? Goal

Solicit news and articles for our 2017-18 Newsletters wherein the President and at least one other TED Yes Executive Board member will write at least article per year. Develop initiatives for TED to support geoscience education preservice teachers to attend GSA. In process In process Update and maintain the TED and have the ad-hoc committee perform most of this work. Yes Sponsor or host NAGT initiative and activities related to teacher education for GSA, AGU, and others.

Consider an activity at GSA similar to GER.

Work with NAGT journals (Journal of Geoscience Education and In the Trenches) to promote Not yet

dissemination of research and best practices in teacher education.

Plan for the 2018 Business Meeting at GSA during the fall virtual TED meeting. Yes

Not yet Develop a formal partnership with the Association for Science Teacher Education (ASTE).

## 2018 President's Report:

#### **Executive Summary:**

- Successful collaboration with NESTA at GSA and other meetings; less successful with ASTE but attempts will continue; AGU Education participation pending in December 2018.
- Travel grants and meal break (session) sponsorship at 2018 Earth Educator Rendezvous went well; TED membership input into Luggage Tags given as swag to members well-received.
- Opened TED ExComm meetings to larger TED membership; increased interest and participation. TED Newsletters and Facebook page updates could be improved.
- CAEP standards 20/20 will continue to be monitored for possible comment or activity.
- Teacher Leader recognition standards proposed and developed; presentations at GSA & AGU in late 2018. NAGT Council approval and TED implementation during FY19 if possible.





#### **Financial Summary:**

Beginning balance	\$2477.75 (as of 30 Sept 2017)	Explanation:
Main income	\$1089.97	Membership dues + interest
Main expenses	\$1143.35	EER: Travel grants, sponsorship, luggage tags
Ending balance	\$2424.37 (as of 30 Sept 2018)	

## **Details (chronological order):**

2017-2018 Officers & Ex Officio members installed at TED Business Meeting during 2017 GSA-Seattle on 22 Oct 2017.

- 161 TED members at that time. While smallest NAGT professional division, membership growing annually.
- TED Facebook page launched and maintained by Media Director Steve Mattox.

#### January 2018:

- Plans initiated for TED involvement in 2018 Earth Educator Rendezvous (Lawrence, KS)
- Ex Officio member Kathy Ellins proposed development of Teacher Leader recognition standards.
- More frequent and public meetings of TED ExComm suggested; roughly bimonthly schedule set.

#### March 2018:

- Vice president Eric Pyle updated TED on continued CAEP (SPA reviews) Re: Teacher Preparation Programs. CAEP standards renamed Standards 20/20, indicating likely implementation in 2020 academic year.
- New officer nominations considered.

#### May 2018:

- TED technical sessions accepted by GSA and AGU:
  - o GSA-Indianapolis Collaborative Partnerships between K-12 Teachers/Informal Educators and Scientists
  - AGU-Washington, DC Supporting K-12 Geoscience and Climate Education through Teacher Professional Development
- Kathy Ellins presented an early draft teacher-leader recognition letter with two levels of teacher-leaders:
  - o The first level recognizes a teacher-leader who meets seven of ten criteria.
  - o The second level recognizes a teacher-leader "extraordinaire" who meets nine of ten criteria.
  - Committee members reviewed the ten criteria created using teacher-leader model standards and Kathy's expertise. Proposed rewards for teacher leaders include:
    - A certificate and one year payment of NAGT-TED division dues for the first level
    - A certificate and one year payment of NAGT membership dues for the second level
- 2019 Earth Educators Rendezvous: request for topics relevant to TED. Such planning could be addressed by NAGT-TED long-term planning committee. Suggestions due October 2018.

## August 2018:

- Officer election results and Ex Officio candidates announced.
- Steve Mattox will step down as Media Director in November 2018; interim media director will be sought.
- NAGT personnel changes discussed.
- GSA strategic planning process included moving resources away from K-12 education. GSA Education programs to be monitored for NAGT impact.
- NSTA draft position statement on teaching climate change available to members for comment; likely high interest by teachers re: climate change education resources/training.

#### **Attended Meetings**:

- Suzanne Metlay and Eric Pyle attended NAGT Executive Committee meeting on 22 October 2017 during GSA-Seattle.
- Eric Pyle participated in ASTE-Baltimore in January 2018.
- NAGT Council Meetings: 9 February 2018, 12 June 2018. Next meeting: 8 October 2018
- Earth Educator Rendezvous: 16-20 July 2018

- NAGT-TED Executive Board Meetings: 22 October 2018 (public at GSA); 9 January 2018, 13 March 2018, 8 May 2018 (public), 14 August 2018 (public).
  - Next meetings: 16 October 2018 (public); 4 November 2018 at GSA-Indianapolis.

TED newsletters published: October 2017, February 2018, June 2018. Upcoming: October 2018.

#### **Goals for next reporting period (2018-2019):**

- Greater TED involvement in 2019 Earth Educator Rendezvous (Nashville, TN).
- Increased TED presence and participation at GSA, NSTA, AGU, and other professional meetings.
  - o Continued collaboration with NESTA wherever possible.
  - o Press forward with outreach to ASTE and other teacher education associations.
  - o Pay attention to possible changes in GSA Education and react as appropriate.
- Recruit interim media director before Steve Mattox steps down as Media Director in November 2018.
- Ad-Hoc Committee development to improve TED social media and member outreach. Focus on:
  - o Member input regarding what makes TED distinct & worthwhile
  - What TED can provide to geoscience teacher preparation programs
  - What TED can provide to K-12 teachers
- Consider working with NAGT journals (*Journal of Geoscience Education* and *In the Trenches*) to promote dissemination of research and best practices in teacher education.
- CAEP standards 20/20: continue to monitor for possible comment or activity.
- Teacher Leader recognition standards: further development, NAGT Council approval, and TED implementation during FY19 if possible.

of Section/Division Teach	her Education [	Division ————			
Year Ending 8/31/	18				
formation Wells	sFargo, Northfie	ald MN			
-		,,,,,,,,			
Type of Account Chec	eking				
out the following informatio	on				Drint Eas
Bank Account	Current	Year	Previou	us Year	Print Fo
	Beginning Balance	\$ 0.00	Beginning Balance	\$1,664.66	RESET FO
	Ending Balance	\$2,424.37	Ending Balance	\$2477.75	
Income	Current	Year	Previo	us Year	
National Dues		\$1089.97		\$988.42	
Interest			~		
Field Guides/Publications					
Other (Please specify)			347		
Other (Please specify)					
Total	\$1089.9	7 \$ 0.00	#988.a	90 <del>\$ 0.00</del>	
Expenses	Current	: Year	Previo	us Year	
Awards		\$500.00			
Meetings/Conferences		\$250.00			
Bank Fees					
Other (Please specify)		\$393.35	5	\$175.33	
Other (Please specify)					
Total	\$1,143.3	\$ 9.00	\$ 175.	33 \$0.00	
Summary	Curren	t Year	Previo	ous Year	
Beginning Balance	\$2477.	75 \$ g.o.	100	1.66 \$000	
Income	\$11089.9	7 \$ 0.00		42 \$0,00	
Expense	811143.		\$ 175.	33 \$ 0.00	
Ending Balance	82424.	37 \$ 0.00		7, 75 \$ 0.00	
Ending Balance from Above	\$2424-	37 \$ 0.00	0 01247	7. 15 \$ 0.00	
Difference	0	\$ 0.00	0	\$ 0.00	

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

Report to the NAGT Executive Committee Geoscience Education Research Division September 21, 2018

#### **Current Division Officers**

Karen McNeal – President Katherine Ryker –Vice-President Anne Gold – Treasurer Leilani Arthurs –Secretary Nicole LaDue – Past-President

At GSA in October 2018, new officer terms start with: Karen McNeal – Past-President Katherine Ryker – President Kelsey Bitting – Secretary

The division is wrapping up its fifth year and has spent the year building community, promoting GER, conducting webinars, developing resources, and providing more networking and communication opportunities. It is has seen another growth year in regard to membership now at 350 members!

At the 2018 Earth Educators' Rendezvous, the Division hosted an evening networking event in conjunction with the 2YC Division in order to inform existing and potential NAGT members of our Division and the benefits we provide our memberships.

At the 2017 Annual Fall Meeting of GSA, the GER Division officers chaired a session on GER Methods. This session included three invited speakers, of which one was from outside of GER (Erin Dolan, Biology Education Research, University of Georgia-Athens). The division provided funds to partially support her travel to GSA, since this is a meeting she wouldn't otherwise attend. The session (T113) included both an oral and poster session, and attendance was high throughout the session. Another session for 2018 Annual Fall Meeting of GSA has been accepted where we again had enough submissions for both an oral and a poster session. The Division has also sponsored two additional GSA sessions - one on improving climate science literacy (T100) and another on research around problem solving and decision making in the geosciences (T120).

As in past meetings at GSA, the three divisions (GER, TED, and 2YC) coordinated our schedules so that our meeting times did not overlap and people belonging to multiple communities could attend multiple business meetings. This year we will have the same room for all three of our meeting so that members of multiple Divisions can easily attend all business meetings. The GER Division will again hold a social event to help connect people with one another.

This year our Newsletter has continued to be sent out to division members on a monthly basis, and is received by approximately 350 members each month. Once again, substantial credit goes to the Communications Director, Kelsey Bitting, who has spearheaded this effort. We have continued the "Spotlight" to highlight the type of work done by various researchers in the community, including recent profiles of Kathy Quardokus Fisher, Christopher Atchison, and Kim Cheek. We have also linked to and helped promote the newly developed GER Community framework that was funded by a NSF project to provide determine future directions in GER. Other consistently popular content include featured articles or webinar recordings from across DBER fields, grant and job opportunities of relevance to the community, and upcoming conferences. To view past newsletters, visit the archive at <a href="https://nagt.org/nagt/divisions/geoed/archive">https://nagt.org/nagt/divisions/geoed/archive</a>.

NAGT put forward a transition from an individual GER division account to an account that is nested under the NAGT main account with the transition of treasurers. The treasurer now submits expenses to the NAGT executive office for payment. The division has an account balance of \$6,998.00.

In 2017-2018, we initiated a once a semester webinar series to address our membership's desires for additional professional development in research methodologies and other GER related information. The first webinar was conducted on October 13, 2017 and was led by Dr. Julie Sexton. The title of the webinar was "Introduction to Geoscience Education Research" and it was focused on what one should consider when deciding to embark in a GER classroom research project, including elements of research design and quantitative and qualitative research approaches. Drs. Anne Gold and Karen McNeal facilitated the webinar where the keynote speaker, Dr. Sexton, provided a short overview and presented an interactive session where attendees utilized the chat function to respond to openended questions. It was attended by 24 participants. The second webinar was conducted on April 25, 2018 and was co-led by Drs, Leilani Arthurs and Katherine Ryker and five panelists were highlighted: Drs. Kelsey Bitting, Briana Ingermann, Dawn Kopacz, Karen Kortz, Eric Riggs. The title of the webinar was "Careers in Academia: Options with your GER Background" and it focused on various career opportunities in non-traditional academic pathways. Each panelist presented a background of their career trajectory and how they got there. Then, small groups and break out rooms were made where participants could choose 2-3 speakers they wanted to interact with further. It was attended by 16 participants.

The division has also been working hard to ensure 1) institutional memory of the division extends beyond the current and past officers, 2) the division leadership is meeting growth needs, and 3) the division is providing continued support to the GER community. As a response to these needs, we have created two new officer positions (Media Director and a Graduate Student Liaison) as well as re-organized responsibilities for existing GER officer positions. We have proposed these new positions and officer responsibility changes in a modified set of Division bylaws

which are currently under membership review and will be voted on at the GSA meeting. We have also created two Division awards – The Transformation Award and the Collaboration Award. The Transformation award is to acknowledge a GER researcher that has made significant contributions to the development of and capacity for geoscience education research. The Collaboration award is to acknowledge a non-GER colleagues (e.g. geophysicists, educational psychologists, education researchers, etc.) who infused the GER community with new approaches to GER. Nominations for these awards have been submitted and the first awardees will be announced at the NAGT luncheon at GSA. Additionally, we are working internally to ensure that our financial planning, scheduling of events/tasks and due dates, and files are well organized and populated so that incoming officers and officers of the future are left with appropriate documentation to have the capacity to continue to move the division forward. Finally, the division will be ordering GER division reusable bags as a benefit to members where we plan for them to be able to pick up their bag at the NAGT booth at GSA/AGU/EER meetings going into the future.

Lastly, the GER Division is working hard to expand its network and determine how best to integrate with other DBER areas as well as within GER and GER subfields. Officers McNeal and Ryker attended the CIRCLE conference (a conference between DBERs and Cognitive Psychology researchers) to learn about work in these fields and to ensure GER is included in such conferences in the future. Furthermore, ongoing conversations are being had with the Atmospheric Science Education Research (ASER) community to determine how best the GER division can support this expanding community. McNeal is also participating with the NAGT/SAGE-2YC/Cutting Edge Teaching Practices Survey group and will be a liaison to the GER Division in order to determine how the Division might be able to support efforts of large data base sharing within the GER community.

We thank Nicole LaDue, past-president, for helping to guide and direct the team throughout the year and for her commitment to continue on as Past-President another year. I also want to welcome Kelsey Bitting, the incoming Secretary, and Katherine Ryker, the incoming President. I also want to thank Kelsey Bitting for her tireless efforts as Communications Director over the past several years. We also want to thank Kristen St. John for her past efforts as the NAGT liaison and thank Anne Egger for being the current NAGT liaison to the Division. We are grateful for all of your commitment to the Division and look forward to your contributions.

The Division leadership looks forward to continued growth as a community of practice!

The NAGT-GER Division Team:

Karen McNeal

Auburn University
Past President (2018-2019)
President (2017-2018)
Vice President (2016-2017)

Katherine Ryker University of South Carolina Past-President (2019-2020) President (2018-2019) Vice-President (2017-2018) Secretary (2014-2017)

Anne Gold University of Colorado Boulder Treasurer (2016-2019)

Leilani Arthurs University of Colorado Boulder Secretary (2017-2020)

Nicole LaDue Northern Illinois University Past President (2016-2018) President (2015-2016) Vice President (2014-2015) Outstanding Earth Science Teacher Awards (OESTA) Report Dr. Mike Passow, National Coordinator

This year, OEST awards to 10 Section winners (including 2 that were also named as a state winner) and 16 State winners (18 if you include the 2 section/state winners).

Section Winners (receive full benefits listed on NAGT website)

Section	Section Awardee	Chair	
Midcontinent	Angie Nelson	Wendi Williams	
Pacific			
Northwest	Jeff Karlin	Jodie Harnden/Lynda Sanders	
Eastern	Tom Gazda	Stephen Lindberg	
Central	Collin Reichert	Susan Wolf	
Far Western	Diane Tom-Ogata	Winnie Kortemeier	
North Central	Natalie Davis-McGrath	Inactive - Suki Smaglik	
Southeastern	Phillip Cox	Frank Forcino	
New England	Melanie Cutler	Lori Weeden	
Southwest	David Thesenga	Cheryl Manning	
Texas	Sabrina Ewald	Inactive - Mike Passow	

- Total number of applicants: 37 (At least one nomination from each of the 10 sections, including inactive sections)
- Letters were sent to every Principal announcing the award winner from their school

NAGT increased marketing efforts this year, including:

- 2 emails sent from the national office to the past 3 year's OEST winners asking them to nominate a colleague
- updated marketing materials (press release and "ad") drafted and sent to all section chairs to help with soliciting nominations
- regular announcements in the monthly NAGT e-News
- additional efforts through other online venues; e.g. ESPRIT List-Serv

All organizations that support our efforts to recognize the OEST winners have been notified with a list of the 2018 award winners. A thank you email was sent to them for their continued support. (Organizations and contact info listed below):

GSA: <u>Dominique Olvera</u> USGS: <u>Dr. Eleanor Snow</u>

AGI: <u>Juliet Crowell</u>
NESTA: <u>Carla McAuliffe</u>

AIPG: Wendy Davidson

[Note: AGU declined to support this program.]

#### Recommendations:

- 1) We need to be sure replacements are identified for several Sections where current chairs are stepping down.
- 2) If Inactive Sections remain in that status, we need to develop processes to solicit nominations for teachers in those areas.
- 3) We need to expand efforts to remain linked with past winners so they continue to contribute to NAGT and Earth Science Education.
- 4) Consider increasing rewards provided to State winners so they also wish to remain active.

## Respectfully submitted,

## Dr. Mike Passow

#### All winners:

	T	
State	Name	email
SE/NC	Philip Cox	Philhcox@chatham.k12.nc.us
SC	Robin Wright	wrightrl@spart6.org
TN	Jana Young	jeyoung@jmcss.org
GA	Brenda Paul	paulb@fultonschools.org
LA	Lacey Hoosier	<u>Lacey.Hoosier@rpsb.us</u>
PR	Elizabeth Torres	ojos104@gmail.com
TX	Sabrina Ewald	ewalds@friscoisd.org
SW	David Thesenga	dthesenga@gmail.com
СО	Stephanie Seevers	sseevers@jeffco.k12.co.us
NM	Anna Suggs	asuggs7@hotmail.com
AZ	Matt Haverty	mhaverty@amphi.com
MidCont	Angie Nelson	anelson1@usd259.net
Pac NW	Jeff Karlin	jmkarlin@lewistonschools.net
OR	Connie Robbins	robbinsc@harneyesd.k12.or.us
ID	Marc Brousseau	brousseau.marc@westada.org
Eastern/NY	Tom Gazda	gazdonianproductions@gmail.com
VA	Jeanette Montrey Dellinger	dellingerjl@staffordschools.net
Central	Collin Reichert	collin.reichert@ames.k12.ia.us
IL	Andrew Peterson	ajpeterson2@cps.edu
KY	Cayeann Cowan	
MN	Dan Gruhlke	Dan.Gruhlke@monticello.k12.mn.us
WI	Dennis Rohr	drohr@seymour.k12.wi.us

Far West	Diane Tom-Ogata	dtom.ogata@gmail.com
CA	Dr. Leonard (Len) Block	lenbloch@gmail.com
No. Central	Natalie Davis-McGrath	natdavis@livingston.k12.mt.us
New		
England	Melanie Cutler	mcutler@aps1.net

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	2016-2019
Vacant	
Diana Steller	Ex officio

#### 2018 winners:

Name	Institution
	Lor Fairfax Community College & Massanutten Regional
Russel Kohrs	Governor's School, Mount Jackson, VA
Jill Weaver	Valley View Junior High, Farmersville, OH
Sara young	Waubonsie Valley High School, Aurora, IL

- Total number of 2018 applicants: 13
- We did not receive a student application this year

#### Recommendations:

- 1) We need to recruit and fill the vacant position 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

NAGT Shea Award Committee 2018 Annual Report

The James H. Shea Award committee is pleased to report that the 2018 award recipient will be Callan Bentley of Northern Virginia Community College. The committee all agreed that Callan is a very worthy recipient of this important award. "He has had a very large influence on people who teach introductory geoscience (which is not a small group). He has been deeply involved in making textbooks more interactive, and producing his own blogs and giga pans, and many other products." We're excited for this choice on several levels. Obviously, Callan has impacted many with his writing (and his work with NAGT), but we agree on the importance of acknowledging maybe "lesser known" names such as Callan's along with the names of well-known past recipients.

The 2018 James H. Shea Award committee included the following members:

- Anne Egger
- Karin Kirk
- Karen McNeal
- Tim Bralower
- Andy Buddington (Chair)

There were a total of eleven nominees for the 2018 award and because of the 3-year continuation for nominees, there will be a minimum of ten nominees for 2019. The committee would like to congratulate Callan Bentley for being the 2018 recipient of the James H. Shea Award.

Andy Buddington James H. Shea Committee, Chair

## Field Camp Scholarship 2018 Report

Chair: Lydia K. Fox

The NAGT Field Camp scholarship field was very competitive again this year, with 85 of the best and brightest young geoscientists from around the country applying for this award. As a comparison, there were 65 in 2017) Committee members are Diana Dalbotten and Steve Whitmeyer. All of the selected individuals were ranked in the top 25 by all reviewers.

## This year's awardees are:

Shayna Avila, California State University, Fullerton

Field Camp: California State University, Fullerton

Katelyn Brower, Western Washington University

Field Camp: Field Methods and Theory and Geologic Mapping

Ashlee Cowles, University of Arizona

Field Camp: Geology Field Camp in Scotland

Samantha Denham, Pacific Lutheran University

Field Camp: Eastern Washington University

Cason Dowdy, University of Georgia

Field Camp: Canon City, Colorado

Molly Gallahue, St. Norbert College (AWG Crawford Field Camp Scholarship Recipient)

Field Camp: Illinois State University

Sabrina Green, California State University, Fullerton

Field Camp: California State University, Fullerton

Denay Grund, University of Nebraska, Omaha

Field Camp: University of St Andrews

Olivia Helprin, Humboldt State University

Field Camp: Humboldt State University

Ashley Lynn, East Carolina University

Field Camp: North Carolina Summer Geology Field Course

Neal Mathes, Case Western Reserve University

Field Camp: South Dakota School of Mines

Samantha McComb, SUNY-Potsdam (AWG Crawford Field Camp Scholarship Recipient)

Field Camp: IUGFS Field Geology in the Rocky Mountains

Shirley Mensah, Eastern Illinois University

Field Camp: Western Illinois University

Evan Millsap, Utah State University

Field Camp: Idaho State University

Holly Pettus, West Virginia University

Field Camp: West Virginia University

Miai-Hana Reed, Georgia State University

Field Camp: Georgia State University

Kelsey Tucker, University of Alaska, Anchorage

Field Camp: University of St. Andrews

David Valerio, Texas A&M University

Field Camp: Texas A&M University Field Camp

The Committee has recommended changes to the scholarship application form, to be sure that the information being collected matches the criteria for the scholarship.





#### ANNUAL REPORT 2018: NAGT/USGS COOPERATIVE SUMMER FIELD TRAINING PROGRAM

The 2018 Field Season for the NAGT/USGS Cooperative Summer Field Training Program marked the 5<sup>3rd</sup> year of what is now one of longest running science internship programs in the nation. More than 2,400 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 at: <a href="http://education.usgs.gov/nagt/NAGTFlyer2018.pdf">http://education.usgs.gov/nagt/NAGTFlyer2018.pdf</a>.)

This year, 104 students were nominated by field camp directors, and 91 of those students completed an application for the program. After receiving 47 proposals from USGS scientists and after the proposal review panel met and matched students to projects, a total of 48 students were placed with USGS science projects. Since bringing new life back into this historic program 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 2018:

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

This year we continued the practice, introduced six years ago, 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 104 nominees from both NAGT and USGS congratulating them on their nomination and instructing them on how to apply. The application is through USAJobs. A total of 91 students (88% of nominees) completed the application deadline by the December 20 deadline.
- The USGS solicited internal proposals from scientists wishing to host an NAGT intern in the fall. A total of 47 proposals were received, and ultimately 48 were matched with interns. A list of interns and their research projects for 2018 is attached. 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.
- We continue the practice of annually updating our comprehensive listing of geology field camps nationwide including, in most cases, contact names and websites. Using the same research procedures employed when the list was developed five years ago, we were able to cross-check and identify 122 active field camp programs during the 2018 academic year. Website links were identified for each program, as well as specific contact information for the respective field camp instructors. This listing is maintained on the USGS Education website and also linked on NAGT's website. <a href="http://education.usgs.gov/nagt/geofieldcamps.html">http://education.usgs.gov/nagt/geofieldcamps.html</a>

- 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, will be provided in the full packets to those attending our Annual Joint NAGT/USGS Internship Meeting on Sunday, November 4, 21018 from 2:00-4:00pm.
- The USGS, Youth and Education in Science Office provides 50% of the intern salary support for a period of up to 12 weeks. Individual scientists, through their science centers, supply the other 50% support. Although final expenditures will not be determined until later next month, it is estimated that the collective support for this program is in excess of \$400,000.
- 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 is looking into the possibility of expanding the current hiring authority to a different version wherein interns may stay on board for up to 4 years, rather than only 5 months. This would be a great benefit to many of our scientists who ask if they can keep their interns for longer, as long as there are no conflicts with their graduate school or other plans. Many of these interns would 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.

4/17/18

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

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

## NAGT/USGS 2018 Cooperative Summer Field Training Program Internship Placements

Student Intern	Project Title	Researcher
Emma Armstrong Oregon State University	Hurricane frequency near Chesapeake Bay during the past two thousand years	Michael Toomey Reston, VA
Tristan BeDell Appalachian State University	Geological and geophysical studies of the San Andreas Fault system, California	Shane Detweiler Menlo Park, CA
Jessica Bersson Whitman College	Volcanic hazards at Glacier Peak and Mount Shasta: understanding the latest Pleistocene to post-glacial history through field and laboratory studies	James Vallance Vancouver, WA
Lila Bishop University of Texas Austin	Frozen in time: using historical photographs to understand the future of water in the western U.S.	Erin Whorton Tacoma, WA
Riley Blais Clemson University	Cape Cod Hydrologic Research	Denis LeBlanc Northborough, MA
Allyson Boggess James Madison University	Impact of mosquito ditching management actions on salt marsh elevation and carbon burial	Meagan Gonneea Woods Hole, MA
Mary Kate Branigan University of Nevada, Reno	Reconstructing paleoclimate from Alaskan lake oxygen isotope; long-term perspectives on North Pacific ocean-atmosphere dynamics	Lesleigh Anderson Lakewood, CO
Kiara Broudy University of California, Santa Cruz	Northern California active fault mapping and paleoseismic studies	Belle Philibosian Menlo Park, CA
Camille Buckley Saint Louis University	Fluvial geomorphology of the Chippewa and Upper Mississippi river basins	Jeffrey Ziegeweid Mounds View, MN
Trevor Burns East Carolina University	Characterization of surface-water quality and quantity	Jeffrey Chaplin Fairview, PA
Samuel Callis University of Utah	Geodetic monitoring of Cascade Range Volcanoes and Yellowstone	Benjamin Pauk Vancouver, WA
David Campbell Eastern Kentucky University	Surface water and ground water networks	Alicia Gearwar Troy, NY
Marley Chertok Temple University	Differentiating cyanobacteria genera using hyperspectral data and relating these data to water quality parameters	Nancy Simon Reston, VA
Brad Clagget University of Tulsa	Field and digital geologic mapping to resolve stratigraphic discrepancies in the Appalachians	Joel Groten Mounds View, MN
Cheyenne Cox University of Missouri, Kansas City	Field and digital geologic mapping to resolve stratigraphic discrepancies in the Appalachians	Daniel Doctor Reston, VA
Robert Domeyko George Mason University	Marine microfossil indicators of past warm periods	Marci Robinson Reston, VA
Morgan Garner Georgia State University	Placing wetland accretion and vegetation in change associated with land-use change and sea-level rise into the Holocene context	Miriam Jones Reston, VA
Kerri Gefeke Northern Illinois University	Earthquake hazards in the Central and Eastern U.S.: Field and office activities	Walter Mooney Menlo Park, CA
Scott Gifford Brigham Young University, Idaho	Optimize pheromone application rates to yield consistent catches of sea lamprey in barrier-integrated traps	Nicholas Johnson Millersburg, MI
Lauren Giggy Fort Lewis College	Characterization of hydrogeologic resources in Pennsylvania with emphasis on methane and pesticides in groundwater	Jeffrey Chaplin Fairview, PA
Nicholas Gilbert University of Missouri, Columbia	Geodetic monitoring of Cascade Range volcanoes and Yellowstone	Benjamin Pauk Vancouver, WA
Francesca Governali Dartmouth College	Phytostabilization in action: Optimizing plant-microbial communities for enhanced reclamation of acidic tailings	Andrea Foster Menlo Park, CA
Madeline Hille University of Washington	Active faults in the western U.S.	Richard Briggs Golden, CO

Amanda Hultz Western Washington University	Earthquake hazards in the central and eastern U.S.: Field and office activities	Walter Mooney Menlo Park, CA
Sarah Jonathan Macalester College	Repressing the hydrologic cycle at a national scale: Tools for model evaluation and improvement	William Farmer Denver, CO
Sally Keating University of California, Davis	Landslide hazards in post-glacial landscapes	Stephen DeLong Menlo Park, CA
Douglas Keto Western Michigan University	Surface-water and ground-water networks	Alicia Gearwar Troy, NY
Evan Magette Colgate University	Mapping drowned Hawaiian reef terraces to reconstruct past sea level change	Michael Toomey Reston, VA
Anna Maher University of Nebraska, Omaha	Evaluating the susceptibility and sustainability of water supplies from confined glacial aquifers	Jared Trost Mounds View, MN
Connor Martin University of Pittsburgh	Earthquake hazards in the central and eastern U.S.: Field and office activities	Walter Mooney Menlo Park, CA
Jordon Mason South Dakota School of Mines and Technology	Applied hydrogeophysics research	John Lane Storrs, CT
Kimberly Moore Sam Houston State University	Applied hydrogeophysics research	John Lane Storrs, CT
Joshua Parris Georgia State University	Arsenic sources in the Klamath Basin	Brent Topping Menlo Park, CA
Eleanour Rappolee Michigan State University	Sediment dynamics and transport in rivers	Katherine Skalak Reston, VA
Michael Reed SUNY Geneseo	Earthquake hazards of reverse faults in southern California	Katherine Scharer Pasadena, CA
Emma Reib Dartmouth College	The effect of floodplain geomorphology on nutrient biogeochemistry and water quality	Gregory Noe Reston, VA
Steven Richardson Ohio University	Integration of economics into the Mississippi Alluvial Plain aquifer groundwater model	Emily Pindilli Reston, VA
Hannah Rigoni New Mexico Tech	Fate and transport of micropollutants during surface water- groundwater exchange	Ronald Harvey Boulder, CO
Claire Ruggles University of Wisconsin, Madison	Geodetic monitoring of Cascade Range volcanoes and Yellowstone	Daniel Dzurisin Vancouver, WA
Kristen Steele James Madison University	Holocene drought history inferred from lake lowstands in the southeastern U.S.	Jessica Rodysill Reston, VA
Elizabeth Teeter Bowdoin College	Columbia Gorge tributary salmonid monitoring and evaluation	lan Jezorek Cook, WA
Alexandra Wallenberg Illinois State University	Melt and fluid inclusion analysis in resource investigations	Al Hofstra Lakewood, CA
Kelsey Walsh Humboldt State University	Geologic mapping in San Luis Valley of the Rio Grande rift	Kenzie Turner Lakewood, CO
Geoffrey Webb University of Missouri, Columbia	Surface-water and ground-water networks	Andrew Waite Ithica, NY
Shannon Weld Colorado State University	National water quality program groundwater and surface water trends	Celeste Journey Columbia, SC
Zoe Wellschlager University of Oregon	Experimental suppression of invasive lake trout, and translocation of imperiled fishes	Vincent D'Angelo West Glacier, MT
Denise Wesley Humboldt State University	Groundwater availability for summer low flows	Andrew Long Tacoma, WA
Kelsey Wetzel Utah State University	Neotectonic investigations of the Yakima Folds and Cascade Range	Scott Bennett Menlo Park, CA

## Report to the NAGT PD Committee: 2017-18 NGSS-ESS Implementation Webinar Series

#### **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 webinar series 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 have provided 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 community.

The 2018-19 webinar series kicks off September 13 with "Designing instructional units using the NGSS Storyline Approach to support student sensemaking," a webinar presented by Abraham Lo, Ph.D., Science Educator, BSCS Science Learning. It will be followed by webinars in October, November, February, March, April and May with topics TBA.

#### Webinar team:

Aida Awad, NAGT Ed Robeck, AGI Carla McAuliffe, NESTA

#### Summary of number of webinars, # of attendees and demographics of attendees\*:

				Web Traffic 080117- 073118 (unique
2017-18 Webinars	Date	Registration	Attendance	pageviews)
Achieve Resources				
and Tools for NGSS				
<u>Implementation</u>	9/14/2017	79	30	236
STEM Teaching Tools:				
Resources for				
equitable science				
teaching and learning	10/12/2017	39	13	263
A Sampling of Federal				
<b>Education Resources</b>				
Supporting Earth and				
Space Science				
<u>Instruction</u>	11/9/2017	37	7	252
Integrating Earth and				
Space Science				
Concepts into High				
School Physics and				
Physical Science				
Courses	3/8/2018	194	51	1000

Explore plate				
tectonics & more				
through GPS data	4/12/2018	122	27	448
Integrating High				
School Earth & Space				
Science into				
Chemistry Classes	5/17/2018	144	20	697

<sup>\*</sup>Demographic information was not collected on the registration form between 2015-2018. We will collect it beginning with the 2018-19 series. See September 2018 registration page here: https://nagt.org/nagt/profdev/workshops/ngss\_summit/sept2018/registration.html

#### Summary of end-of-webinar surveys:

Webinar feedback surveys were sent to participants along with a link to the archived version of the webinar. No further follow-up was done, nor did we send additional requests for completed feedback surveys. As a result, during the 2017-18 series we received only 10 completed surveys. Survey respondents rated their overall satisfaction with the webinars an 8.8 out of 10.

#### Link to webinar series offerings since 2015:

https://nagt.org/nagt/profdev/workshops/ngss\_summit/webinars.html

#### **Progress on webinar development:**

Registration for the 2018-19 webinar series kick-off event on September 13 is now open: <a href="https://nagt.org/nagt/profdev/workshops/ngss\_summit/sept2018/index.html">https://nagt.org/nagt/profdev/workshops/ngss\_summit/sept2018/index.html</a>

Remaining webinars in the series will be announced at least 1 month in advance.

We are working with Aleeza Oshry, HHMI, and Jessica Bean, Berkeley on increasing the impact of the webinars through post-webinar discussion threads, and a more varied slate of presenters. This work is ongoing, including defining roles and tasks of each member of the webinar team. The webinar team is also discussing the benefits of providing certificates to webinar participants.

#### Webinar report contact:

Aida Awad aawad@tothecloudedu.com

The National Association of Geoscience Teachers offered a rich array of in-person and virtual programs during 2017-2018. These programs included the Earth Educators' Rendezvous, the Early Career Workshop, the Preparing for an Academic Career Workshop, the Traveling Workshop Program, workshops at AGU and GSA, webinars, and the Teach the Earth Website. Over 1000 people participated in NAGT programs over the past year and many more accessed the website. Program summaries are below with the full reports available at: https://nagt.org/nagt/about/workspaces/workshop\_plan/programactiviti.html.

**Earth Educators Rendezvous** July 16-20, 2018, University of Kansas, Lawrence, KS <a href="https://serc.carleton.edu/earth\_rendezvous/2018/program/index.html">https://serc.carleton.edu/earth\_rendezvous/2018/program/index.html</a>
Conference chairs: Caitlin Callahan, Grand Valley State & Hannah Scherer, Virginia Tech Program chairs: Rachel Teasdale, California State U, Chico & Katherine Ryker, U South Carolina **235 registrants** 

"The primary goals for planning the 2018 Earth Educators' Rendezvous were to maintain the quality of the contributed and invited program, diversify the disciplinary backgrounds represented in workshop and roundtable leaders, and develop more structure around the planning process. Through these efforts, we aimed to grow the reputation of the Rendezvous at a premier interdisciplinary venue for sharing research and practice related to all facets of teaching and learning about the Earth. A survey to collect ideas for the program was developed and advertised with a deadline of October 1, 2017. This allowed us to gather input from past participants and identify existing groups (e.g. grant-funded projects) that were interested in presenting at the Rendezvous. Invited program presenters included representation from disciplines including geoscience, geography, atmospheric science, environmental science, geoscience education research, and science education research and organizations including K-12, 2-year, 4-year, graduate, HBCU, and tribal educational institutions, governmental agencies, and non-profit organizations. We recommend engaging with the NAGT divisions for input and continuing to refine the process for identifying and recruiting invited program presenters, as this is the primary consideration in the timeline for finalizing and advertising the program. A second key recommendation is to develop a procedure for ensuring quality evaluation of the Rendezvous within the current budget constraints. Finally, we implemented a new format for roundtable discussions (tables in a large ballroom) which was well-received; we recommend adding a training for roundtable leaders similar to the webinars currently held for workshop leaders to better prepare them for quality facilitation in this setting."

**Early Career Workshop** July 22-27, 2018, University of Maryland, College Park, MD <a href="https://serc.carleton.edu/NAGTWorkshops/earlycareer2018/index.html">https://serc.carleton.edu/NAGTWorkshops/earlycareer2018/index.html</a>

Conveners: Tessa Michelle Hill, UC Davis, Sarah Penniston-Dorland, University of Maryland, and Josh Galster, Montclair

#### 67 participants

"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. The workshop design is aligned 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). 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 on the last day of the workshop."

## Preparing for an Academic Career Workshop July 18-20, 2018 at EER

https://serc.carleton.edu/earth\_rendezvous/2018/program/morning\_workshops/w1/

Convener: Lisa Gilbert Williams College

#### 28 participants

"The main goals of the "Preparing for an Academic Career in the Geosciences" (Career Prep) workshop are for participants to improve their application and interview skills for academic jobs, become more effective at goal-setting and time management, and broaden their network of colleagues and resources to help jump-start their teaching and research as a faculty member. The workshop was held for the third year at the Earth Educators' Rendezvous. Participants rate the workshop highly with both quantitative and qualitative feedback provided in the end-of-workshop evaluation. Participants agreed that the workshop achieved its goals and appreciated having five leaders with diverse experiences. They were left wanting more, and it might be worthwhile to have either an afternoon workshop or a Thursday-Friday morning workshop that addresses getting started with teaching to supplement the Monday-Wednesday morning workshop. The conveners have an NSF grant pending (Gilbert & Ebanks PIs) to support the workshop financially and complete a more comprehensive and longitudinal analysis of the impacts of the workshop."

**Traveling Workshop Program** 2017-2018, located at 13 universities and colleges Chairs: Dallas Rhodes, Humboldt State University, and Catherine Riihimaki, Princeton **175 + participants** 

"A new administrative structure for the NAGT Traveling Workshops Program (TWP) began in March 2017 with the creation of the TWP Management Team. The Team is comprised of 10 facilitators (including a chair and co-chair) and four members of the SERC staff. With a number of specific responsibilities, the Management Team is charged with overseeing and directing all the operations of the TWP. During FY 2017-2018, the Team received and reviewed 16 applications for workshops, approving all but one of them. Thirteen workshops, with a total participation of at least 175 faculty members, were conducted during the year. The Geoscience and Environmental Science Departments and Programs workshops and the Cross-Campus Environmental and Sustainability Programs workshops were the most requested and the most

often conducted during the year. All combined, the workshops received a weighted aggregate rating of 8.9 on a 10-point scale, with Baccalaureate (9.5) and Master's (9.3) institutions evaluating the workshops most positively and Doctoral universities producing lower evaluations (8.5). Facilitators' post-workshop reports provide insight into common challenges and particularly successful activities. Notably, flexibility in managing the schedule is essential in facilitating nearly every workshops and action planning is where all the workshop activities come together. In addition to handling workshop applications, the goals of the TWP Management Team for the coming year are to: 1) continue to improve session descriptions for both facilitators and participants; 2) institute on-line training for workshop facilitators; 3) publicize the TWP and especially the newer workshop themes; 4) engage facilitators who have not yet led a workshop and; 5) establish a process of rotating members on and off the Management Team. The TWP Management Team will also consider recommendations for improving and enhancing all types of workshops. One such improvement might be the creation of "concept maps" for every workshop to help participants understand how the various sessions support each other while moving toward the workshop's established goals."

## **AGU Workshops** December 12, 2017

- Supporting the Success of All Students: Broadening participation of underrepresented groups in the geosciences, 45 participants, https://nagt.org/nagt/profdev/twp/AGU2017/index.html
- Sustainable Solutions to Societal Issues, *25 participants*, https://serc.carleton.edu/integrate/workshops/solutions\_societal\_issues/resources.html

## **GSA Workshop** October 21, 2017

• Helping students thrive in geoscience at two-year colleges: selected strategies, **36** participants, https://serc.carleton.edu/sage2yc/workshops/GSA17 thrive/program.html

#### **Webinars** 2017-2018

- Integrate: 17 webinars, 500 participants,
   <a href="https://serc.carleton.edu/integrate/workshops/index.html">https://serc.carleton.edu/integrate/workshops/index.html</a>
   "The goals of the series were to promote broad adoption of teaching aligned with the InTeGrate philosophy through the use of InTeGrate materials and models, support implementors with just-in-time learning, build capacity for leading Traveling Workshops, build interest in the Traveling Workshops program, and build interest in workshop materials."
- **GER**: 2 webinars, **40** participants, <a href="https://nagt.org/nagt/divisions/geoed/webinars">https://nagt.org/nagt/divisions/geoed/webinars</a>
  "The NAGT-GER webinar goal is to provide professional development, DBER community awareness, information on funding opportunities, and career information to our members that are specific to GER. We aim to provide one webinar per semester for the GER division membership, and those interested NAGT members."
- NGSS-ESS: 6 webinars, 148 participants
   https://nagt.org/nagt/profdev/workshops/ngss\_summit/webinars.html
   Webinar team: Aida Awad, Ed Robeck, Carla McAuliffe

"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 webinar series 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 have provided 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 community."

#### **Teach the Earth Website**

https://serc.carleton.edu/teachearth/index.html

Chair: Jennifer Wenner, University of Wisconsin, Oshkosh

"In the past year, the committee established several new policies for how content is curated and managed on the Teach the Earth site. Discussions and policies have centered on how we effectively and efficiently continue to provide quality content, keep the site up to date, and allow new content to be added. New policies include protocols for including external site links on the portal, a process for engaging with folks who want to curate, update, and edit portions of the pages included on the portal, and developed a protocol for how the pop-up window are populated. We identified three challenges for the future: 1) Gaining a meaningful understanding of the current Teach the Earth collection; 2) filling in gaps in content - making the site as comprehensive as possible; and 3) updating content. We also started thinking about opportunities to do some of our site reviews on external sites. Finally, we recruited a new member, Sarah Fortner, to fill the slot vacated by Anne Egger."

Respectfully submitted October 2, 2018 by

Rachel Beane, Chair of the NAGT Professional Development Planning Committee

Associate Dean for Academic Affairs
Anne T. and Robert M. Bass Professor of Natural Sciences
Department of Earth and Oceanographic Science
Bowdoin College
rbeane@bowdoin.edu