45TH BIENNIAL CONVENTION of SIGMA GAMMA EPSILON
VIRTUAL MEETING HOSTED BY EASTERN ILLINOIS UNIVERSITY
April 10, 2021

James Walters
james.walters@uni.edu

Paula Even
University of Northern Iowa, even@sigmagammaepsilon.com

Follow this and additional works at: https://digitalcommons.csbsju.edu/compass

Recommended Citation
Available at: https://digitalcommons.csbsju.edu/compass/vol91/iss2/3

This News Update is brought to you for free and open access by DigitalCommons@CSB/SJU. It has been accepted for inclusion in The Compass: Earth Science Journal of Sigma Gamma Epsilon by an authorized editor of DigitalCommons@CSB/SJU. For more information, please contact digitalcommons@csbsju.edu.
45TH BIENNIAL CONVENTION of SIGMA GAMMA EPSILON 
VIRTUAL MEETING 
HOSTED BY EASTERN ILLINOIS UNIVERSITY
April 10, 2021
James C. Walters¹ and Paula F. Even²
Department of Earth and Environmental Sciences
University of Northern Iowa
Cedar Falls, IA 50614 USA
¹James.walters@uni.edu
²even@sigmagmaepsilon.com

ABSTRACT
The 45th Biennial Convention of Sigma Gamma Epsilon, the national honor society in the Earth Sciences, was originally scheduled for April 3 – 5, 2020 at The University of Tennessee at Martin, but it was postponed until April 10, 2021 due to the Coronavirus pandemic. Since COVID-19 was still a serious issue this spring, the SGE National Council decided to conduct this meeting in a virtual format using the Zoom platform. The meeting was hosted by SGE Gamma Chi Chapter in the Department of Geology/Geography at Eastern Illinois University and presided over by Dr. Diane Burns, Chair of the Department and Gamma Chi Chapter Advisor. This report summarizes the Convention and includes information on the deliberations and actions of the attendees.

KEY WORDS: Sigma Gamma Epsilon, 45th Biennial Convention, Eastern Illinois University, virtual meeting

SUMMARY OF THE MEETING
Sigma Gamma Epsilon, the national honor society in the Earth Sciences, held its 45th Biennial Convention as a virtual meeting on April 10, 2021. Gamma Chi Chapter in the Department of Geology/Geography at Eastern Illinois University hosted this event, with Department Chair and SGE President Diane Burns presiding. There were a total of 36 attendees at the Convention with 13 chapters represented. Delegates and alternates are listed in Table 1.
National officers in attendance were President Diane Burns, Central Province Vice President Steve Bennett, Southeastern Province Vice President Michael Gibson, Secretary-Treasurer James Walters, and Editor of The Compass, Daniel Curtis. Also present was SGE Associate Director Paula Even. Advisors in attendance included Janet Vote, Dr. Alexander Stewart, Dr. Rick Ford, Dr. Frank Ettenson, Dr. Margaret Yacobucci, Dr. Dave Goldsmith and Dr. Joshua Spinler. Also in attendance was lifetime member David Svingen and guest Sonora Brandon.

<table>
<thead>
<tr>
<th>Name</th>
<th>Chapter</th>
<th>University</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molly Hunt</td>
<td>Sigma</td>
<td>The Ohio State University</td>
<td>Delegate</td>
</tr>
<tr>
<td>Taylor Arrowood</td>
<td>Chi</td>
<td>University of Kentucky</td>
<td>Delegate</td>
</tr>
<tr>
<td>Jessica Williams</td>
<td>Beta Upsilon</td>
<td>Bowling Green State University</td>
<td>Delegate</td>
</tr>
<tr>
<td>Madison Wood</td>
<td>Gamma Zeta</td>
<td>Kent State University</td>
<td>Delegate</td>
</tr>
<tr>
<td>Sofie O'Neil</td>
<td>Gamma Sigma</td>
<td>University of Northern Iowa</td>
<td>Delegate</td>
</tr>
<tr>
<td>Courtney Johnson</td>
<td>Gamma Sigma</td>
<td>University of Northern Iowa</td>
<td>Alternate</td>
</tr>
<tr>
<td>Kari Wellman</td>
<td>Gamma Sigma</td>
<td>University of Northern Iowa</td>
<td>Alternate</td>
</tr>
<tr>
<td>Carolyn Karns</td>
<td>Gamma Chi</td>
<td>Eastern Illinois University</td>
<td>Delegate</td>
</tr>
<tr>
<td>Anthony W. N. Kilber</td>
<td>Gamma Chi</td>
<td>Eastern Illinois University</td>
<td>Alternate</td>
</tr>
<tr>
<td>Matthew Bourdon</td>
<td>Epsilon Omega</td>
<td>University of Texas at San Antonio</td>
<td>Delegate</td>
</tr>
<tr>
<td>Jack S. Garret</td>
<td>Eta Alpha</td>
<td>University of Tennessee @ Martin</td>
<td>Delegate</td>
</tr>
<tr>
<td>Clayton Ervin</td>
<td>Eta Alpha</td>
<td>University of Tennessee @ Martin</td>
<td>Alternate</td>
</tr>
<tr>
<td>Joseph Pelren</td>
<td>Eta Alpha</td>
<td>University of Tennessee @ Martin</td>
<td>Alternate</td>
</tr>
<tr>
<td>Kylie Arcaris</td>
<td>Eta Gamma</td>
<td>Weber State University</td>
<td>Delegate</td>
</tr>
<tr>
<td>Judy Smith</td>
<td>Eta Gamma</td>
<td>Weber State University</td>
<td>Alternate</td>
</tr>
<tr>
<td>Nick Bentley</td>
<td>Eta Gamma</td>
<td>Weber State University</td>
<td>Alternate</td>
</tr>
<tr>
<td>Eloise Bellingham</td>
<td>Eta Xi</td>
<td>St. Lawrence University</td>
<td>Delegate</td>
</tr>
<tr>
<td>Brittany Price</td>
<td>Eta Phi</td>
<td>Northern Illinois University</td>
<td>Delegate</td>
</tr>
<tr>
<td>Rebecca Bishop</td>
<td>Theta Sigma</td>
<td>University of Arkansas Little Rock</td>
<td>Delegate</td>
</tr>
<tr>
<td>Tristan Palmer</td>
<td>Theta Psi</td>
<td>Westminster College</td>
<td>Delegate</td>
</tr>
</tbody>
</table>

Table 1. SGE 2021 Biennial Convention delegates and alternates.

Dr. Diane Burns called the meeting to order at 10:02 am. She welcomed everyone to this historic first ever virtual SGE Convention and reviewed Zoom protocol (figure 1). She also introduced special guest, David Svingen, representing The National Association of State Boards of Geology (ASBOG), which is seeking to promote its organization to SGE.
members, and with whom we may be able to establish a mutually beneficial relationship. Diane explained the reason for conducting a virtual meeting and noted that we are planning to get the biennial convention schedule back on track with the 46th Biennial Convention scheduled for fall 2022. She noted that Dr. Michael Gibson and the Eta Alpha Chapter at the University of Tennessee at Martin were all ready to go when the Coronavirus struck last spring and we had to postpone the Convention.

![Figure 1. Dr. Diane Burns welcomes everyone to this historic first ever virtual SGE Convention.](image)

That unrealized meeting will now be held as the 46th Convention in a year and a half. Dr. Gibson will have much more to say about this later in today’s meeting. Diane then mentioned the success we have been having with the SGE Poster Session at the Geological Society of America annual meetings. She encouraged members to participate and also indicated that their research should be submitted for publication in The Compass. She mentioned that the previous editor, Dr. Larry Davis, has stepped down and she thanked him for his years of work with the journal. Diane welcomed Dan Curtis as the new editor of The Compass and indicated
that we will hear from Dan later in the meeting today. By way of concluding her remarks, Dr. Burns mentioned that we have had 9 new chapters installed since our last convention in 2017 and 2 chapters have re-activated. Figure 1.

Dr. Diane Burns welcomes everyone to this historic first ever virtual SGE Convention.

National Secretary-Treasurer, Dr. James Walters, next gave some opening remarks and then provided a brief report on the financial status of the Society. He indicated that since our last convention in 2017, SGE has shown a decline in total number of members but an increase in total number of chapters. We currently have a total of about 1,000 active members. Our largest source of income continues to be initiation fees and dues paid by new members. Our second largest source of income is provided by dividends from our stock holdings, now managed by Edward Jones. Jim next took a moment to recognize the efforts of Dr. Larry Davis, former Editor of The Compass, the SGE Journal of Earth Science. He was instrumental in moving the journal to an online format, and it was through his insight and hard work that The Compass has become an attractive and widely read publication.

Dr. Walters then provided a brief summary of our finances over the last four fiscal years. Fiscal years 2016-17, 2017-18, and 2018-19 all showed positive net income, but 2019-20 showed a slight loss. This is due to a significant decline in new initiates, which is probably attributable to less overall activity of chapters as the Coronavirus pandemic took hold. If a negative trend continues, we will have to consider an increase in dues and/or initiation fees, but we are not yet to that point. Dr. Walters then presented some figures on awards presented over the last few years, noting that we typically award 3 Quality Chapter Awards and 2 to 5 Chapter Service Awards each year. Thirty to thirty-five W.A. Tarr Awards are normally presented annually, but 2020 was unusually low with just 19 awards given. This also might be an effect of the Coronavirus pandemic and lower than normal chapter activity. Dr. Walters ended his presentation by entertaining questions from the attendees.

Vice President of the Central Province, Dr. Steven Bennett, next gave his report on activities in his
province. He noted that the Central Province includes 30 chapters in nine states. Of these chapters, only eight are currently active and no new chapters have been installed since the last national convention. With the decline in the number of active chapters in the Central Province, Dr. Bennett indicated he will endeavor to contact the inactive chapters and, if possible, work to assist them in reactivating.

Next to report was Dr. Michael Gibson, Vice President of the Southeastern Province. Dr. Gibson noted that there are 11 states that make up the Southeastern Province of SGE, and since our last convention in 2017 one new chapter has been installed. The new chapter is at the University of Tennessee at Chattanooga, and this makes a total of 61 chapters in the province. The COVID-19 pandemic struck campuses in the U.S. in March 2020, and consequently there has been little opportunity for additional chapter cultivation in the Southeast Province during this time period. Although at the beginning of the 2019 academic year there were several inquiries from schools regarding potential new chapters, there have been no petitions for new chapters and no chapter visits for the past year.

The University of Tennessee at Martin was to have hosted the 2020 SGE Convention and had developed a field trip opportunity to the internationally famous Coon Creek Science Center lagerstätte fossil site, which is now managed by UT Martin. Unfortunately, the pandemic caused this field trip convention to be rescheduled twice. And now UT Martin has indicated it is prepared to host the next SGE biennial convention with a field trip to the site in fall of 2022. Finally, Dr. Gibson remarked that since a COVID-19 vaccine has now been developed he reports that the Southeastern Province is eager to emerge from the pandemic strong and resume the expansion of chapters it has witnessed over the past decade.

No reports were provided from the Northeastern Province Vice President or the Western Province Vice President.

Dr. Burns next introduced Dan Curtis, new editor of The Compass and an alumnus from Gamma Chi Chapter at Eastern Illinois University. Dan began by thanking Larry Davis,
previous editor of The Compass, for his many years of service. He indicated he is looking to modernize many aspects of journal including format and design, submission guidelines, and publication schedule. He mentioned that since the last in-person convention in 2017, there have been 5 new works published. A breakdown of full-text downloads of articles over the last several years, indicates that The Compass receives wide readership, with an average of well over 3,000 downloads annually. He noted that there seems to be (as one might expect) a correlation between number of publications and downloads. Dan then shared information on the top downloaded papers since the last SGE Convention in September 2017. Larry Davis would find it interesting that an editorial he published in 2012 titled “Is Geology a Real Science?” has received the most downloads over this period of time. It is also interesting to note that educational institutions make up 64% of downloads, with commercial (25%) and government (6%) entities making up most of the remainder. Dan also pointed out that our primary referrer (the source that linked a viewer to The Compass website) was Google by a factor of 10 over other referrers. The indicates our journal is found primarily through standard internet search engines rather than composite educational journal platforms like ScienceDirect or Elsevier.

The officers’ reports finished up at approximately 11:45 am (the complete Committee and Officers’ reports follow the Convention Summary), and we then began the presentations of chapter reports given by Convention delegates. These reports summarize local chapter activities since the last Convention in 2017 and are published in this issue. Shortly after 1 pm, we finished the chapter reports and took a short break, reconvening at about 1:30 pm. Dr. Burns briefly went over committee assignments (Table 2) and responsibilities, and participants were then instructed to go to their respective breakout rooms.

At 1:43 pm, we reconvened to discuss committee reports and conduct business.
Table 2. Committee Assignments.

<table>
<thead>
<tr>
<th>Name</th>
<th>Chapter</th>
<th>Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diane Burns</td>
<td>Gamma Chi</td>
<td>Chapter Affairs, Facilitator</td>
</tr>
<tr>
<td>Eloise Bellingham</td>
<td>Eta Xi</td>
<td>Chapter Affairs, Chair</td>
</tr>
<tr>
<td>Margaret Yacobucci</td>
<td>Beta Upsilon</td>
<td>Chapter Affairs</td>
</tr>
<tr>
<td>Carolyn Karns</td>
<td>Gamma Chi</td>
<td>Chapter Affairs</td>
</tr>
<tr>
<td>Janet Vote</td>
<td>Epsilon Omega</td>
<td>Chapter Affairs</td>
</tr>
<tr>
<td>Joseph Pelren</td>
<td>Eta Alpha</td>
<td>Chapter Affairs</td>
</tr>
<tr>
<td>Rebecca Bishop</td>
<td>Theta Sigma</td>
<td>Chapter Affairs</td>
</tr>
<tr>
<td>Dave Goldsmith</td>
<td>Theta Psi</td>
<td>Chapter Affairs</td>
</tr>
<tr>
<td>Daniel Curtis</td>
<td>Gamma Chi</td>
<td>COMPASS &amp; Finance, Facilitator</td>
</tr>
<tr>
<td>Molly Hunt</td>
<td>Sigma</td>
<td>COMPASS &amp; Finance, Chair</td>
</tr>
<tr>
<td>Frank R. Ettensohn</td>
<td>Chi</td>
<td>COMPASS &amp; Finance</td>
</tr>
<tr>
<td>Courtney Johnson</td>
<td>Gamma Sigma</td>
<td>COMPASS &amp; Finance</td>
</tr>
<tr>
<td>Matthew Bourdon</td>
<td>Epsilon Omega</td>
<td>COMPASS &amp; Finance</td>
</tr>
<tr>
<td>Amanda Mayo</td>
<td>Eta Alpha</td>
<td>COMPASS &amp; Finance</td>
</tr>
<tr>
<td>Michael Gibson</td>
<td>Eta Alpha</td>
<td>Constitution &amp; Bylaws, Facilitator</td>
</tr>
<tr>
<td>Taylor Arrowood</td>
<td>Chi</td>
<td>Constitution &amp; Bylaws, Chair</td>
</tr>
<tr>
<td>Sofie O’Neil</td>
<td>Gamma Sigma</td>
<td>Constitution &amp; Bylaws</td>
</tr>
<tr>
<td>Anthony W. N. Kilber</td>
<td>Gamma Chi</td>
<td>Constitution &amp; Bylaws</td>
</tr>
<tr>
<td>Rick Ford</td>
<td>Eta Gamma</td>
<td>Constitution &amp; Bylaws</td>
</tr>
<tr>
<td>Nick Bentley</td>
<td>Eta Gamma</td>
<td>Constitution &amp; Bylaws</td>
</tr>
<tr>
<td>Paula Even</td>
<td>Gamma Sigma</td>
<td>Nominations, Facilitator</td>
</tr>
<tr>
<td>Kylie Arcaris</td>
<td>Eta Gamma</td>
<td>Nominations, Chair</td>
</tr>
<tr>
<td>Clayton Ervin</td>
<td>Eta Alpha</td>
<td>Nominations</td>
</tr>
<tr>
<td>Brittany Price</td>
<td>Eta Phi</td>
<td>Nominations</td>
</tr>
<tr>
<td>James Walters</td>
<td>Gamma Sigma</td>
<td>Ritual &amp; Insignia, Facilitator</td>
</tr>
<tr>
<td>Tristan Palmer</td>
<td>Theta Psi</td>
<td>Ritual &amp; Insignia, Chair</td>
</tr>
<tr>
<td>Kari Wellman</td>
<td>Gamma Sigma</td>
<td>Ritual &amp; Insignia</td>
</tr>
<tr>
<td>Jack S. Garret</td>
<td>Eta Alpha</td>
<td>Ritual &amp; Insignia</td>
</tr>
<tr>
<td>Alexander Stewart</td>
<td>Eta Xi</td>
<td>Ritual &amp; Insignia</td>
</tr>
<tr>
<td>Steve Bennett</td>
<td>Delta Psi</td>
<td>Scholarship &amp; Membership, Facilitator</td>
</tr>
<tr>
<td>Jessica Williams</td>
<td>Beta Upsilon</td>
<td>Scholarship &amp; Membership, Chair</td>
</tr>
<tr>
<td>Madison Wood</td>
<td>Gamma Zeta</td>
<td>Scholarship &amp; Membership</td>
</tr>
<tr>
<td>Sonora F Brandon</td>
<td>Eta Alpha</td>
<td>Scholarship &amp; Membership</td>
</tr>
<tr>
<td>Judy Smith</td>
<td>Eta Gamma</td>
<td>Scholarship &amp; Membership</td>
</tr>
<tr>
<td>Joshua Spinler</td>
<td>Theta Sigma</td>
<td>Scholarship &amp; Membership</td>
</tr>
<tr>
<td>David M. Svingen</td>
<td>Delta Kappa</td>
<td>Scholarship &amp; Membership</td>
</tr>
</tbody>
</table>
Chapter Affairs Committee Chair Eloise Bellingham proposed a onetime fee of $55 which would give members life status instead of the current $25 initiate fee plus paying $15 annual dues as long as you are an active member. Previous members would pay a onetime fee of $15 to become life members ($25 if requesting a new certificate). Concerns raised during the discussion were if the increase in fees would be too much of a financial burden for students and how to contact previous members. After a lengthy discussion, the committee recommended this proposal be forwarded onto the Constitution and Bylaws Committee since it would require a constitution change. The next topic discussed was the addition of a SGE poster session to future SGE Conventions. This would provide students an opportunity to present their research and also give students who have not done research an opportunity to see what is involved. The group discussed the possibility of having an award but ultimately agreed it might be too complicated to develop criteria to judge both graduate and undergraduate posters simultaneously.

The Compass and Finance Committee Chair Molly Hunt stated her committee addressed the future of The Compass. Editor Curtis plans on revising the guidelines for submitting articles and constructing an email subscription list. The committee reviewed how many times a year The Compass should be published and recommended The Compass be published at least twice a year.

Chair Taylor Arrowood and the Constitution and Bylaws Committee proposed that SGE products costs should be determined by the national secretary-treasurer in consultation with the national council instead of by business at large (conventions) for stoles, pins, cords, etc. This would require a new Section 5 under Article 6 in the constitution.

The second item addressed was the proposal from the Chapter Affairs Committee to replace the current onetime initiation fee of $25 and annual dues of $15 with a onetime membership fee of $55, which would give members life status instead of an initiate fee plus paying annual dues as long as you are an active member. Previous members would pay a onetime fee of $15 ($25 if a new
certificate is requested) to become life members. All members agreed to the content, but language reflecting the membership fee structure would need to be written in the constitution by August 1, 2021.

The Scholarship and Membership Committee Chair Jessica Williams addressed adding a graduate poster award for the SGE Poster Session at GSA and if so, how many graduate posters would be needed in the session to have this occur. The committee agreed that they would like to see a graduate poster award with a monetary award. They suggested a minimum of 5 graduate posters be required for the award to be given. The second issue the committee addressed was allowing members at large. After a lengthy discussion, the group decided they would not like to pursue this at this time.

Nominations Committee
Chair Kylie Arcaris presented the following slate of officers:

President
Dr. Diane Burns, incumbent - Advisor for Gamma Chi Chapter at Eastern Illinois University
Central Province Vice President
Dr. Steve Bennett, incumbent - Advisor for Delta Psi Chapter at Western Illinois University
Northeastern Province Vice President
Dr. Alexander Stewart - Advisor for Eta Xi Chapter at St. Lawrence University
Southeastern Province Vice President
Dr. Michael Gibson, incumbent - Advisor for Eta Alpha Chapter at University of Tennessee at Martin
Western Province Vice President
Dr. Richard Langford, incumbent - Advisor for Alpha Lambda Chapter at University of Texas at El Paso and
Dr. Rick Ford, past SGE President and past Western Province Vice President - Advisor for Eta Gamma Chapter at Weber State University
Editor
Daniel Curtis, incumbent - Northern Illinois University

Chair Kylie Arcaris asked for nominations from the floor 3 times. None were received. As a candidate in an election, Dr. Rick Ford was provided an opportunity to speak. He shared his history with the Society and his interest in continuing to be active in SGE. The officers left the meeting so voting could proceed. Chair Kylie Arcaris motioned nominations cease and a unanimous
ballot be cast, for Dr. Diane Burns as president, Dr. Steve Bennett as Central Province Vice President, Dr. Alexander Stewart as Northeastern Province Vice President, Dr. Michael Gibson as Southeastern Province Vice President and Daniel Curtis as The Compass Editor. Seconded by Tristan Palmer, motion passed. A vote for the Western Province Vice President followed between nominees Dr. Richard Langford and Dr. Rick Ford. Dr. Rick Ford was elected Western Province Vice President.

Another issue addressed by the nomination committee was requiring national officer candidates to submit a short statement listing their qualifications and why they are interested in being a national officer. All delegates were in favor of this in the future.

Lastly, Chair Kylie Arcaris shared that the next convention will be September 16-18, 2022 at the University of Tennessee Selmer Center & Coon Creek Science Center. The 46th biennial convention will be hosted by Dr. Michael Gibson and the Eta Alpha Chapter at University of Tennessee at Martin.

Ritual and Insignia Chair Tristan Palmer shared that his committee discussed if a student who graduates in December is still eligible for the W.A. Tarr Award the following spring. The committee fully supported this.

Next the committee revisited initiation ceremonies during their meeting and decided they do not need to be changed. They did recommend that a statement be placed under Officer Resources on the website informing members that they can contact the SGE Associate Director for copies of the initiation ceremony.

The last item on the convention agenda was a presentation from Dr. Michael Gibson, who with Eta Alpha Chapter from the University of Tennessee at Martin, will be hosting the 46th Sigma Gamma Epsilon Biennial Convention at the University of Tennessee Selmer Center & Coon Creek Science Center (CCSC) September 16 -18, 2022. The Coon Creek Science Center is a 240-acre rural facility with five cabins, mess hall with museum and classroom, outdoor preparation facilities and a laboratory for research. CCSC is the “type section” for the world-famous Coon Creek Formation lagerstätte, a ~72
million year old fossil deposit that serves as Tennessee’s link to the Age of Dinosaurs (figure 2).

**Figure 2.** The 2022 Convention will include a field trip to the world-famous Coon Creek Formation lagerstätte and the opportunity to collect fossils there.

Over 400 species of perfectly preserved fossil clams, snails, crabs, lobsters, swimming reptiles such as mosasaurs, turtles, fish, plesiosaurs, and even plant fossils are readily found there. It is also home to the Tennessee State Fossil Pterotrigonia thoracica. Attendees will have the opportunity to collect fossils at this remarkable site. Dr. Gibson also shared several slides of the facilities (figure 3).

Dr. Burns thanked everyone for participating in the convention before bringing the convention to a close at 2:41pm.
COMMITTEE REPORTS

Chapter Affairs Committee

Chapter Affairs Committee members were Chair Eloise Bellingham, Facilitator Dr. Diane Burns, Carolyn Karns, Joseph Pelren, Rebecca Bishop, Janet Vote, Dr. Dave Goldsmith, and Dr. Margaret Yacobucci.

The committee proposed a one-time fee of $55 which would give members life status instead of an initiate fee plus paying annual dues as long as you are an active member. Previous members would pay a one-time fee of $15 ($25 if a certificate is requested) to become life members. This passed unanimously within their committee with 8 votes and they forwarded it on to the Constitution and Bylaws Committee. Concerns raised during the discussion were if the increase in fees would be too much of a financial burden for students and how to contact previous members.
The next topic discussed was the addition of a poster session to future SGE Conventions. The reasoning being students need an opportunity to present their research and this provides a platform for them to do it and add it to their CV. It also provides an opportunity for students who have not done research to see what is involved. The group discussed the possibility of having an award but ultimately agreed it might be too complicated to develop criteria to judge both graduate and undergraduate posters simultaneously. Members of the committee voted unanimously to add a poster session to future SGE Conventions with 8 votes. The committee brought the resolution “To add a poster session to future SGE Conventions.” to the convention delegates and officers which passed unanimously with 14 votes.

**The Compass and Finance Committee**

The Compass and Finance Committee was comprised of Chair Molly Hunt, Facilitator Editor Dan Curtis, Courtney Johnson, Amanda Mayo, Matthew Bourdon (absent) and Dr. Frank R. Ettensohn.

The committee addressed the future of The Compass. Editor Curtis plans on revising the guidelines for submitting articles and constructing an email subscription list. The committee had a lengthy discussion regarding how many times a year The Compass should be published and recommended The Compass be published at least twice a year. The committee brought the resolution “To publish THE COMPASS twice a year.” to the delegates and officers which passed unanimously with 14 votes.

**Constitution and Bylaws Committee**

Chair Taylor Arrowood led the Constitution and Bylaws Committee with assistance from Facilitator Dr. Michael Gibson. Members included Sofie O'Neil, Anthony W. N. Kilber, Nick Bentley, and Dr. Rick Ford.

The committee first proposed that SGE products costs should be determined by the national secretary-treasurer in consultation with the national council instead of by business at large (conventions) for stoles, pins, cords, etc. This would require a new Section 5 under Article 6 in the constitution. All committee members
supported this proposal. The committee brought the resolution “Product costs will be calculated by the national secretary-treasurer in consultation with the national council instead of by business at large (conventions) for stoles, pins, cords, etc.” to the delegates and officers which passed unanimously with 14 votes.

The second item addressed was the proposal from the Chapter Affairs Committee to enact a onetime membership fee of $55 which would give members life status instead of an initiate fee plus paying annual dues as long as they are an active member. Previous members would pay a onetime fee of $15 ($25 if a new certificate is requested) to become life members. All members agreed to content but language reflecting the membership fee structure would need to be written in the constitution by August 1, 2021.

The committee brought the resolution “The membership fee be changed to a onetime payment of $55 which would provide members life status instead of the previous membership fee structure of a $25 initiate fee plus paying $15 annual dues as long as you are an active member. Previous members would pay a onetime fee of $15 ($25 if a new certificate is requested) to become life members.” to the delegates and officers which passed unanimously with 14 votes.

Scholarship and Membership Committee

The Scholarship and Membership Committee comprised of Chair Jessica Williams, Facilitator Dr. Steve Bennett, Madison Wood, Sonora Brandon, Judy Smith, and Dr. Joshua Spinler addressed adding a graduate poster award for the SGE Poster Session at GSA and if so, how many graduate posters would be needed in the session to have this occur. The committee agreed that they would like to see at least 5 eligible posters and a monetary award.

The committee brought the resolution “Add a graduate poster award for the SGE Poster Session at GSA.” to the delegates and officers which passed unanimously with 14 votes.

The second issue the committee addressed was allowing members at large. After a lengthy discussion, the
group decided they would not like to pursue this at this time.

**Nominations Committee**

Chair Kylie Arcaris with support from Facilitator Paula Even, Clayton Ervin and Brittany Price (absent) presented the following slate of officers:

**President**
Dr. Diane Burns, incumbent - Advisor for Gamma Chi Chapter at Eastern Illinois University

**Central Province Vice President**
Dr. Steve Bennett, incumbent - Advisor for Delta Psi Chapter at Western Illinois University

**Northeastern Province Vice President**
Dr. Alexander Stewart - Advisor for Eta Xi Chapter at St. Lawrence University

**Southeastern Province Vice President**
Dr. Michael Gibson, incumbent - Advisor for Eta Alpha Chapter at University of Tennessee at Martin

**Western Province Vice President**
Dr. Richard Langford, incumbent - Advisor for Alpha Lambda Chapter at University of Texas at El Paso

and

Dr. Rick Ford, past SGE President and past Western Province Vice President - Advisor for Eta Gamma Chapter at Weber State University

**Editor**
Daniel Curtis, incumbent - Northern Illinois University.

As a candidate in an election, Dr. Rick Ford was provided an opportunity to speak. He shared his history with the Society and his interest in continuing to be active in SGE.

The officers left the meeting so voting could proceed. Chair Kylie Arcaris asked for nominations from the floor 3 times. None were received. Kylie motioned nominations cease and a unanimous ballot be cast, for Dr. Diane Burns as President, Dr. Steve Bennett as Central Province Vice President, Dr. Alexander Stewart as Northeastern Province Vice President, Dr. Michael Gibson as Southeastern Province Vice President and Daniel Curtis as The Compass Editor. Seconded by Tristan Palmer, motion passed. A vote for the Western Province Vice President followed between nominees Dr. Richard Langford and Dr. Rick Ford. Dr. Rick Ford was elected Western Province Vice President.

Another issue addressed by the nomination committee was requiring
national officer candidates to submit a short statement listing their qualifications and why they are interested in being a national officer. The committee brought the resolution “National officer candidates are to submit a statement listing their qualifications and why they are interested in being a national officer to the nomination committee prior to the election.” to the delegates and officers which passed unanimously with 13 votes.

Lastly, Chair Kylie Arcaris shared the next convention will be September 16-18, 2022 at the University of Tennessee Selmer Center & Coon Creek Science Center. The 46th biennial convention will be hosted by Dr. Michael Gibson and the Eta Alpha Chapter at University of Tennessee at Martin.

Ritual and Insignia Committee

Ritual and Insignia Committee members included Chair Tristan Palmer, Facilitator James Walters, Kari Wellman, Jack Garret and Dr. Alexander Stewart.

The first topic they discussed was if a student who graduates in December is still eligible for the W.A. Tarr Award the following spring. The committee brought the resolution “A student who graduates in December is eligible for the W.A. Tarr Award the following spring.” to the delegates and officers which passed unanimously with 12 votes.

The committee revisited initiation ceremonies during their meeting and decided they do not need to be changed. They did recommend that a statement be placed under Officer Resources on the website informing members that they can contact the SGE Associate Director for copies of the initiation ceremony.

NATIONAL OFFICER REPORTS

Report of the National President

Since the last convention in my own backyard – Charleston, IL – there have been many activities that have taken place that will be of interest to the Society. Added to that is the – hopefully never again! – anomaly that was the COVID pandemic that resulted in our unprecedented decision to defer our National Convention for a year. It is quite unfortunate that this had to happen, and I duly recognize that this
current Convention platform is not ideal. Geologists – especially those of the highest caliber such as yourselves - *thrive* on the energy that is derived from meeting in person, having guest speakers and the beauty of a wonderfully planned and executed field trip. Dr. Gibson, VP of the Southeastern Province of SGE, generously volunteered and spent much time on developing a most exciting Convention for Spring 2020 that had to be abandoned for safety’s sake. Thankfully, Dr. Gibson is willing to host us again for our next meeting – in-person and even more interesting than the original! If you are graduating soon, do not fret – SGE members can be Members for Life and still have access to all that our society offers. With a promise of both fossil hunting as well as star-gazing, this should be quite a treat! I encourage all to note that this will be a mere 1.5 years from now, as we will resuming our COVID-interrupted timing of when Conventions are held.

The Sigma Gamma Epsilon technical session at the Geological Society of America’s annual meeting continues to inspire and to draw many talented student researchers to report on their investigations. Since the last Convention, 169 students have showcased their research, demonstrating academic prowess as well as honed research skills. The national officers had the pleasure of reviewing all of these excellent projects and were pleased to bestow the Austin A. Sartin and the Charles J. Mankin Best Poster awards at each meeting to two deserving students. This poster session continues to be a highlight and a pleasure for all of the national officers, and we look forward to having even more outstanding research projects to review in the coming years.

With the deepest respect and gratitude, we thank Dr. Larry Davis for his dedication and hard work in shepherding The Compass through the many issues he has seen published during his time as Editor-in-Chief. Larry decided to retire and do what we geologists do best – explore every nook and cranny that the world has for us to see. We wish the absolute best in all that he undertakes.

Thankfully, we have Dan Curtis, alumnus of Eastern Illinois University and a Lifetime SGE member who was willing to take on this responsibility. Dan took over the reins of command
last Fall and has been working diligently to get up to speed on the various duties of Editor-in-Chief. The first publication under his leadership will be published shortly after this meeting so that we can include all of the Convention’s proceedings and reports in it. Along with showcasing your research projects, there is a series called On the Outcrop that highlights important localities of geologic interest. Please consider contributing articles for that as well!

We have had a wealth of new chapters installed since the last convention: *Theta Sigma*, University of Arkansas at Little Rock; *Theta Tau*, University of Oregon; *Theta Upsilon*, Eastern Connecticut State University; *Theta Phi*, Wesleyan University; *Theta Chi*, Westminster College; *Theta Psi*, Westminster College; *Theta Omega*, Tennessee Technological University; *Iota Alpha*, Marietta College and *Iota Beta*, University of Tennessee, Chattanooga. Several previously inactivated chapters decided to re-establish their connection to our Society, including *Alpha Gamma*, University of California, Los Angeles and *Gamma Lambda*, Indiana State University, Terre Haute. A hearty “welcome” is extended to our newest members as well as all of our returning chapters!

Dr. Diane Burns  
SGE National President

**Report of the National Secretary-Treasurer**

The 45th Biennial Convention of Sigma Gamma Epsilon was originally scheduled for April 3 – 5, 2020 at The University of Tennessee at Martin, but it was postponed until April 10, 2021 due to the Coronavirus pandemic. Still not comfortable with having an in-person meeting this spring, the SGE National Council decided to conduct this meeting in a virtual format using the Zoom platform.

Since our last convention at Eastern Illinois University in the fall of 2017, Sigma Gamma Epsilon membership has declined from an average of about 1,200 to currently about 1,000 active members (Table 3). This decline is probably attributable to less overall activity among Chapters because of the pandemic. Nine new Chapters have been installed and 76 Chapters are currently active.

Our largest source of income has for many years been initiation fees and
dues paid by new members, dues from returning members, and the sale of SGE pins and honor cords. Our second largest source of income comes from dividends from our stock portfolio. As I have reported previously, in 2010 we consolidated and moved all of our investments into a portfolio managed by Edward Jones. We receive monthly statements of our holdings and meet regularly with our agent to discuss our portfolio and review any appropriate transactions. Major expenses continue to be funding the biennial conventions, the annual W.A. Tarr Awards, Quality Chapter Awards, and Chapter Service Awards, the SGE best poster awards at the GSA annual meetings, expenses associated with the SGE booth at GSA annual meetings, expenses associated with site visits to schools petitioning for the establishment of SGE chapters, and our Associate Director’s part-time salary.

Another item I have reported on previously, but it bears repeating, is that since 2012 The Compass, the SGE Journal of Earth Science, has been an open-access online publication. I would like to acknowledge the efforts of Dr. Larry Davis in this regard. As Editor of The Compass, Dr. Davis was instrumental in moving the journal to an online format. He has developed it into a very professional looking publication, which is easily accessible and has a wide readership. SGE is grateful to Larry for his insight and his hard work in making The Compass the journal it is today. As was reported earlier by President Diane Burns, Larry has recently stepped down as Editor and Daniel Curtis has been named the new Editor. We wish Dan much success as he follows in Larry’s footsteps.

The following is a summary of our expenses and income since the 44th Biennial Convention in 2017. I also provide some information on number of awards presented during that period of time, since this is also some indication of degree of activity of the Society.

**2016-2017 Income and Expenses**

<table>
<thead>
<tr>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>711 Initiates</td>
<td>$28,440</td>
</tr>
<tr>
<td>473 Returning members</td>
<td>$7,095</td>
</tr>
<tr>
<td>3 New Life members</td>
<td>$525</td>
</tr>
<tr>
<td>51 SGE pins</td>
<td>$163</td>
</tr>
<tr>
<td>383 SGE honor cords</td>
<td>$4,596</td>
</tr>
<tr>
<td>Stock portfolio dividends</td>
<td>$25,683</td>
</tr>
<tr>
<td>Total Income</td>
<td>$66,502</td>
</tr>
<tr>
<td>2016-2017 Expenses (-)</td>
<td>- $61,070</td>
</tr>
<tr>
<td>Net Income</td>
<td>$5,432</td>
</tr>
</tbody>
</table>
2016-2017 Awards presented
35 W.A. Tarr Awards
3 Quality Chapter Awards
2 Chapter Service Awards

2017-2018 Income and Expenses
793 Initiates $31,720
557 Returning members $8,355
2 New Life members $350
60 SGE pins $180
441 SGE honor cords $5,292
Stock portfolio dividends 27,635
Total Income $73,532
2017-2018 Expenses (-) -$68,336
Net Income $5,196

2017-2018 Awards presented
28 W.A. Tarr Awards
3 Quality Chapter Awards
2 Chapter Service Awards

2018-2019 Income and Expenses
630 Initiates $25,200
501 Returning members $7,515
7 New Life members $700
61 SGE pins $221
371 SGE honor cords $5,194
Stock portfolio dividends $35,465
Total Income $74,295
2018-2019 Expenses (-) -$64,258
Net Income $10,037

2018-2019 Awards presented
37 W.A. Tarr Awards
3 Quality Chapter Awards
5 Chapter Service Awards

2019-2020 Income and Expenses
553 Initiates $20,662
421 Returning members $6,301
9 New Life members $750
7 Replacement Certificates $45
9 SGE pins $45
281 SGE honor cords $3,934
Compass Article $5
Patch $5
Stock portfolio dividends $29,237
Total Income $60,984
2019-2020 Expenses (-) -$64,759
Net Income $3,775

2019-2020 Awards presented
19 W.A. Tarr Awards
3 Quality Chapter Awards
3 Chapter Service Awards
Table 3. Membership data for the last 10 years.

<table>
<thead>
<tr>
<th>Academic Year</th>
<th>Initiates</th>
<th>Returning Members</th>
<th>Total Members</th>
<th>Cords</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010-2011</td>
<td>641</td>
<td>416</td>
<td>1057</td>
<td>226</td>
</tr>
<tr>
<td>2011-2012</td>
<td>689</td>
<td>514</td>
<td>1203</td>
<td>277</td>
</tr>
<tr>
<td>2012-2013</td>
<td>779</td>
<td>559</td>
<td>1338</td>
<td>355</td>
</tr>
<tr>
<td>2013-2014</td>
<td>735</td>
<td>641</td>
<td>1376</td>
<td>391</td>
</tr>
<tr>
<td>2014-2015</td>
<td>697</td>
<td>625</td>
<td>1322</td>
<td>431</td>
</tr>
<tr>
<td>2015-2016</td>
<td>711</td>
<td>563</td>
<td>1274</td>
<td>424</td>
</tr>
<tr>
<td>2016-2017</td>
<td>711</td>
<td>473</td>
<td>1184</td>
<td>383</td>
</tr>
<tr>
<td>2017-2018</td>
<td>793</td>
<td>557</td>
<td>1350</td>
<td>441</td>
</tr>
<tr>
<td>2018-2019</td>
<td>630</td>
<td>501</td>
<td>1131</td>
<td>371</td>
</tr>
<tr>
<td>2019-2020</td>
<td>553</td>
<td>421</td>
<td>974</td>
<td>281</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>6939</strong></td>
<td><strong>5270</strong></td>
<td><strong>12209</strong></td>
<td><strong>3580</strong></td>
</tr>
</tbody>
</table>

Dr. James C. Walters  
SGE National Secretary-Treasurer

Report of the National Editor

The Compass is going through several changes, the first of which is a new editor, Daniel Curtis, alumni member from Gamma Chi chapter at Eastern Illinois University. We thank Larry Davis for his many years of service as The Compass Editor. In addition, we are looking to modernize many aspects of The Compass to include format and design, submission guidelines, and release schedule. These changes are still in progress and further interruptions to publications will be minimal.

Since the last in-person convention in 2017, there have been 5 new works published to The Compass. Total full-text document downloads (by year) since the last convention are as follows: 2021-to-date: 1528 downloads, 2020: 3848 downloads, 2019: 3380 downloads, 2018: 3322 downloads, and 2017(Sep-Dec): 946 downloads. For comparison, between the March 2015 convention and September 2017 convention 19 works were published, and downloads were 2015 (Mar-Dec): 3931, 2016: 4701, 2017(Jan-Sep): 2415. While many downloads are from prior years entirely, there does seem to be a correlation between publications and downloads (as would be expected).
The top five downloaded documents between September 2017 and current (April 2021) are in descending order Is Geology a Real Science? By Larry Davis (editorial published in 2012), Dinosaur Tracks and Trackways in the Escalante Member of the Entrada Formation (Middle Jurassic), Twentymile Wash, Grand Staircase-Escalante National Monument, Utah by Robert Eves, et al. (research paper published in 2012), Mary Anning: Princess of Paleontology and Geological Lioness by Larry Davis (editorial published in 2012), Polyphase Laramide Structures and Possible Folded Tertiary(?) Sills at Dagger mountain, Big Bend National Park, Texas by Jeff Cullen, et al. (research paper published in 2013), Geology and Music by Dan Merriam (editorial published in 2012).

Educational institutions made up 64% of downloads in this period, with commercial (25%) and government (6%) entities making up most of the remainder. Interestingly, our primary referrer (the source that linked a viewer to The Compass website) was Google by a factor of 10 over other referrers, with other search engines comprising the remaining highest spots. This would indicate our journal is found primarily through standard internet search engines rather than composite educational journal platforms like ScienceDirect or Elsevier.

Dan Curtis
SGE Compass Editor

Report of the Southeastern Province Vice President

Eleven states make up the southeastern province of Sigma Gamma Epsilon and since the last report at the 44rd Biennial Convention at Eastern Illinois University in 2017, the section has increased by one chapter to a total of 61 chapters. The last school visit and new chapter to be completed prior to the onset of the pandemic was a successful site visit to the University of Tennessee at Chattanooga in late February of 2020. On that visit, I was hosted by the petitioning students in the Department of Biology, Geology, and Environmental Sciences (BGE) for a tour of Grote Hall, home to the geology program. Dr. Stephanie DeVries was tapped as both a new SGE member and new SGE chapter advisor for the newly established Iota Beta Chapter of SGE.
The COVID-19 pandemic struck campuses in the U.S. in March of 2020, not long after my visit to UT Chattanooga, and like nearly all campuses across the country, campuses in the southeast went into lock-down and students were sent home for their safety. Instruction moved to on-line for the remainder of the spring semester and essentially has remained that way for over a year now. Consequently, there has been little opportunity for additional chapter cultivation in the southeast during this time period. Nor has there been much opportunity for chapters to do little more than “maintain”. Although, at the beginning of the 2019 academic year, there were several initial inquiries from school regarding potential new chapters and reactivation of a couple of chapters, there have been no petitions for new chapters and no chapter visits for the past year.

The University of Tennessee at Martin was to host the 2019-2020 Convention and had developed a field trip opportunity to the internationally famous Coon Creek Science Center lagerstätte fossil site, which is now managed by UT Martin. The site is a Cretaceous marine deposit known for its unusual unaltered preservation of fossils and high abundance and diversity of species. The COVID-19 pandemic resulted in this field trip and convention to be rescheduled; however, the pandemic continued long enough to force another rescheduling of that field conference. UT Martin has indicated that it is prepared to host the next SGE biennial convention with a field trip to the site.

As I write this report, three vaccines are being distributed and most schools are optimistic that they will be able to return to face-to-face instruction by Fall semester of 2021. In that regard, I can report that the southeastern province is eager to emerge from the pandemic strong and resume the expansion of chapters it has witnessed over the past decade.

Dr. Michael A. Gibson
SGE Southeastern Province Vice President

Report of the Central Province Vice President

The central region includes 30 chapters in nine states, Illinois, Iowa, Kansas, Minnesota, Missouri, Nebraska, North and South Dakota and Wisconsin. Of these chapters, eight are
active and three became inactive in the past year. Unfortunately, no new chapters have been installed in the Central Province since the last national convention.

Of the eight active chapters, Illinois contains the most chapters (3) and Iowa, Kansas, Missouri, South Dakota, and Wisconsin each contain one active chapter. With the rapid decline in the number of active chapters in the Central Province, I will endeavor to contact the inactive chapters and, if possible, work to assist them in reactivating.

*Dr. Steve Bennett*
*SGE Central Providence Vice President*

**Report of Northeastern Province Vice President**
No report submitted.

**Report of Western Province Vice President**
No report submitted.

**CHAPTER REPORTS**

**SIGMA**
**The Ohio State University**

Over the last year the Sigma Chapter of Sigma Gamma Epsilon has seen great change. Before the onset of the COVID-19 pandemic, we inducted 9 new members. Upon returning to campus in the fall, student organizations were restricted from meeting. With many of our members having graduated, it was difficult for us to recruit new members. Our officer team in partnership with our advisor worked to increase student involvement by creating a new student organization, the Ohio State Geoscience Club, which became the umbrella organization for the Sigma Chapter. This allowed members to be involved in both the student chapter of the American Institute of Professional Geologists and if they met the requirements, to become members of Sigma Gamma Epsilon. This allowed our membership to double.

**Volunteer Opportunities**

Our chapter gathered safely on a Saturday and explored the Columbus Metro Parks and cleaned up the litter in the parks, while also enjoying the geological scenery.

**Field Trips**

Due to COVID-19 we were not able to host any fieldtrips this last year but are hoping to in the fall semester.

**Fundraisers**
Our chapter was able to raise over $1,000 through a sticker fundraiser which supported four $200 scholarships for our members to use to subsidize costs related to attending Geology Field Camp.

Research

Our members were active in research over the last year mostly comprised of paleontological research. We were represented at the Society of Vertebrate Paleontology and Geological Society of America conferences (figure 4).

Molly E. Hunt
Sigma President

Figure 4. President Molly Hunt discusses Sigma members presenting their research at conferences.

CHI CHAPTER
University of Kentucky

The Chi Chapter of Sigma Gamma Epsilon at the University of Kentucky remained active throughout the ongoing COVID-19 pandemic with monthly meetings amongst us and other organizations on campus to continue to support the student life of our members.
In the Fall of 2020, Chi Chapter and another organization consisting of geology graduate students worked together to encourage undergraduate and graduate participation in a new Earth and Environmental Sciences department seminar where students had the opportunity to showcase their research. Chi Chapter aimed to assist students in professional development skills such as figure making, poster making, making a presentation, and more. These efforts were coordinated virtually via Zoom. Due to the COVID-19 pandemic, efforts to advertise our help sessions weren’t well achieved, thus the attendance for these events was minimal.

In the Spring of 2021, Chi Chapter welcomed new undergraduates to the society during an induction ceremony in late February. This was also coordinated via Zoom and was the first ever virtual induction ceremony held by Chi Chapter. Our induction ceremony was also revised slightly to be more inclusive to all members by changing various pronouns throughout the induction script. The ceremony for the first time also did not make use of the blindfolds as was scripted in all previous ceremonies.

Additionally, in the Spring of 2021 Chi Chapter co-hosted a Darwin lecture series held by KY-AIPG (figure 5). This is a lecture series held each year by KY-AIPG around or on Charles Darwin’s birthday. The chapter oversaw streaming the talk to social media platforms, and thus Chi Chapter started a YouTube channel from this event. Hosting the talk made those in the local scientific community more aware of Sigma Gamma Epsilon as a whole, as well as Chi Chapter at the University of Kentucky.

Finally, Chi Chapter applied for and was rewarded funding to support a new student printer to be used in our research building that is fully accessible to all Chi Chapter members. It will likely arrive within the next few months and give printing options to members while the departmental printers remain down due to a lack of funding, yet another issue related to COVID-19. Chi Chapter is supporting the toner costs for the printer.

Taylor Arrowood
Chi President
Figure 5. President Taylor Arrowood discusses Chi Chapter co-hosting a Darwin lecture series.

BETA UPSILON
Bowling Green State University

The Beta Upsilon Chapter of Sigma Gamma Epsilon was founded in 1959 and has been continually active since 1967, initiating new members at least once a year. Since 2018, 13 new members have joined the chapter. Most recently, five new members joined in Spring 2021, demonstrating a positive improvement in the number of eligible Geology students. New officers were elected in Spring 2021, including Jessica Williams as President, Katarina Kieffer as Vice President, and Autumn Lehner as Treasurer. Selection of a new Secretary is pending.

Beta Upsilon Chapter works closely with Bowling Green State University’s Geology Club, another officially recognized student organization, since many students are...
members of both groups. Pictured below (figure 6) are dual members of SGE and Geology Club selling gem trees, jewelry, and artwork to fund educational field trips to places like Chicago’s Field Museum and southeastern Ohio’s Hocking Hills State Park. As well, SGE members have participated in the 2018 (figures 7 and 8) and 2019 Toledo Gem and Rockhound Club Shows (figure 9). and spring.

Allison Savoie  
Delta Epsilon Vice President

**Figure 6.** SGE member Autumn Lehner volunteering at the Geology Fundraiser (April 2019).
Figure 7. Beta Upsilon’s Rainbow of Minerals display at the Toledo Rock and Gem Show (September 2018).

Figure 8. BGSU’s display case and information table at the 47th Annual Toledo Gem and Rockhound Club Show (2018). SGE members pictured are Dan Cline, Katerina Konstantinidis, Kari Odegaard, Toni Bernard, Autumn Lehner.
Figure 9. BGSU’s display case and information table at the 48th Annual Toledo Gem and Rockhound Club Show (2019). This display contains information on BGSU’s Geology Department, Beta Upsilon Chapter and the Geology Club and is taken to several events on campus and in the community. Contributing SGE members include Toni Bernard, Autumn Lehner, Katerina Konstantinidis.

Beta Upsilon members have also been involved in a variety of educational outreach events. In April 2019, SGE members helped plan and run an educational table at the Cleveland Museum of Natural History’s first “Fossil Fest” event. The table informed museum goers about Ohio’s ancient environments and life. In September 2019, SGE members assisted with the “Fun with Fossils” table at BGSU’s STEM in the Park event. STEM in the Park is an annual event held on the BGSU main campus that features interactive displays and activities created by area universities, community partners, and local businesses to engage children of all ages in science, technology, engineering, and mathematics. BGSU hosts the regional Science Olympiad each spring. In March 2019 and
February 2020, SGE members assisted with running several geoscience-related events.

The COVID-19 pandemic has definitely disrupted university life. Annual outreach events that SGE members normally attend (Fossil Fest, STEM in the Park, Toledo Gem and Rockhound Club Show) were cancelled in 2020. However, SGE members were able to assist the Geology Club with “Trunk or Treat,” a safe and alternative Halloween celebration organized by the BGSU Student Veterans of America for the local youth. Here university and community volunteers distribute candy following CDC guidelines.

In the near future, Beta Upsilon hopes to organize an SGE alumni mentorship conference focusing on undergraduate research, applying to graduate school, and discussing geoscience career options and research. In light of recent world events, we would also like to increase the scope of our philanthropic work; foremost in consideration for next semester is a canned food drive. Special thanks to our faculty supervisor Dr. Peg for guiding the new, returning, and graduating members of our small but committed chapter through such unprecedented times.

Jessica Williams
Beta Upsilon President

GAMMA ZETA
Kent State University

Introduction

Our chapter has been continuously active since 1965. Our main chapter activity is the production and distribution of grain size folders, which we have been doing for over 40 years (figure 10). We are able to provide scholarships and research grants to students using the profits from the sale of grain size folders.

Volunteer Opportunities

Members participated in the Cleveland Natural History Museum public education outreach event. At this event, we set up a table and spent time introducing museum goers to geologic and paleontological concepts. More recently, SGE collaborated with the American Association of Petroleum Geologists (AAPG) to do a park clean up event. For this event, students chose 1 of 5 parks in the area and picked up trash for approximately 3 hours.

Activities
Every fall SGE hosts an “ice-breaker” event at a local restaurant, this provides an informal setting for new students to meet each other and faculty. Later in the year SGE hosts a “cross-cultural thanksgiving” event. Kent State students and faculty come from many different backgrounds and this event gives students and faculty the opportunity to show off traditional foods and make connections. As the fall semester comes to a close, the annual holiday party is held in the SGE lounge in the Geology building. And finally in the spring, there is a traditional banquet at which scholarships and grants are awarded. We have also done a variety of other fun activities including bowling and ice skating.

Scholarships and Awards

The Gamma Zeta Chapter offers three scholarship/grant opportunities for students. The Glenn Frank Field Camp scholarship may be awarded to an undergraduate or graduate student that is a current member of SGE and is enrolled in a Summer Field Camp Course. The Sigma Gamma Epsilon research scholarship may be awarded to an undergraduate or graduate student that is a current member of SGE and is in need of funding for a research project. And finally, the W.A. Tarr award may be awarded to an academically superior graduating senior who has made significant contributions to SGE.

Research

All of the current SGE officers at Kent State are involved in some aspect of research, as are most of our other members. SGE president Madison Wood, vice president Emily Mehta, and secretary Kortney Cole are all members of Dr. David Singer’s Environmental Geochemistry/Mineralogy lab group. Our treasurer Lucy Dyer is a graduate student under Dr. Chris Rowen and studies machine learning. And finally, events coordinator Katherine Connell is a graduate student and does geochemical and petrological analysis under the advisement of Dr. David Hacker.

Madison Wood
Gamma Zeta President
GAMMA SIGMA
University OF Northern Iowa

UNI’s Gamma Sigma Chapter of Sigma Gamma Epsilon, the National Earth Science Honor Society, helps to bring together UNI Earth and Environmental Science students with community members and other on-campus organizations. We provide education, outreach, volunteer, and research activities in order to get students more involved and to help residents of Cedar Falls.

Since 2017, the Gamma Sigma Chapter of Sigma Gamma Epsilon has volunteered at Sunday at the Quarry and the UNI Haunted House every fall. One spring we worked with the Sustainability Club to replace all of our building’s lightbulbs with LED lightbulbs as an energy initiative. Previously, two astronomy students have volunteered at the Astronomy and Planetary open houses every Thursday. Every year there is a Dry Run Creek Snapshot event to get community members and UNI students, including SGE members, involved in water quality testing for biological and bacterial stream impairments (figure 11).

This year, our volunteer activities were limited because of
COVID-19. We weren’t able to participate in regular yearly events like the UNI Haunted House and Sunday at the Quarry but we were still able to find different ways to help our community. We spent time in the fall volunteering at the Tallgrass Prairie Center, a center on campus that provides prairie services, research, and education. We participated in a Plant Rescue Event and helped with bi-weekly trail maintenance, weeding, seed collection, and seed cleaning. We also were able to volunteer with the UNI Outdoors program on campus. One of our members volunteered by leading outdoor activities like cross country skiing and rock climbing. This spring semester, we will be participating in bi-weekly water quality testing with a nearby watershed, a Dry Run Creek water quality snapshot event, and a Hazardous Waste Recycling Drop-off. Our fundraising this year came from selling snacks and candy in the student room. With that money, we were able to fund a part of several students’ Wilderness First Aid Certification through UNI Outdoors and will continue to do so in the future.

Kari Wellman
Gamma Sigma President

Figure 11. Gamma Sigma members participate in water quality events
The Gamma Chi Chapter at EIU has been up to exceptional work, not only for our chapter, but also for the community as a whole. In the years since the last convention, the Gamma Chi Chapter has volunteered over 1,300 hours. Our organization averaged adding one member each year, and currently we stand with 8 members led by President Emma McGuire, Vice President Michael Otzwirk, and Secretary Carolyn Karns. Diane Burns, Chapter Advisor, has guided our chapter with a focus on community outreach.

In 2017-2018, the participating members helped with recruiting at various Open Houses and with spreading geoscience information at tabling events throughout the years at

*Figure 12.* Gamma Chi members made paracord bracelets to donate to Operation Gratitude, a group that sends care packages to soldiers overseas.
the 5-mile house, local farmer’s market, and on campus. Near the end of 2018, paracord bracelets were made by the chapter members to donate to Operation Gratitude, a group that sends care packages to soldiers overseas (figure 12). A large, monumental moment in the year 2018 was adopting a 2-mile stretch of States Highway 16 through the Adopt-A-Highway Program. Not only did this adoption grant us access to great advertising for the organization, but it also allowed us to hold 4 plus highway clean ups every year since the highway was adopted. Members of the Gamma Chi chapter also volunteered at the Special Olympics in 2018 and 2019.

Our members were and still are able to connect with the community via the Urban Butterfly Initiative, which is a non-profit organization that has a large presence in and around the EIU campus. Through working with the UBI, Gamma Chi members were able to cultivate butterfly and honeybee gardens around campus and throughout the community. On another earth note, the Gamma Chi Chapter has also volunteered to help the Embarrass River Volunteer Stewards in removal of invasive species. EIU’s Gamma Chi Chapter is currently working on making dog toys from old t-shirts. This project provides great toys for the animals at our local shelter while simultaneously recycling old t-shirts. Due to the chapter’s dedication and hard work, we have received the Quality Chapter Award and Chapter Service Award every year!

Carolyn Karns
Gamma Chi Secretary

EPSILON OMEGA CHAPTER
University of Texas at San Antonio

The Epsilon Omega Chapter of Sigma Gamma Epsilon at the University of Texas at San Antonio was recently reactivated and recognized by UTSA in March of 2021. The chapter currently has nine (9) members, four (4) officers, and one (1) advisor. Officers and members were inducted in December 2020 through a Zoom meeting. Our chapter is beginning to grow and branch out to more students studying Earth Sciences through our campus’ Geology Department and Student Organization website, RowdyLink. We currently have both graduate and undergraduate students representing our SGE chapter at UTSA.
Due to our recent reactivation, we currently do not have volunteer opportunities, field trips, fundraisers, or member research. The officers have been working hard to get the organization recognized by the school, and with the recent recognition are preparing activities for the chapter. There are currently no specific plans, but we hope to have fundraisers, field trips, and other activities soon (figure 13). Our new chapter is excited to be a part of Sigma Gamma Epsilon and we are prepared to be a positive part of the National Society. We look forward to planning events and growing as a chapter.

Izzy Heathman
Vice President

ETA ALPHA
University of Tennessee at Martin
Greetings to all fellow SGE members! We are the Eta Alpha Chapter at the University of Tennessee at Martin. We have been a smaller
chapter since the last convention, but our organization and members are a prominent part of the Geosciences at the University. My name is Clayton Ervin, the outgoing President. I have been the residing President of the chapter since my election in the spring of 2018. Over the past four years our members have been actively participating in numerous volunteer events, student organizational events, collaborations with Boy Scout groups, and national conventions like GSA and our regional annual event, Geoconlave (figure 14). Though, the last two years have been particularly challenging, to say the least...

Figure 14. Eta Alpha members have been active participating in numerous volunteer events, student organizational events, collaborations with Boy Scout groups, and national conventions like GSA and their regional annual event, Geoconlave.
Up to the point that COVID–19 changed our lives, our chapter was meeting regularly with good attendance and we had a fair amount of volunteer work logged at the UT Martin Coon Creek Science Center for assisting The Pink Palace with their annual Members Day Open House. In April of 2020, UT Martin took over the 240-acre fossil lagerstätte site and we have been working on upgrades ever since. We are still hopeful that the site will be a future SGE field trip. Once COVID-19 became the new fixture that all of our lives now work around, our chapter has honestly struggled to maintain progress and attract new members as most society activities went on hiatus. All our members commute to school, so when everyone is sent home or students prefer online courses because of the safety it provides, the ability to coordinate and schedule philanthropy around everything else became exceedingly difficult. But where it was possible, our members have still logged volunteer work and still participated in philanthropy via social media. We also gained two new faculty members in the past two years, Dr. Angela Van Boening (Structural Geology & Geoscience Education), and Mrs. Audrey Pattat (Introductory Lab Instructor).

Our chapter has just completed voting on our new panel of officers for the 2021-2022 school year and we are beginning to plan an induction ceremony for our new incoming members that we vote on this week! We are also going to take on new leadership this year with Jack Garrett as the new incoming president, Joseph Pelren as our new Vice President, Sonora Brandon as Treasurer and Amanda Mayo as Secretary. One other big development, UTM has acquired Coon Creek Science Center, a nationally recognized geologic formation and museum in McNairy County, TN. The site is a great location for school collaborations, university field trips, K-16 education, student organizational events, etc. Once COVID-19 has passed or once we can return to some semblance of normalcy, we intend to utilize this site for regular philanthropy and public education, and we encourage you to reach out to us for any information about UT Martin Coon Creek Science Center or anything else.
you would like to know about the Eta Alpha Chapter.

*Clayton Ervin
Eta Alpha President*

**ETA GAMMA CHAPTER**
**Weber State University**

Since SGE’s last convention in September 2017, the Eta Gamma Chapter at Weber State University (Ogden, Utah) has had an average of 15 active members each year, with initiation drives in the fall and spring. We are particularly proud of our recent record in earning the Quality Chapter and Chapter Service Awards from the national office. Our Chapter has predominantly focused on community service and outreach opportunities to educate the public and pre-college students about the various fields of study in geosciences that are available to them at Weber State University.

We participated in Lakeside Elementary School’s Career Day, during which the school had participants from different careers provide information to the students about jobs in their fields (figure 15). We brought different rocks/minerals to show them as well as educational information. Eta Gamma members have also served as judges at the Taylor Canyon Elementary School Science Fair and Ritchey Science & Engineering Fair at Weber State University.

![Figure 15. Lakeside Elementary career day.](image1)

![Figure 16. WSU clubs take over farmer’s market.](image2)

In Fall of 2018 and 2019, we also participated in the annual Physics Open House, a major college-wide outreach program where the public is invited to

*The Compass: Earth Science Journal of Sigma Gamma Epsilon, v. 91, no. 2, 2021*
Tracy Hall Science Center, where the Department of Earth & Environmental Sciences is located. We demonstrated an EmRiver stream table and the College of Science’s OmniGlobe, which is an interactive science visualization display with many animations related to plate tectonics, ecology, climate change, oceanography, and the solar system. Visitors were also able to see the "Living Rock" microbialite aquarium maintained by one of our professors.

In August 2019, an Eta Gamma member volunteered at the United Nations Civil Society Conference on Building Inclusive and Sustainable Cities and Communities held in Salt Lake City. We have volunteered throughout the community by bringing the geoscience story to a local farmer’s market and trail fest (figure 16).

SGE members have participated in many field trips in conjunction with their classes and have participated in undergraduate research projects with our faculty (figure 18). These UR projects have been presented at the annual WSU Undergraduate research Symposium, Utah Conference on Undergraduate research (UCUR), GSA sectional and annual meetings and at the annual WSU Undergraduate research Symposium. traveled throughout northern Utah, Nevada, Wyoming, and Iceland (Study Abroad Program) in conjunction with our courses and research projects (figure 17). As a joint activity with our Geology Club, we visited the Natural History Museum of Utah, located in Salt Lake City, and received a "behind-the-scenes" tour of the museum and its research and collections areas (figure 20).

Our long-serving faculty advisor, Dr. Rick Ford, has announced that he in retiring at the end of June 2021 (figure 19). Dr. Ford led the effort to charter an SGE chapter at Weber State back in 1998. He also served as Vice President of the Western Region and two terms as National President of the society.
We are pleased to announce that Dr. Ryan Frazier of our department has agreed to take over as faculty advisor beginning with the Fall 2021 semester. As with everyone else, the COVID-19 pandemic has affected our ability to hold chapter activities and volunteer this past year, but we are striving to continue our chapter activities and community outreach, either in person or on Zoom. We are definitely looking forward to getting back to normal, whatever that may look like.

Kylie Arcaris
Eta Gamma President

Figure 17. Students in Iceland

Figure 19. Dr. Ford in the field with students.

Figure 20. Eta Gamma members visited the Natural History Museum of Utah, located in Salt Lake City, and took group hiking trips to learn more about Utah geology.

The Compass: Earth Science Journal of Sigma Gamma Epsilon, v. 91, no. 2, 2021
The Eta Xi Chapter of Sigma Gamma Epsilon, located in the Geology Department at St. Lawrence University, was founded in 2006 by Dr. J. Mark Erickson, Diane Burns, and John Bursnall with the inaugural membership being 16 students. In the intervening 15 years, our chapter has inducted 147 members with 15 currently attending SLU.

Despite this historic time and significant change to day-to-day operations, the Geology Department at St. Lawrence University and the Eta Xi Chapter of Sigma Gamma Epsilon have continued to meet in person and to induct new members. Although our inductions this past year have lacked the traditional mystery and pomp and circumstances, we are active and eager for our future.

Our current cohort of members are planning community work with the Grasse River Heritage, hosting trivia nights, and potentially field trips to the Smithsonian’s National Museum of Natural History and the beautiful Green Lake State Park in the state of New York if circumstances allow for the Fall of 2021 when, we hope(!), life returns to whatever normal will be (figure 21). As a group we have been eager for a filled, elbow-bumping van ride to world-class geology locales that only the Adirondack region can provide. In order to support our chapter’s fiscal health, we also plan to use student made art on t-shirts as well as potentially hosting alumni Zoom nights to gain money to support our triennial St. Lawrence University Geology Alumni Conference in the Spring of 2022 where we are integral to its success.

Going forward we hope to have an induction ceremony this semester so that new members can be celebrated. We also hope to continue our community-based work and chapter meetings while navigating this unprecedented time. Although this semester has looked slightly different than those in the past, students of the Eta Xi chapter hope to continue to benefit from all that the Adirondacks and St. Lawrence University have to offer.

Eloise Bellingham
Eta Xi Treasurer
The Compass: Earth Science Journal of Sigma Gamma Epsilon, v. 91, no. 2, 2021

ETA PHI CHAPTER
Northern Illinois University

The Eta Phi Chapter at Northern Illinois University currently has 18 active members, initiating nine new members in 2019, and three in 2020. We are excited to welcome a new faculty advisor, Dr. Megan Brown, and thank Dr. Justin Dodd for his guidance during his tenure as our advisor.

Our chapter continued our yearly participation in NIU’s STEMfest, providing a recorded tour of our department, interviews with faculty, and highlights of graduate student research. This video can also be used for future outreach and recruitment for the geology department. The chapter assisted one of our own members, Josh Schwartz, in expanding a Minecraft world he built of a to-scale geologic time scale. He plans on letting our chapter and department utilize this resource for outreach events. We are also proud of the relationships we have cultivated in our community, and have been recurring guests for many years at local STEM expos, elementary schools and boy scout merit badge workshops, which we look forward to.

Figure 21. Eta Xi plans for upcoming events.
resuming in the future. Earlier this month three of our members acted as geologic advisors to a local 5th grade class who are creating a proposal to the state legislator to establish an official Illinois state rock.

In 2019, members traveled to Mammoth Caves, KY to explore the karst topography and hold initiation. During pre-covid times, we continued traditions of hosting a welcome kickball game and BBQ, football tailgate, holiday party and spring softball game for the geology department. Recently, our president Heather Furlong hosted a virtual trivia evening, which was enjoyed by all. Additionally, our department celebrated its 50th Anniversary in 2019! Our chapter used this as a major fundraising opportunity, selling commemorative t-shirts and pint glasses while getting to visit with alumni. We also used several generous donations of semi-precious stone pendants, and toiletry sets for fundraising events. Toiletry sets were also donated to students with financial need.

Beginning in 2019, the chapter decided to add a professional development component to our efforts. We have since hosted NIUs Coordinator of Career and Professional Development, who discussed optimization of LinkedIn profiles, and showed members how to utilize NIUs career finder tools. Former President John Owens and current Treasurer Mackenzie Wegmann organized and run multiple resume/CV workshops for all geology students in the department. We plan on continuing these events in the future. Additionally, VP Anthony Guajardo worked with our department chair to compile a list of professional geology organizations that are free to student members, to encourage participation in external organizations for professional development and to better inform students of available opportunities.

Brittany N. Price
Eta Phi Secretary

THETA SIGMA
University of Arkansas at Little Rock

Since the last SGE convention in 2017, our chapter has continued to work towards our goals and encourage new membership. We are very excited to have grown by five members. Our small group focuses on community
service and in supporting events around our department.

Prior to the COVID-19 pandemic, our members would assist in tutoring introductory geology students on a regular basis. The UA Little Rock Department of Earth Sciences hosted a weekly “Geology Happy Hour”, where students in any lecture or lab could come for assistance. We look forward to resuming these activities when we are able.

The university’s department is also responsible for maintaining a mile of highway as a part of the Adopt a Highway program. We assist in departmental clean-ups to pick up litter for this stretch of road, with our most recent one being on February 7, 2021 (figure 22). These events remain one of our most attended.

Figure 22. Theta Sigma volunteers with their department to pick up litter and maintain a mile of highway as a part of the Adopt a Highway program.
Many of our members participate in research and internship opportunities within the university as well as outside organizations. Research topics are diverse within our department. Some broad research topics include urban and environmental geochemistry, coral reef diversity, materials science, and utilizing LiDAR to identify landslides amongst other earth science questions. Some of our students are also planning to present at our university’s virtual Research and Creative Works Expo on April 16th.

Our activities have been limited this past year due to the restrictions surrounding COVID-19, but we have taken this time to plan some of the future goals of our club. Our priority is to renew our community outreach, especially on our own campus. There is a small stream that flows through the university’s campus that, despite its central location, is often seen full of trash. Since this stream is located within a highly urbanized drainage basin, it is subject to the wear and tear that urban environments may present in hydrologic environments. Our goal for future works is to begin implementing more regular cleanups and to involve the campus community in keeping our local environment cleaner.

Rebecca Bishop
Theta Sigma President

THETA PSI
Westminster College

This is the Theta Psi’s first report, since we are a newly formed chapter of Sigma Gamma Epsilon. We are excited to be a part of the organization, and look forward to making you proud with our energy.

We primarily make our presence known on campus by operating a drop-in tutoring center for geology students. The center runs four nights a week and is staffed each night by two geology majors. For the past year, the tutoring center has been run virtually, but we are looking forward to meeting in-person again in the fall. On that same topic, several chapter members worked with our geology faculty in March of 2020 to help them test on-line platforms and meeting spaces for the campus-wide transition to remote teaching.

We have taken several field trips as a chapter including one that we coordinated with the campus rock climbing club. This trip went to Maple...
Canyon in the San Pitch Mountains. Maple Canyon is a slot canyon carved from conglomerate. The cobbles are about 20 cm in diameter on average and weather out of the canyon wall creating a natural climbing wall (figure 23). We also took a tour of the Energy Geoscience Institute, an exploration research center at the University of Utah.

Several of our recent graduates have had very successful senior years and exciting post-graduate opportunities. Our most recent past president, Megan Fairchild, gave multiple presentations at the past two GSA annual meetings on earthquake education and on volcanic geochemistry. Last year’s W.A. Tarr award winner, McKenna Holliday, also presented her original geochemical work at GSA. Both are now off to Ph.D. programs.

The pandemic has made it hard for us to get together recently, but we have managed to have occasional activities on-line. Most recently we had an on-line movie night in which we watched (and might have made a little fun of) the 2003 geo-classic The Core. Like everyone else, we are stockpiling ideas for future activities and are looking forward hopefully to the future.

Tristan Palmer
Theta Psi Chapter President
Figure 23. Theta Psi coordinated a field trip with the campus rock climbing club to Maple Canyon which is a slot canyon carved from conglomerate. The weathered out cobbles in the canyon wall create a natural climbing wall.