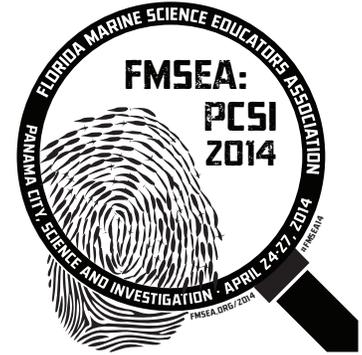


**FLORIDA MARINE SCIENCE EDUCATORS
2014 ANNUAL CONFERENCE**
**PCSI: PANAMA CITY BEACH,
SCIENCE AND INVESTIGATION**
APRIL 24-27, 2014
PANAMA CITY BEACH, FL



FMSEA 2014 Field Trips

A. Gulf World

Half Day – 1:30 to 4:30 PM

\$15 per person (Limit 15 people)

Come explore Gulf World Marine Park's behind the scenes areas and view our many habitats and daily shows. Spend the afternoon with us discovering and learning about our marine mammals, sea turtles, tropical fishes, and much more! Fun, educational, and interactive material on these marine animals will also be provided for your classrooms.

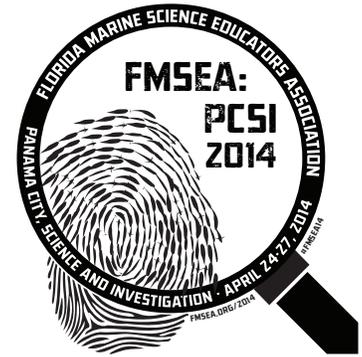
B. St. Andrews State Park & Snorkel trip

Half Day – 9 AM to 12:30 PM

\$30, Lunch included (Limit 20 people)

Reef Building corals cannot survive the colder temperatures found in the inshore areas of the northern Gulf of Mexico and natural rocky structures are rare in these same shallow coastal waters, so that natural habitat for reef species is limited. The Jetties at the entrance of coastal bays provide rocky habitat for these reef creatures, as well as being a place where estuarine and open water gulf species mix. As a result these jetties offer an excellent opportunity to observe a wide variety of marine life. Join us as we explore the jetties at St. Andrews State Park in the calm protected waters of the "kiddie pool". The nearby concession stand rents out snorkel gear if you do not have your own. The water in late April should be around 70–74 degrees so a wet suit would make snorkeling more pleasant and extend the amount of time you can spend in the water. Fish Biologist Steve Theberge (NOAA Affiliate at the National Marine Fisheries Service Southeast Fisheries Science Lab) will lead this field trip.

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C. National Marine Fisheries Service Lab

Half day –9:00 to 12:00 AM

\$15 (Limit 15 People)

Tour the NOAA Fisheries Panama City Laboratory, located in Panama City Beach, Florida. The Lab performs research relevant to the formulation of rational plans to manage the marine fishery resources of the U.S. South Atlantic, Caribbean, and Gulf of Mexico. Our current research program encompasses a spectrum of projects including basic fishery biology, ecology, routine monitoring and data collection, and habitat mapping. Fisheries of primary interest are reef fishes, mackerels, and sharks and rays. NOAA Fisheries mission is to conduct innovative research for sustainable fisheries, and collect and analyze data for the management of fishes and their habitats. NOAA Fisheries' personnel will showcase these techniques used to collect biological information from commercial and recreational fisheries to provide a comprehensive look at management and protection of a variety of species.

D. FMSEA / FWC Aquatic Species Collecting Workshop (At FSU Panama City Campus)

Half Day – 1:00 to 4:30 PM

\$20 for conference registrants, an additional \$25 will be collected at the workshop for those participants not registered for the conference

The 2-hour workshop will focus on the Aquatic Species Collecting Certificate, which allows educators to collect aquatic organisms with certain restrictions. A PowerPoint presentation will be used along with actual items, and discussion. The workshop will cover the components of this special activity license, its requirements, best management practices, field sampling techniques, transporting techniques, basic information about keeping organisms, and resources that educators can use for these activities. A field component will follow the workshop. Participant will walk to the nearby St Andrews Bay shoreline for seining and other collecting activities.

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E. Zoo World & Man in the Sea

Half Day – 9:30 to 12:00

Price: \$25

Come explore and observe many animals up close in a lush tropical setting. ZooWorld is home to animals from all over the world including exotic and endangered species. After your visit at ZooWorld, explore a collection of rare diving equipment highlighting man's success in underwater exploration capabilities at the Man in the Sea Museum. After a short orientation will be given at each site participants will have about an hour to explore each.

F. Two Tank Panama City Dive Trip: The Benefits of Artificial Reefs with Panama City Dive Charters with Dive Master Danny Grizzard

Full day 9:00 AM to 3:00 PM

Price: \$100, Lunch included (Limit 15)

Two tank dive trip to two the larger inshore artificial reefs equipment not included but can provide a price fully equipment package or individual as needed. Boat trip and personal back ground and trip leader with Capt. Danny Grizzard. Capt. Grizzard has been active in artificial reefs in the Panama City area since the seventies and has been a part of over 150 artificial reef deployments over the last four decades. Learn from personal knowledge and archive photo stories on all the local large wrecks.

G. Immersed in STEM Education: St. Andrew's Bay

9 AM – 2:30 PM (20 people)

\$30 per person, Lunch included

Field trip participants will, literally, be immersed in the flora and fauna of the St. Andrew's Bay near shore ecosystem as they discover the creatures (macro, micro, vertebrate and invertebrate) that inhabit the sea grass beds of St. Andrews Bay. The biodiversity is amazing; Participants will use a variety of marine collection devices as they move through stations designed by Glenn Faust and Linda Yori (Surfside Science Educators) to teach their students marine science. The afternoon portion includes a brief stop at Bid A Wee Beach (sandy beach environment) and ends at Surfside Middle

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School for plankton and microscope labs. Included will be a discussion of setting up and maintaining a classroom brackish water (bay) aquarium.

Participants should bring a change of clothes, closed toed shoes to wear into the water, and dress for the weather. Personal choice will determine how wet participants get (from knees to waist).

Note: No transportation provided. Participants will drive to the starting and two other locations.

H. Tour Two State of the Art Science Facilities

1:15–4:15 PM (15 people)

\$15

First visit the FSU Underwater Crime Scene Investigation program's Dive Locker. Here you will get a guided tour of the FSU Panama City Campus located right on the beautiful St. Andrews Bay. FSU Panama city is now a four year full degree seeking institution with 1,500 students supported by 15 bachelors and 19 graduate degree programs. FSU Panama City offers an Underwater Crime Scene Investigation (UCSI) certificate that may be earned independently or as part of a bachelor's or master's degree. The UCSI lab offers students courses and labs that allow the application of theory and practical experiences that equip them to be underwater forensic scientists.

After this tour, walk across the street for an interactive tour of the Gulf Coast State College Advanced Technology Center (ATC). The ATC is a 93,500 square foot facility dedicated to driving and accelerating regional economic growth by fostering partnerships across business, industry, government and education to fully leverage regional assets and connect education to business and industry. It is a LEED certified building with advanced labs that are ahead of the times, a green roof, solar and wind power and much more. This future thinking scientific facility involves innovative partnerships across key sectors of business, industry, government and education to accelerate economic development and job creation. The ATC focuses on career pathways for students and returning adults in advanced technologies. Certificates

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connect to new career fields that are highly valued by industries at the national level. Training and education programs emphasize employment upon completion, STEM talent development to promote our region to new business and industry and K-12 connections to ensure that our high school graduates link to worthwhile degrees. Workforce training through new accelerated non-credit models “IDEA-to-MARKET” creates new job growth through innovation and commercialization.