

Florida Association of Professional Geologists (FAPG)

Florida Chapter of American Institute of Professional Geologists (AIPG)



January/February 2020 Newsletter

EDITTOR'S NOTE

William C. Aley IV, PG

Welcome to the first issue of the newly revived FAPG newsletter. The intent of the newsletter is to provide Florida geologists and anyone interested in geology in Florida continued updates on legislative issues that may affect geology licenses and businesses in our state as well as additional informational and entertaining content related to all things geologic in Florida. Geology is a multi-disciplinary science and we hope to showcase the spectrum of geologic topics and study areas in our revamped newsletter format. We aim to do this through contributed articles such as "Fossil Hunting Florida" by Rick Cochrane and "North Florida Finds" by Madeline Williams in this issue.

We will also be introducing our readers to various geology students, academics, and industry professionals in coming issues. This issue contains "spotlights" or profiles of geologists from Florida Atlantic University. Through these articles we hope to re-engage with state universities to re-invigorate our AIPG/FAPG student chapters. AIPG and FAPG offer scholarships annually to geology students engaged with the organizations.

Finally, it is my hope as the editor of this newsletter that we can assist emerging geologists in understanding what types of employment opportunities await once the joy of college is complete. To assist with this we will continue to provide helpful information such as the article "A look at Trends in the Geosciences Workforce" from organizations such as the American Geophysical Institute (AGI) who's mission is to support earth sciences education. We hope you enjoy this special issue and encourage you to contact us with suggestions for future content or comments on published articles. One of the best ways for students to ease their transition into the workforce is through participation in professional associations such as AIPG/FAPG/AGI/GSA.

Thanks for reading.



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FOSSIL HUNTING FLORIDA

By: Rick Cochrane

Instagram: @DigDiveDiscover Youtube: Dig Dive Discover

Dig deep enough almost anywhere in Florida and you will hit ancient sea floor and huge Megalodon shark teeth! As a SCUBA dive instructor, I fell in love with Florida's tropical water and vibrant coral reefs. Before long I discovered most of Florida's waterways cut into ancient layers and deposits exposing fossilized bone and shell. These fossils can be 56 million years to 10,000 years old. I found my first fossil in the Peace River, a Megalodon Shark tooth about 2 inches long and I was hooked. I started to dive places most wouldn't consider like dark water rivers full of alligators with almost no visibility.



Fossil assortment. Photo: Rick Cochrane

Most of Florida was once a shallow sea; however, the modern coast also extended some 30 miles offshore. This is why I find fossil horse and mammoth teeth many miles offshore and fossilized shark and whale teeth many miles inland. Dinosaurs from the Jurassic are absent from Florida's fossil record, but according to the Florida Museum of Natural History, "Florida has the richest fossil record of vertebrate animals of the eastern United States". This is exciting for scientists and fossil collectors because we can find fossils from many creatures not found or rarely found anywhere else. Creatures such as Saber Tooth Cat, Giant Sloth, Giant Armadillo, Bear Dog, Dire Wolf, and the massive Columbian Mammoth and Mastodon. Over 1,000 unique vertebrate species are present and that's not including the hundreds of marine animals like sharks, whales, and turtle. In addition to fossils, Florida is littered with artifacts from the first settlers. They left behind pottery and stone tools like arrow heads, knives, and spear points. I have come to enjoy searching for these human relics as touchstones to the first humans to call Florida home.



Mastodon Tooth. Photo: Rick Cochrane

I share my explorations and discoveries on social media through my YouTube channel, Instagram, and Facebook. If you are interested, you can subscribe to my channel to follow along on my trips and watch the discoveries unfold. I meet up with a lot of treasure, rock, and relic hunters and share their stories too. I also share information, tips, and techniques for how you can get started with your own adventures and collection.



Rick Cochrane and large vertebrate fossil. Photo: Rick Cochrane

Many fossils are common and not significant to our current body of scientific data and research, but sometimes an amateur collector can discover something important or even momentous to science. It is therefore important to learn about and apply for a Florida Fossil collecting permit if you decide to collect fossils. This permit system is designed to help bridge the gap between professional and amateur collectors so when an important discovery is made it is not lost to science. I have donated many specimens to the Florida Museum of Natural History, and I consider that a privilege and a duty. I strongly encourage all amateur and enthusiasts to consider this as they discover and collect from our shared natural resources. For more information on fossil collections, services, and permits visit floridamuseum.ufl.edu/vertpaleo/professionals/collections/



Mammoth and shark teeth. Photo: Rick Cochrane

2019 FAPG ANNUAL MEETING – JACKSONVILLE, FL

A lot happened at the Jacksonville, FAPG meeting last year! We thank Clint Noble and <u>CDM Smith</u> for their support in opening their facilities for our annual meeting. We are happy to announce the addition of Mr. Bill Aley, (Editor), Mr. Robert Mckinnon, (Secretary and Legislative Committee leader), and David Wilshaw, (FAPG Advisor) which means a full board!



Left to Right - Anne Murray, Clint Noble, Troy Bernier, David Wilshaw, William Aley. Photo: Joey McKinnon.

A considerable number of action items were discussed. Just a short summary includes;

- Look out! Young Professional to be appointed to FAPG Board
- Webinars for FAPG members, topics to include PFAS, and Sea Level Rise Mitigation
- More AGI Critical Issues in our newsletters
- SEGS joint field trip To Be Announced
- Tallahassee Legislative Days, (Jan 2020)
- Expanding our Lobby Reach in geosciences and licensure
- Plus lots more!

FAPG 2020 SCHOLARSHIPS

Purpose

To assist students with college education costs and to promote student participation in the American Institute of Professional Geologists (AIPG) and the Florida Section (FAPG). Up two scholarships will be awarded to declared undergraduate geological sciences majors who are at least sophomores. Details for applying for these scholarships are provided below.

Scholarship Awards

Scholarship awards in the amount of \$500.00 to \$1,000.00 each will be made to the eligible student(s) depending on a number of outstanding submittals that are attending a Florida college or university. Scholarships are intended to be used to support field camp tuition or to allow the student(s) to attend an annual AIPG National Conference.

Eligibility Requirements

Any student who is majoring in geology (or earth science), is at least a sophomore, and is attending a four-year accredited college or university in the U.S. can apply. Each student who is awarded a scholarship agrees, by accepting the scholarship, to prepare a 600 to 800-word article for publication in The Professional Geologist and re-printed in the FAPG Newsletter. The subject of the article must be related to a timely professional issue.

Application Process

- 1. Submit a cover letter introducing yourself and tell us what you have done outside of the classroom such as research projects, an officer in a club, or outside activities within the community. Address your career goals in the near term and long term.
- 2. Submit an essay on "Why I Want to be a Geologist."
- 3. Submit a copy of your transcript (unofficial) and documentation that you are a current student. Requisite standards to apply are a minimum GPA of 2.8 (on a 4 point scale) and a minimum of 12-semester credits of geology/geoscience courses with a 3.0 GPA in these courses completed at the time of application.
- 4. Submit a letter of recommendation from a geology/geoscience professor that provides an emphasis on your performance and activities in the classroom, in the department, and your character in how you work and help other students.

Submit the application packet to:

Florida Association of Professional Geologists c/o Anne Murray, PG, CPG 3473 SE Willoughby Blvd. Stuart, FL

or e-mail: pastpresident@fapg.org

Application Deadline and Award Date

Applications must be received by March 15th Awarded the month of May

Basis of Awards

Awards will be based on the cover letter, recommendation, transcript and the content and

creativity of the essay as judged by the Education Committee. The decisions of the FAPG Executive Committee are final.

Miscellaneous

Application requirements for student membership to AIPG: Student must be currently enrolled in a geological science degree program (as defined by the American Geosciences Institute).

2019 SMF CONFFRENCE WRAP UP

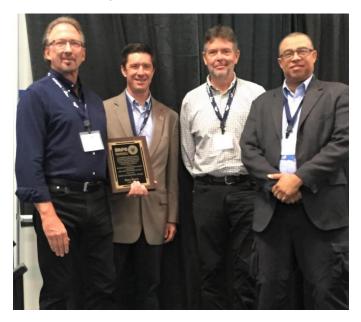
On October 9-10 several FAPG members attended the 34th Annual Florida Society for Mining, Metallurgy & Exploration (FLSME) Regional Mining Conference in Lakeland, Florida. Every second of our lives we are surrounded by materials which had to be mined from the earth in order to produce the products that the world depends on daily. The FLSME brings together a local and national community of minerals professionals who share pride in the science and technology that the mining community brings to the world.

Mr. Troy Bernier, P.G., and President of FAPG chaired the conference's Geology session which included talks on Continuous Surface Wave testing, Integrated Mine Planning, and Real Time Monitoring of Dredging and Mining projects.



Troy Bernier and Bill Aley at the 34th Annual FLSME Conference

At Thursday's Hero of the Industry Luncheon, Gary Gavie was honored as the 2019 Hero of the Industry. Gary grew up as the son of a police officer in Detroit, Michigan. He earned Bachelors and Masters degrees in geology from Northern Illinois University and Southern Illinois University.



Shown above left to right, Gary Gavie, 2019 Hero of the Industry; Ed Murwaski, SME Conference Chairman; Wink Winkler Chairman Hero Committee; Troy Bernier, FAPG President.

Early in Gary's career he was a drilling geologist in the petroleum industry working for Freeport Sulphur Company. In this position, he worked in Saudi Arabia, Egypt and China. While at Freeport he earned the prestigious Presidents award for identifying significant additional reserves that extended operations at one of Freeport's mines for several years.

Gary was hired in the early 1990's by Agrico (owned by Freeport at the time), where he worked as a Geologist/Mine Planner in the Florida phosphate mining operations. Working through the IMC/Agrico merger in 1993, and future mergers, he attained the position of Mines Planning Supervisor for Mosaic prior to retiring recently.

Gary was very innovative in developing systems for evaluating geologic prospect data, phosphate reserves, geologic modeling, mine production data analysis, and mine production simulation, including design specifications for software applications. He also worked on the Mosaic/Ma'aden joint venture phosphate project in Saudi Arabia.

In his decades in the Florida phosphate industry, Gary was a skilled, conscientious, results-driven professional. He always strived to improve the systems and processes he and his employees used, while showing tremendous

patience, cooperation, and compassion for those he worked with.

Gary is enjoying retirement in Lakeland and is an outstanding recipient of the 2019 Florida section American Institute of Professional Geologists Hero of the Industry award.

AIPG CURRENT EVENTS

The American Institute of Professional Geologists (AIPG) is financially healthy based on a solid investment portfolio and events like the AIPG WI Section PFAS Seminar that benefits both National and the Chapter financially and provides value to members and other attendees https://aipg.org/page/2020WIPFASSeminar, additionally AIPG participates and receives revenue from a number of programs including Geosciences Online Learning Initiative (GOLI) courses. AIPG's Foundation is flourishing and provides over \$5,000 in annual scholarships.

AIPG's The Professional Geologist (TPG) magazine is offering exceptionally good technical content and boasts four peer-reviewed articles in its current edition. AIPG welcomes article submittal.

AIPG is working on updating and creating new position statements on a variety of critical issues that will be posted to the AIPG website.

Now that there are official Young Professional and Past-Young Professional board positions we have seen an increase in student member and university chapter activity and inclusion of YP events at AIPG and other organization meetings. There is also movement by state chapters to revise bylaws to include a YP on state executive boards.



American Geosciences Institute

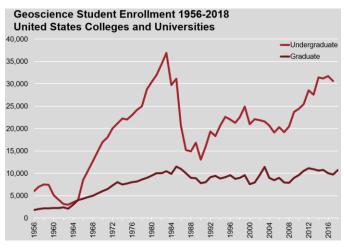
The American Geosciences Institute (AGI) has restructured over the past year based on financial challenges, however, is rebuilding and continues to serve the geoscience community and provides public education on the geosciences. Recently, AGI has migrated from the EARTH magazine to Nautilus. AGI has a robust undergraduate, graduate and K-12 grant supported programs aimed at strengthening geoscience education. AGI has also received a number of recent National Science Foundation and other grants focused on carbon sequestration, resiliency and sustainability. AGI works with several member partners on policy and critical issues and interfaces with AIPG on geolpolicy working group and the hazards caucus alliance group among others.

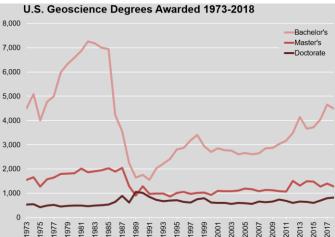


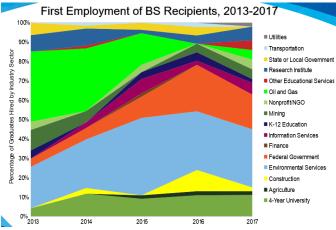
A LOOK AT TRENDS IN THE GEOSCIENCES WORKFORCE

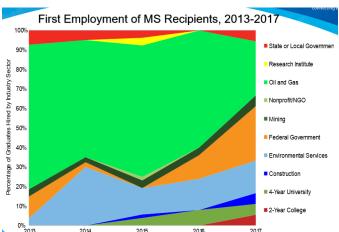
On November 21, 2019 the American Geosciences Institute (AGI) hosted a webinar entitled "A Look at Current Trends in Geoscience Workforce." The presentation was given by Mr. Christopher M. Keane and revealed some very interesting trends in historic and current changes in geosciences college enrollment as well as employment. The data presented may be used by geoscientists, employers, and universities to reveal macro-issues ahead for geosciences programs. We have reprinted a few graphics that we felt would be interesting to FAPG members. We encourage all members to visit the American Geophysical Institute webpage (https://www.americangeosciences.org/) for more information and resources pertaining to geosciences employment and the professional in general. For more information related to the slides printed below visit the website

https://www.americangeosciences.org/workforce or contact workforce@americangeosciences.org.











(left to right) A partial mastodon tooth, 4-inch megalodon and partial mammoth tooth all found in Jacksonville dredge material.

NORTH FLORIDA FINDS

By: Madeline Williams
Instagram @northfloridafinds

Florida is well known among the United States for creating some of the craziest people there are. When people think of Florida they think of endless sunshine, beach sitting, beer drinking, alligator wrestling, gun shooting hillbillies. Being a native here I am all too familiar with this reputation. I have learned the ins and outs of our sunshine state but until recently I never explored our history. I have always loved visiting the beach and finding teeny tiny shark teeth scattered throughout the shell beds but eventually that wasn't enough for me. I wanted more.



One of our display cases containing 90% Jacksonville dredge teeth.

It wasn't until about 3 years ago my Aunt Charlene introduced me to the fossils in the Gainesville creek systems. I thought she was insane. How could there be shark teeth in the middle of Florida, there was just no way. In late January of 2017 we put this idea to the test and got our boots wet for the first time in the shallow Gainesville creeks. With our kitchen colanders, bare

hands and somewhat trained eyes we began scanning for rock beds lining the creek. Left and right we began picking up small shark teeth. I was shocked that we were indeed finding teeth in the middle of Florida. I began doing research to better understand why these fossils were here. Through my research I discovered that Florida was submerged underwater approximately 25 million years ago. The emergence of Florida was not a single process rather it was reclaimed several times by the sea and endured serious erosion. As organisms died, they became encased in layers of sediment and eventually some were preserved. When each layer was added over millions of years it began to create a picture of the past. These fossil layers were not evenly created and now reside at different depths in the earths crust. We can see fossil formations due to creeks eroding them, dredging, mining and construction. Aside from man-made processes there are environmental events that have unearthed and dispersed these fossils.



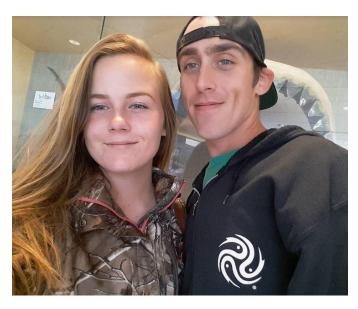
Bone Valley teeth from this year.

Following my research, I quickly recruited my friend Robert, who has similar interests, from work to help me. Together we uncovered a whole community who share our common interests. We began making trips to Gainesville every weekend. From this we learned more and more about the fossil layers and the ways of the creek. We learned quickly how to identify the different species of shark teeth along with recognizing other possible fossils such as bones and various mammal teeth. We started talking to other fossil hunters throughout Florida and realized we have only hit the tip of the iceberg in the fossil world. After more research,

conversations and a driven desire we began exploring old dredge sites in Jacksonville, Florida. The St. Johns River is lined with ancient sea rocks and fossils are scattered throughout. Our mission was to find them and better understand Florida's history. Soon every glass jar we owned began filling up and so did the display cases. Shark teeth, vertebrae and unidentified bones were stacking up around our room, kitchen, back porch and even our washer and dryer. As we dove further into the fossil community, we began exploring mine sites, dirt roads in central Florida lined with fossils, various creeks and even visited South Carolina for the cusped C. angustidens. Our love for fossils blossomed lifetime friendships, connections, memorable trips and one hefty collection. While we are still somewhat new to this community, we have already learned so much and still have more to learn.



Megalodon!



Madeline Williams (author) and boyfriend Robert Strickland in South Carolina at the Mace Brown Museum of Natural History standing in front of a replicated megalodon jaw.

2020 LEGISLATIVE AND REGULATORY UPDATE

Start of Legislative Session 2020 and Occupational Licensing Bills – Ryan Matthews, Peebles, Smith & Matthews Inc., FAPG Lobbyist

The 2020 Legislative Session began in earnest on Tuesday, January 14th, 2020. The typical pomp and circumstance was evident from the early morning hours as members of the legislative, executive, and judicial branches of Florida government gathered to hear charges from the House Speaker, Senate President and Governor DeSantis. Those comments generally articulate goals from each chamber and the executive and often provide a glimpse into what can be expected during the sixty-day session.

Occupational Licensing Bills

HB3 by Grant, and SB1336 by Perry

These bills expressly preempt the local licensing of any occupation, broadly defined as anything anybody gets paid to do.

HB707 by Renner, and SB 1124 by Diaz

These bills provide for the repeal of every professional or occupational regulatory statue, over one hundred professions and occupations representing 29% of Florida's workforce, over the next four years, unless the particular statute is reenacted. The bills also prohibit

any local government regulation of these occupations or professions.

Taken together the bills would represent a dramatic change in the Florida regulatory landscape and would handcuff any local effort to respond in order to protect its citizenry.

Governor DeSantis has been an ardent supporter of occupational license reform. The House is similarly supportive, and has already moved the bill out of its first committee. There has been no action on the Senate bill.

Comments from President Troy Bernier:

House Bill 707 proposes to remove licensure of professional geologists, engineers, surveyors, plus every other profession? What?

The practice of professional geology has been licensed for 31 years and provides certainty to Floridians that they are hiring qualified professionals. Removing the licenses of 1,900 professional geologists is a disservice to the industry and endangers our residents.

We are facing significant environmental and resource issues that impact human health, safety and welfare. The role of professional geologists is critical during this time of climate change adaptation and mitigation, serious water quality challenges, increasing drinking water demands, and aging infrastructure to name a few.

When making an important decision, wouldn't you want to consult a licensed professional? When buying land for a house, you want to be sure that the building is not over a sinkhole. Or, that your investment will not be inundated because of sea-level rise.

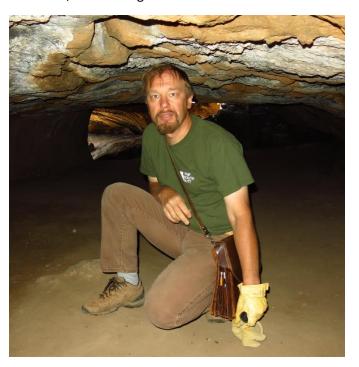
Let's look at it this way. If you were visiting an eye doctor for a cataract operation, would you allow someone who isn't experienced and professionally licensed to perform the surgery? The answer is no. Why would you hire an unlicensed geologist to perform critical geotechnical work or remediate a hazardous waste spill?

ACADEMIC SPOTLIGHT

Dr. Anton E. Oleinik,

Associate Professor of Geology, Department of Geosciences, Florida Atlantic University

My initial training was in geology, with specialization in paleontology and stratigraphy. My research interests were, and still are, focused on the molluscan paleontology and stratigraphy of high latitude regions of the planet, from the Arctic to Antarctica during the Cenozoic, the geologic era started after the extinction of the dinosaurs 65 million years ago. Later, the focus of my research evolved from taxonomy and biostratigraphy into a more precise understanding of biogeographic and evolutionary consequences of climate changes in the past. For that I started looking into proxies such as stable isotopes of Oxygen and Carbon locked inside mollusk shells. A number of projects, sponsored by the National Science Foundation, including the precise dating of the first opening of the Bering Strait, determining the magnitude of the Middle Miocene climatic warming in high latitudes of the North Pacific, and the magnitude of the Oligocene cooling in the Arctic, have emerged since.



Dr. Anton Oleinik. Mammoth Cave, Utah

Temporal and spatial distribution of fossil mollusk assemblages, backed up by stable isotope analysis of shells and detailed stratigraphy, yielded new information about critical events in the history of the earth during the past 60 million years. Results of my research are incorporated in the climate models to make accurate predictions of future effects and timing of climatic changes on Earth. At the same time, I was looking into biodiversity, evolutionary patterns, and stable isotopes of recent mollusks, mainly from Florida and the Caribbean, to test for patterns we see in fossils.



Dr. Anton Oleinik and Graduate student Alex Modys extracting core in Boynton Beach, Florida

My interests are also broadened into research on shallow-marine mollusk and coral taphonomy and use of the Holocene corals as paleoenvironmental proxies. My research took me to various places from rocky outcrops in the rim of the North Pacific, to underwater sites around Florida and the Caribbean. I conduct my research in the Department of Geosciences at Florida Atlantic University in the Paleoenvironmental Research Laboratory. The Lab is dedicated to research in paleoclimate, paleobiology, ancient depositional environments, and their modern analogs, using the sediment record and fossils. We employ methods from the fields of stratigraphy, sedimentology, paleontology, paleoecology, and geochemistry. Our major focus is on the paleoenvironmental records of marine organisms with mineralized skeletons. Lab personnel are involved in scientific SCUBA diving activities related to the research conducted in the lab. Most students in my lab become a American Academy of the Underwater Sciences (AAUS) certified scientific divers in order to conduct their research.

Research ranges from documenting critical climate events in the Cenozoic from high latitude to comparative studies of modern and Holocene coral reefs and associated biota in the western Atlantic.

The courses I teach at FAU are closely connected with my research. The main objective of the general science course "The History of the Earth and Life", is to introduce students of various backgrounds to the very basic scientific knowledge about history of our planet, from its origin to the origin and evolution of higher forms of life, using the geologic time scale as the scientific organizing framework. Knowing how planet Earth came to be and where science suggests it is headed is an important aspect of basic science education. Major events, like asteroid impacts, major outbursts of volcanic activity, and dramatic changes in climate from the greenhouse to icehouse world, global changes in sea level and associated mass extinction and diversification effects will help place the constantly evolving Earth's environments and life forms into perspective. Critical events of the Earth's geologic past provide important clues to the future of the planet. I also teach courses for geology majors including Sedimentology and Stratigraphy, Geology Field Methods and Geology Field Camp. These courses give students in-depth knowledge of depositional environments and rock structures, as well as the skill for all geologists of recognizing and interpreting rocks in the field.





Graduate student Jason Fadeley packing fossils in the Arctic Alaska

My broad goal as a scientist and researcher is to better understand the world around me, my goal as an educator is to see my students to eventually exceed my knowledge, expertise, and achievements. I believe that the most essential part of research and education is to ensure the progress and improvement of our scientific knowledge for the good of the planet.

INDUSTRY SPOTLIGHT

Dr. Lindino Benedet

Senior Coastal Scientist and Principal, Coastal protection Engineering



Dr. Benedet is a Senior Coastal Scientist and Principal with Coastal Protection Engineering. He obtained his undergraduate degree in Brazil in 1999 in Physical Oceanography; M.Sc. in Florida at Florida Atlantic University in Marine Geology in 2001; MBA in Brazil in 2013 and Doctorate in The Netherlands, at TU Delt in 2016 in Civil-Hydraulic Engineering. Lindino is also part of the editorial board of Shore & Beach and the Journal of Coastal Research and is the author of dozens of scientific publications covering a range of topics including numerical modeling of coastal processes, beach nourishment, coastal structures, coastal remote sensing and marine sand searches.



WHAT IS "PUBLIC PRACTICE OF GEOLOGY" IN FLORIDA?

By: William Aley, P.G.

The question of precisely what is and isn't appropriate for Professional Geologists (P.G.s) to seal in the state of Florida leads to a broader question of what the state of Florida defines as "Public Practice of Geology." Legally, this definition comes from the laws of our state, specifically Florida Statute (F.S.) 492 - Professional Geology. It is every PG's duty to understand how the state(s) they are licensed in define and regulate their practice. Recent experience has shown that some employers of licensed P.G.s may be hesitant to allow geologists to take responsibility for their work on certain types of projects due to perceived potential conflicts with the State Board of Professional Engineers and/or concerns for potential legal liability to the company. One solution to this issue is to provide a more comprehensive definition of "Public Practice of Geology" within our state law.

A published list ⁽¹⁾ of "Traditional Tasks Performed by Florida Professional Geologists," as compiled by the Florida Board of Professional Geologists lists many typical tasks associated that may be performed by licensed geologists in various areas of practice. The National Association of State Boards of Geology (ASBOG) Model Rules and Regulations ⁽²⁾ provides a very broad and inclusive definition of "Public Practice of Geology" which encompasses many aspects of specific types of projects and professional geologic responsibilities.

Referenced from the Florida Association of Professional Geologists (FAPG) webpage, as of 2005, the FL Water Resources Act – Chapter 373 ⁽³⁾ was amended to include professional geologists as an identified profession to supply services and interpretations to the Department of Environmental Protection (FDEP) and the Water Management Districts. As a result of this, the FDEP form ⁽⁴⁾ typically submitted for project permits specifies certification by an "appropriate licensed professional" rather than "Certified by Professional Engineer."

Florida Statutes Chapter 492 – Professional Geology – contains minimal language, mostly focused on general licensing, prohibitions, disciplinary proceedings, etc. There is only a very vague definition of what the State of Florida considers encompassed by the public practice of geology. While some references exist for definition of professional certifications required by common geologic practices ⁽⁵⁾ (waste management, clean up, etc.) there seem to be many geologic practices that exist in a

grey area. Due to this, Florida P.G.s may miss opportunities for employment and/or career advancement as a result of engineering companies being hesitant to hire geologists or put them in positions to sign and seal their own work for a lack of understanding of typical duties, qualifications, and education of Professional Geologists.

The state of Florida should consider implementing the ASBOG Model Rules and Regulations, or portions thereof to better define authorized duties of Professional Geologists licensed in this state. The state of California has fairly robust regulations and codes defining the practice of geology and geophysics ^(6,7).

Additionally, Florida should consider offering a Certified Engineering Geologist endorsement similar to that of California and other states. This endorsement would provide a higher level of credibility for Florida P.G.s working in the field of Engineering Geology and a higher degree of comfort and credibility to the companies who employ P.G.s who are engaged in atypical geologic plans, designs, practices, and activities.

REFERENCES:

List of "Traditional Tasks Performed by Florida Professional Geologists," as compiled by the Florida Board of Professional Geologists. April 2004.

- (1) ASBOG Model Rules and Regulations (particularly public practice of geology beginning on Page 60, Section 15-8). 2011.
 - 15-8.b. "The geologist shall sign, seal and date the original title sheet of bound geologic reports, specifications, details, calculations, estimates or drawings/diagrams/maps, and each original sheet of plans or drawings....."
 - Reference Appendix 1, Definition of Public Practice of Geology
- (2) FL Water Resources Act Chapter 373, F.S. Modified in 2005 so that it now includes professional geologists as an identified profession to supply services and interpretations to the Department of Environmental Protection and the Water Management Districts. As a result of this, many FDEP permits (reference FDEP Form 62-343.900(1)) now require certification by an "appropriate licensed professional" rather than always specifying "Certified by Professional Engineer."
- (3) FDEP Form 62-343.900(1). Joint Application for Environmental Resource Permit / Authorization to

- Use Sovereign Submerged Lands / Federal Dredge and Fill permit
- (4) Florida Statutes Chapter 492 Professional Geology
- (5) Memorandum: FDEP Division of Waste Management Policy on Professional Certification of Technical Documents
- (6) Regulations Relating to the Practices of Geology and Geophysics. California Code of Regulations Title 16, Division 29 §§ 3000-3067
- (7) California GEOLOGIST AND GEOPHYSICIST ACT. (Business and Professions Code §§ 7800 7887)

STUDENT CHAPTERS

This year the FAPG intends to revitalize our scholarship program and continue to provide helpful resources to new geologists entering into and maneuvering through the geosciences workforce. Through these efforts we hope to re-engage with our student chapters and provide graduating geologists with resources to guide them into their first jobs and into exciting careers in geosciences.

We encourage students and professors interested in organizing student chapters of the AIPG/FAPG to contact William.aley4@gmail.com.

COMING EVENTS

Polk County Geologists to Meet - An informal meeting of geologists is planned for February in Lakeland. Tentative plans are for a Thursday night meet-up at Swan Brewery located on Lake Wire. No program is anticipated. Just great local brews, food truck fare and a chance to catch up with colleagues and meet other local geologists. An email will follow with details on this event.

<u>Winter Water Seminar</u> – February 18-19 – Orlando, Florida. https://www.fleng.org

University of Florida Water Institute Symposium – February 25-26 – Gainesville, Florida https://conference.ifas.ufl.edu/waterinstitute/

Geological Society of America (GSA) Southeastern and Northeastern Annual Meeting - March 20-22 - Reston, Virginia.https://www.geosociety.org/GSA/Events/Section Meetings/GSA/Sections/Home.aspx

2020 American Institute of Professional Geologists (AIPG) National Conference - October 3-6 – Sacramento, California.

https://aipg.org/general/custom.asp?page=2020CANationalConference

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Business card (\$200/year) Quarter page (\$500/year) Full Page (\$1000/year)

Contact William Aley for more information. William.aley4@gmail.com

ADDITIONAL GFOLOGIC RESOURCES

American Geosciences Institute (AGI) https://www.americangeosciences.org/

American Geophysical Union (AGU) https://www.aegweb.org/

American Institute of Professional Geologists (AIPG) aipg.org

Association of Environmental and Engineering Geologists (AEG)

https://www.aegweb.org/

Florida Geologic Survey (FGS) https://floridadep.gov/fgs

Florida Museum of Natural History https://www.floridamuseum.ufl.edu/

Florida Society of Mining Engineers (FLSME) http://flsme.org/

National Association of State Boards of Geology (ASBOG) https://www.asbog.org/

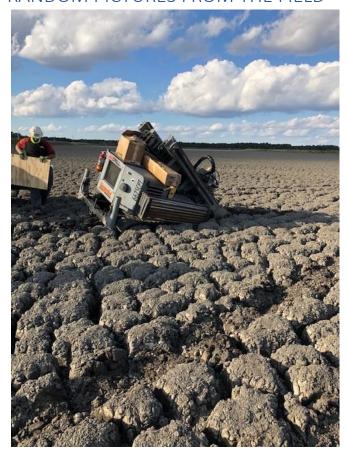
Southeastern Geologic Society (SEGS) segs.org

IN OUR NEXT ISSUE

The FAPG is working to revitalize our newsletter to continue providing entertaining, educational, and helpful content to geologists and geology lovers in the state of Florida. In 2020 we will have recurring columns highlighting geology students, professors, and industry professionals around the state. We will continue to engage the social media community for content and pictures of geologic finds and sites around the state. We also intend to revitalize our scholarship program and continue to provide helpful resources to geologists entering into and maneuvering through the geosciences workforce. Through these efforts we hope to re-engage with our student chapters and provide graduating geologists with resources to guide them into their first jobs and into exciting careers in geosciences.

If you have suggestions for future content, would like to nominate a student, professor, or industry professional for a spotlight article please contact the editor, William Aley at William.aley4@gmail.com.

RANDOM PICTURES FROM THE FIELD



Geoprobe drill rig stuck in the mud



Sand offloading operation at Dredged Material Management Area (DMMA) in North Florida