



"The best geologist is one who has seen the most rocks." H.H Read, FRS, 1940

Clint Noble, P.G., President
Jon Bryan, P.G., Vice President
Andy Lawn, P.G., Treasurer
Samantha Andrews, P.G., Secretary
Bryan Carrick, P.G., Past President, Newsletter Editor

cnoble@gfnet.com
bryanj@nwfsc.edu
alawn@hsweng.com
sandrew3@tampabay.rr.com
carrickbk@embarqmail.com

2017 Winter/Spring Newsletter

NEW BOARD MEMBERS ELECTED

The SEGS conducted an election of Executive Committee/Board members in January; your new Board members are cited above. Clint Noble moved from Vice President (V.P.) to President, and Dr. Jon Bryan stepped into the role of V.P., and will lead the field trip committee. Andy Lawn and Samantha Andrews remain in their positions as Treasurer and Secretary, respectively. Bryan Carrick moves into the role as Past President, and will serve as the newsletter editor. Greg Mudd steps out of his role as Past-President. Please give the new volunteer Board members your support as they conduct the organization's business this year. Officer and committee duties are explained in detail on our website. Thanks to all of those that participated in the election, and to those that accepted positions in our committees.

Greg Mudd is given our sincere gratitude for his service as a Board member and newsletter editor over the past three years.

We always have positions available to serve on committees, and seek our next V.P., who will be lead coordinator of two field trips in 2018. Please don't hesitate to contact any of your Board members to sign up for name recognition, resume building, professional development, and fun.

PRESIDENT'S MESSAGE

Hello, members –

I wanted to give the membership a brief overview of recent SEGS Board activities and actions to keep the organization current and viable.

We successfully implemented four field trips in 2016 and boosted exposure of SEGS by extending invitations to more related organizations in Florida and to many college students, namely FAU and USF. All trips included excellent guidebooks that are published on our website.



Roles and duties of Committees have been defined and linked on our website. We've re-instated committee members, added new members, and assigned Chairs for the following Committees to boost membership and keep SEGS moving forward with shared responsibilities:

- Field Trip Committee
- Membership Committee
- Website Committee with Social Media potential
- Newsletter Committee
- Student Awards Committee
- Nominating Committee

SEGS is looking into the benefit/need for insurance to protect our organization as attendance of our field trips has grown.

MEMBERSHIP

Student involvement is increasing and membership is on the rise due to excellent field trip opportunities. We have 100+ paid members for 2017, but have a historic list of 250+ members on some email distributions.

- We are open to suggestions for adding membership value.
- We have added a USF grad student and President of the USF geology club.

SEGS WEBSITE

The website has undergone a major overhaul in the past several months with updated news, events, and trip information. The team is still actively compiling all Guidebooks and publications in electronic format (including digitizing historic guidebooks). Updates have been made with member field trip photographs.

OUTREACH

We have bolstered our relationship with FAPG (Florida section of AIPG), Everglades Geological Society, Tampa Bay Fossil Club / Paleontological Society, and the Florida Association of Environmental Soil Scientists to team on events and field trips together. We are looking toward teaming and sharing trips/events with other related societies and engineering groups to share exposure of our industry and interests.

In March 2017, Clint Noble, SEGS President, gave a Geology presentation to Sabal Palm Elementary School using maps, diagrams, and hands-on Florida and Georgia rocks, fossils, and geology field tools. It was a hit and he was invited to come back next fall! The kids were very excited and full of good questions.



SEGS representatives Denise Cox and Dr. Jon Bryan - SEGS V.P., attended the AAPG Delegates meeting in Houston on April 2, 2017.

SEGS logo embroidery services are explained on our website for sending your items to be embroidered with the SEGS logo. We are considering more merchandising, and open to ideas and member management.

SEGS could use a reintroduction of our Officers and members to GCAGS for mutually beneficial activities.

LEGISLATIVE NEWS

The Florida Legislature again entertained removal of the Geologic Business License requirement under a deregulatory effort by SB-802 and HB-7047 under Florida Statutes 492. FAPG worked hard to stop this with their lobbyist. In SB-802 we successfully removed geologists from the bill, but concerns still exist regarding HB-7047. We look toward other societies for guidance in protecting business and personal Geology licenses in Florida. Visit FAPG's website www.fapg.org, or contact President, Anne Murray, P.G. for more info.

THANK YOU!

A special thank you and appreciation is in great need to Andy Lawn, our Treasurer, who has really made a big impact in SEGS the past year and been a prime motivator for the group and taken on many non-Treasurer duties. We are very lucky to have him and he deserves many thanks for the recent successes of SEGS.

CHEERS!

Clint Noble, SEGS President

SEGS Student Research/Field Work Grant Opportunity

SEGS announced a competition for student research/field work grant awards. The purpose of the awards is to promote greater understanding of Southeastern U.S. geology through student research and/or field work. Grants are available on an application merit basis to any student, undergraduate or graduate, enrolled at any accredited University or College in Florida, Georgia, or Alabama.

For this competition, the SEGS has allocated **grant awards of \$1,000 for an undergraduate student applicant and \$2,000 for a graduate student applicant**. Awards are targeted for expenditures such as



(but not restricted to) field work, research travel, laboratory analyses, research materials, etc.; they are not intended to fund indirect/overhead costs or wages. Applications must be postmarked on or before a **deadline of June 30, 2017**, and be sent to the Awards Chairman at P.O. Box 1636, Tallahassee, Florida 32302. Applications will be reviewed by an SEGS Grant Awards Committee and judged based on the following criteria: 1) merit of proposed research/field work, 2) clarity of expression, and 3) strength of recommendation letter from a college faculty sponsor. All applicants meeting requirements will be acknowledged by email and provided the current, plus one **free year of SEGS membership (up to a \$60 value)**. Following SEGS Executive Committee approval, awardee(s) will be notified, identified on our SEGS website, and sent check(s) by August 31, 2017.

Recap of the Cote Blanche Island, Salt Dome Mine, October 13th, 2016 trip

On Friday, October 13, 2016, SEGS hosted a field trip to the Compass Minerals' Cote Blanche salt mine located on the Louisiana coast south of Lafayette and Baton Rouge. Our objective was to examine the geology and observe mining operations in a salt dome. Cote Blanche is one of five forested "islands" that rise 75 to 171 ft above the surrounding marsh and sugar cane fields of coastal Louisiana. They are arranged on a NW/SE trend and all are surface expressions of salt diapirism.

Sixteen members of SEGS met at R&M's Boiling Point Cajun restaurant on Thursday evening to socialize, eat Cajun seafood, participate in a business meeting, and enjoy a presentation by Mr. Michael Nixon – mine engineer for Compass Minerals. Mr. Nixon gave an overview of the Compass Minerals company, salt diapirism and formation of the Cote Blanche salt deposit, the history of salt mining in coastal Louisiana, and mining methods used at the Cote Blanche mine. Compass Minerals has plans for 50 to 100 years of mining operations; they have 20,000 vertical feet of salt reserves.

The field trip started with a safety briefing and outfitting everyone with safety gear. The mine was inactive due to planned maintenance activities. We all descended in a cylindrical elevator "car" to the 1500 ft level where we loaded into 5-person utility vehicles to tour the mine. We observed the surprisingly homogeneous salt deposits, zones of dark banding – stratigraphic salt layers containing 2-4% anhydrite, clay and other impurities that have been tilted to near-vertical orientation and folded as the plastic salt mass flowed during diapiric intrusion. We also observed a large "sandstone" silty red sand body that was either deposited with the salt or incorporated into the salt during diapirism. The Compass Minerals staff showed us how the salt is excavated, transported in the mine, processed, and moved to the surface; and how the mine is maintained.





We were amazed at the size of the equipment that was used to mine and transport the salt in the mine. All material in the mine is lowered via a 16-ft diameter lift. Equipment is disassembled and, if necessary, cut into pieces before being lowered into the mine – to be reassembled. The factor limiting the size of the equipment used in the mine is the tires – they are the only component that cannot be disassembled or cut apart and reassembled. At the end of its service life, equipment is retired in the mine and not brought back to the surface.

After we completed our tour of the mine and collected samples of salt and “sandstone” we returned to the surface for a BBQ lunch and discussion of what we had seen. After departing the Cote Blanche mine, several of us visited nearby Avery Island, site of the world famous Tabasco Pepper Sauce operation. We capped-off the day with another Cajun dinner in New Iberia.

We are grateful to Dr. Jon Bryan of NW Florida State College for having arranged this extraordinary field trip and for compiling an outstanding guidebook. We are also very grateful to Compass Minerals for making the mine and their staff available to SEGS.

Recap of the Cemex Center Hill Mine, December 3rd, 2016 trip

On Friday, December 2, 2016, SEGS hosted a meeting at the Center Hill, Florida hotel where the group stayed overnight and met on Saturday. The meeting included a presentation regarding Cemex’s limestone aggregate mining and cement production operations. SEGS Officers also held a 2016 Year-End SEGS Business Meeting.

On Saturday, we visited the mine located about 45 miles west of Orlando, along with members of the Tampa Bay Fossil Club. We enjoyed meeting and interacting with these folks, and express our gratitude to Cemex staff who accommodated all of us, including use of their PPE (gloves were required in addition to the usual steel-toe boots, hard hat, and safety glasses).

We viewed maps of the mine and learned of Cemex’s water management operations, then canvassed accessible areas to hunt fossils. We collected Eocene Ocala Limestone marine fossils including mollusks, echinoids, crabs and large foraminifera. Some marine vertebrates (dugong) and terrestrial vertebrates associated with infilled karst features that the dragline mining process exposes were also found, along with interesting and colorful chert precipitates.





Recap of the Lake Wales Ridge Sand Pits, February 25, 2017 trip



Our first trip of 2017 was inspired by students in the USF Geology Department, who asked long-time SEGS member (and Past-President) Marc Hurst and colleagues at C.C. Calhoun, Inc., if they would allow students to access sand pits on the Lake Wales Ridge. Marc agreed and graciously provided SEGS the opportunity to coordinate the trip as a revisit to our sand mining trip in October 2010 (Guidebook #50). This was a great opportunity to see, touch, and learn about Pio-Pleistocene Cypresshead Formation sands and hunt for fulgurites, which are abiotic fossils - melted sand remnants of lightning strikes - Florida's metamorphic rock!

The weather was beautiful, therefore some camped at nearby Lake Rosalie Park & Campground Friday night to awake early and proximal to the sand pits. Those who spent the weekend in Lake Wales experienced how expansive mining operations are in the Central Florida region, with very large sand mining and cement manufacturing operations on the ridge, and phosphate mining to the north and west in Polk County, as made obvious by massive drag-line lights that could be seen many miles away, across the lake after dark.

We met Saturday morning at the entrance of C.C. Calhoun, Inc.'s Pit No. 1 at 1280 Old Scenic Hwy., Lake Wales. Marc, Clint (President), Andy (Treasurer), and Dr. Matt Pasek (USF professor and fulgurite expert) herded the crowd of seventy nine (79!) attendees for discussions regarding Cypresshead Formation sands, fulgurites, and of course, safety within the mines. The massive pits of multi-colored sands and extreme topographic relief, with many geologists climbing around, made for some terrific photos. Members had great fortune finding nice specimens, making our decision to provide all attendees small fulgurite specimens at the pre-trip meeting seem unnecessarily generous.

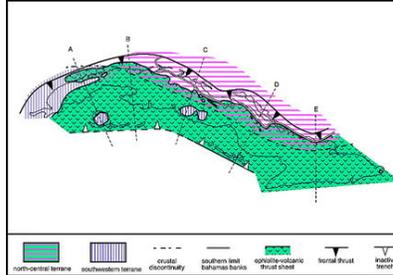
After a couple of hours, we moved to Pit No. 4 at 1250 Detour Rd, Haines City, where we continued collecting until lunch – boxes from subway; complimentary to all 55 students, courtesy of SEGS. During lunch we held our first 2017 quarterly business meeting, where we were pleased to gain a few student members and more committee volunteers, to help SEGS be even more productive on our mission :

“To advance geosciences knowledge of our members and communities by encouraging professional and social relationships, and providing field trips and meetings with interactive technical presentations.”



SEGS GOING INTERNATIONAL ???

SEGS long-time member Sarah Whitaker, P.G., expressed interest in facilitating a field trip to Cuba in years past; she's visited several times as a Canadian citizen. Now that borders are more open, and we learned that flights from Tampa and Orlando are under \$200 round trip, many are enthusiastic about the adventure. Sarah reported that she is willing to help. Please let any field trip committee member know of your interest, and please - willingness to commit in advance, and help making the trip happen.



SEGS AND ITS AFFILIATION WITH THE GCAGS



SEGS is a member of The Gulf Coast Association of Geological Societies (GCAGS). So, what does that mean? It's a subject that we mention in meetings and several have attended annual meetings, and have some idea of what the organization is about. But we're sure there is some curiosity out there. Below, is some background information and a recent account of attending the Semi-annual meeting of GCAGS that will shed more light on what our affiliation means. It is an opportunity for any member to participate on behalf of SEGS. Read on, and if you have any interest, please let an SEGS officer know.

The SEGS Vice President, Dr. Jon Bryan recently attended The Gulf Coast Association of Geological Societies (GCAGS) of which, SEGS is affiliated, along with the following groups:

- Alabama Geological Society
- Asociacion Mexicana de Geologos
- Austin Geological Society
- Baton Rouge Geological Society
- Corpus Christie Geological Society
- East Texas Geological Society
- Houston Geological Society
- Lafayette Geological Society
- Mississippi Geological Society
- New Orleans Geological Society
- Shreveport Geological Society
- South Texas Geological Society

Additional facts about the GCAGS:

- The organization was formed in 1951, and serves as the Gulf Coast Section of the American Association of Petroleum Geologists (AAPG).



- GCAGS provides an organizational structure through which member societies may participate and be represented in the business of the AAPG.
- GCAGS serves as a forum for discussion and publication of papers on subjects concerning the geological profession as they relate to Gulf Coast area geology. Papers presented at the annual GCAGS convention are published in the annual *Transactions* of the Association.
- GCAGS is a non-profit professional organization whose purposes are to foster education and communication of ideas, and provide financial support to geoscience students and faculty conducting research in the Gulf Coast region.
- GCAGS is served by a Board of Directors composed of its officers and one representative from each member society.
- The Vice-President, Secretary, and Treasurer are nominated by the Executive Committee of the local society hosting the year's annual meeting.
- GCAGS officers assume their office at the conclusion of the annual convention, which is held in September/October each year.

Below, is Dr. Bryan's report of the recent GCAGS meeting.

**Report on the Mid-Year Meeting of the Gulf Coast Association of Geological Societies (GCAGS)
Board of Directors, 1 April 2017**

Hilton Americas, Houston, Texas

Submitted by Jon Bryan, Vice-President of the
Southeastern Geological Society (SEGS)

The GCAGS Mid-Year Board of Directors meeting on 1 April 2017 in Houston, Texas, was educational, productive, and forward looking. Under the able and energetic leadership of President Tom Ewing (Frontera Exploration Consultants, San Antonio), GCAGS appears to be entering an exciting future, with a renewed interest on not only the traditional, petroleum-rich areas of the Gulf Coast (viz., Texas and Louisiana), but the entire Gulf of Mexico Basin, including Mexico and the Florida Platform. Among the GCAGS member societies, there was a genuine interest in the Florida-based SEGS, and a desire to see more communication, interaction, and participation of SEGS in the GCAGS annual meeting. SEGS is a member society of GCAGS. So SEGS members are encouraged to take advantage of the resources and opportunities offered by our parent association, the GCAGS.

The meeting consisted of various GCAGS reports (2016 Convention, Treasurer & Finance Committee, Publications Committee, etc.); reports of the member societies present, with discussion (over a delicious catered luncheon); and an extensive consultation on the future of the GCAGS Annual Convention.

As your SEGS representative, I believe there were several agenda/discussion topics items that may be of special interest to SEGS members. In no particular order, they are:

(1) If possible, GCAGS would like to see some continuity in member society representatives at the Mid-Year meeting. That is, to have the same representative from each member society attend the meeting for at least 2 successive years. This representative need not be the president of the member society. This would indeed facilitate better communication and participation among member societies, and help coordinate Association-wide events.

(2) The GCAGS offers an Outstanding Educator (K-12) award, as well as student and faculty research grants. Application deadline for these nominations or proposals is February 15th. SEGS membership is encouraged to explore the GCAGS webpage for details on these awards, as well as publications, and other information (<http://www.gcags.org/>). (Note: GCAGS once had a matching grant program for member society student grants, but this has apparently been discontinued).



(3) The 67th 2017 GCAGS/GCSSEPM Annual Convention will be held on 1-3 November 2017, in San Antonio, Texas, and hosted by the South Texas Geological Society. The 68th Annual Convention of the GCAGS/GCSSEPM will be held 30 September to 3 October 2018, and hosted by the Shreveport Geological Society. Abstract submissions for the Shreveport meeting begin on 15 December 2017, and extend to 15 February 2018. More details will be posted at www.gcags2018.com.

While it seems unlikely that SEGS would host a GCAGS Annual Convention anytime soon, the leadership of the GCAGS indicated that GCAGS would support an SEGS-sponsored research or field conference should we decide to put on such an event in Florida. They also made it clear that although GCAGS has historically focused on oil and gas, they are completely open to environmental and groundwater research, and the full range of geosciences, and hope that such contributions will increase at the convention and in GCAGS publications. The *GCAGS Journal* for example, has many articles on groundwater, karst, and Gulf Coast stratigraphy that are entirely relevant to Florida geology.

(4) After listening to the various member society reports, it occurred to me how our sister societies differ from SEGS. Most are more narrowly regional than SEGS (e.g., South Texas, Austin, Houston, Shreveport, New Orleans geological societies), have regular social and fund-raising events, and certainly take *fewer* fieldtrips than SEGS. Some member societies have an *annual* field trip, and perhaps a core workshop. Some have monthly meetings, emphasize public service (e.g., working with K-12 students, Boy and Girl Scouts, etc.), and are active at the GCAGS Annual Convention. SEGS clearly emphasizes field trips, routinely offering as many as 4 trips per year, with very few other events. A couple of member society reps asked how we managed to organize and run our field trips. I believe that SEGS should stay the course we are on, and conservatively add activities and special events as we judge necessary and useful.

Our student grant program, for example, is an outstanding addition. Perhaps we could coordinate resources for K-12 events, which many of us regularly do in our hometowns. A future core workshop or other training program would be welcome. There are many possibilities. We should not promise the Moon because we are all very busy. But we all desire to see our society advance and improve, and recruit future geologists!

(5) Several GCAGS member societies sell their publications in the GCAGS Bookstore, which is centered in the Texas Bureau of Economic Geology Bookstore in Austin. Given the number of SEGS field guides, perhaps we might consider offering our publications here as well. This would certainly increase our exposure and generate more interest in our work.

(6) There was much discussion on the future of the GCAGS Annual Convention, and a desire for some “rebranding” and change in emphasis. This may have resulted from a continued, downward decline in GCAGS meeting attendance (which, however, is cyclical over many years). This appears to be directly related to the precipitous drop in the price of oil in recent years, fewer independent oil companies, less travel money, rising hotel and convention costs, and other factors (the same concerns were expressed at the AAPG House of Delegates meeting the next day). There was a clear realization that “business as usual” may have to change. But there was genuine interest and optimism to equip GCAGS for the future. This historical geological association has no intention of fading into the sunset.

The major topic of discussion in this regard was the desire to re-organize/re-purpose the GCAGS Annual Convention, with a more inclusive emphasis. Rather than the usual concentration on petroleum-related geology, include a full range of Gulf of Mexico geoscientists—onshore and offshore, environmental, hydrogeology and karst, engineering, coastal studies, etc. So the emphasis would be all geosciences within the Gulf of Mexico Basin. This would hopefully encourage more interest and participation in the GCAGS meeting. This was an exciting discussion, and I hope we can get more Florida geologists involved. There was complete agreement among member societies, but it was decided that this plan needed additional work, and could not realistically be “rolled out” until the 2019 meeting (2017 is set, and 2018 is already being planned). The re-branding would most likely include a new name for the convention, such as **GeoGulf 2019**.

The Southeastern Geological Society (SEGS) is a non-profit group of avocational and professional geologists dedicated to advancement of the geological sciences.