AIPG members, professionals, students, friends, and spouses

You are Invited to take part in the

Bahamas Short Course

Field Trip

March 14 to 21, 2015

"Modern Carbonate Analogs for the Geologic Record"

Please read the following pages carefully

Location: San Salvador Island, Bahamas;
The College of the Bahamas
Gerace Research Centre



Format: The course will be run as series of daily field trips with evening discussion sessions; course outline provided. Spouses and friends are not obligated to attend field trips or classes.

Dates: March 14, 2015—March 21, 2015

Allow March 13 and March 22 for travel to and from San Salvador Island, Bahamas



Leaders: Frank Ettensohn, UK
Tom Lierman, EKU

Charles Mason, MSU



Carbonate depositional environments, origins and types of carbonate sediments; porosity in carbonates; karst; unconformities in carbonates; carbonate soils and paleosols; marine ecology and geology; modern and fossil reefs; geomorphology of carbonate islands; stromatolites and other carbonate-related extremophiles.



Apply for yours early, may take 30 to 60 days



Costs: AIPG Members-\$584; Professionals-\$609; Students-\$559; accompanying spouses-\$559.

(Children's rates depend on age; contact F. Ettensohn)
Includes room and board for a week, insurance for 8 days (includes travel time), and a boat trip to special snorkeling sites. (Note to get these prices, we will need to have 16 participants).

Travel to and from San Salvador Island, Bahamas (flights in and out of the island run everyday) is at your expense; please make reservations early as to get best prices. Possible flights are suggested at the end.

Deadlines: \$150 deposit due by January 16, 2015 (100% refundable if course is cancelled)
Remaining balance due by February 13, 2015 (50% deposit refundable, if cancellation is before balance-due date, and 0% refundable after balance-due date.)





PLEASE EMAIL FRANK ETTENSOHN TO MAKE YOUR RESERVATION fettens@uky.edu

MAIL YOUR DEPOSIT CHECK AND THEN YOUR REMAINING BALANCE TO:

KY-AIPG BAHAMAS SHORT COURSE PO BOX 24690 LEXINGTON, KY 40524-4690



Must have: Passport (apply early, it may take 30 to 60 days to receive).

Recommended: Mask, fins, snorkel and a bag for your gear, bathing suit, sunscreen, insect repellant, camera, old clothes to cover up with and old tennis shoes or boat shoes

Participants will be updated by email if there are any changes.

Gerace Research Center

Center for the study of Archaeology, Biology, Geology, and Marine Science



College of the Bahamas San Salvador, Bahamas

Previous Field Trips:









Possible Flights to and from San Salvador:

Note: Arriving flights out of Ft. Lauderdale, FL, will typically require an overnight stay in Nassau, meaning an extra expense and arriving a day late (Mar. 15). If you are only able to get on such a flight, we will see that you are picked up on your arrival on San Salvador. Return flights from San Salvador (via Nassau) to Ft. Lauderdale can be done in the same day (Mar. 21).

Same-day travel (on Mar. 14) to San Salvador (via Nassau) can best be accomplished by flying out of Miami, FL. Return flights from San Salvador to Miami (via Nassau) can also be done in the same day (on Mar. 21). Possible **same-day** flight combinations out of Miami are listed below:

Same-Day Arriving Flights	Same-Day Returning Flights
AA 3589 + Bahamasair 378	Bahamasair 379 + 227
AA 3495 + Bahamasair 378	Bahamasair 379 + 227
Bahamasair 230 + 378	Bahamasair 379 + 227
Bahamasair 230 + 378	Bahamasair 379 + AA 3557
USAir 8364 + Bahamasair 378	Bahamasair 379 + 227
USAir 8364 + Bahamasair 378	Bahamasair 379 + USAir 8331
Combinations of the above	Combinations of the above





Group Information 2014-2015

Greeting from the Gerace Research Centre! To all our returning groups, thank you, for your continued support of the GRC. To new researchers and groups, we hope that you will join the long list of people who consider that GRC and San Salvador a home away from home.

Please read the following information. All necessary forms for booking a group are included in the file "GRCFORMS1415.doc".

- -Please note our internet policy has changed. All visitors of the GRC will be charged a \$10 technology fee which covers a range of services. A new computer lab will be open 24 hours a day for use by visitors. Faculty and researchers will also have access to wireless.
- -US citizens are required to have **passports** to enter the Bahamas. Make sure everyone in your group is aware of this and if necessary has applied for a passport well in advance.
- -Be sure to send all required forms in to us within the time frame listed under "Booking and Registration Procedures" in "GRCFORMS1415.doc". These forms are important to ensure that we are properly prepared for your group problems invariable arise when we do not get these forms in a timely manner.
- -Credit Cards are not accepted at the GRC. Be sure that your students have brought adequate cash and that most of it is in smaller denominations (\$5 and \$10 bills), as it can be difficult to change larger bills. Student checks are not accepted at the GRC.
- -Please make sure that students (and parents) are aware that our US mailing address should not be used for personal mail. This is not a regular service and it is likely that if something is sent to a student it will not arrive until well after they are gone.
- San Salvador continues to grow, but it is still very much an isolated island with limited facilities. Please make sure your students are aware of this phone service and internet access are not always working at the GRC. If students do not feel they can handle being out of communication with family or friends for up to a week or more, then they may want to reconsider their visit to the island. Also, medical facilities are limited as always, and emergency transport off the island remains a challenge.

Again, thank you for choosing the Gerace Research Centre for your field studies, and we look forward to seeing you this coming year on San Salvador.

Sincerely,

Dr. Thomas A. Rothfus Executive Director

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GENERAL INFORMATION

San Salvador Island

San Salvador Island is one of the outermost of a chain of some 700 islands sprinkled throughout more than 5,000 square miles of the most beautiful waters of the world. Although San Salvador is similar to the other islands of this archipelago, it is unique for its history, ecology, inland lakes, and potential for future development.

In 1492 Christopher Columbus made his first landfall in the New World at San Salvador. At that time the island was populated by the Lucayans, an Indian population which lived by fishing and agriculture. After befriending these people, the admiral explored the island, going north from Long Bay where his fleet was anchored and rowing some twenty miles in search of an entrance through the barrier reef. One such boat canal was found with seven feet of water leading to a deep harbor which Columbus reported "would hold all the ships of Christendom." It is now known as Grahams Harbor.

The harbor remains as it was except for the Gerace Research Centre (GRC), which is located on the berm of a beach composed of calcareous sands.

Much of the interior of San Salvador is made up of lakes which were utilized in days past for transportation. This unique inner island passage promoted the development of several communities on the perimeter of these interconnected lakes. After trampling in the dense bush which covers the island, one can appreciate why this method of transport was used.

Today the island's paved perimeter road traverses through several small settlements which reflect the unspoiled Bahamian natural charm. The largest community, Cockburn Town, is the center of all activities on the island, having the Commissioner's office, Post Office, telecommunication station, and electricity generators

Most descriptions of the Bahamas picture islands basked continually with a warm breeze, blue skies, and long sunny days. This is for the most part true. However, it is not uncommon during winter, when a northwestern front arrives, to have as much as a week of rainy, cool weather. These are days when it becomes too cool to swim and sweaters feel most comfortable in the evenings. The rainy season during the later summer permits the propagation of insects on San Salvador to the extent that the nuisance level becomes almost intolerable

during September and October. This, along with the potential for hurricane activity, is the predominant reason for not having field projects during those months of the year. The nuisance level of insects is reduced during the winter and spring dry season.

The waters of the Bahamas are warm, blue, and have tropical reefs which can only be described for their beauty and abundance. Different from northern waters, diving in the sea produces very little comparative air temperature shock. However, many persons require wet suit vests when diving for long periods of time, even in May and June.

The Purpose of the Gerace Research Centre

The GRC, as part of the College of the Bahamas, has a continuing agreement with the Bahamas government to undertake a wide range of environmental research projects in the natural sciences, social sciences, and humanities. San Salvador offers a natural field laboratory for such studies.

Four purposes guide our activities at the GRC:

- 1. to inquire into the meaning of environmental relationships.
- 2. to develop an understanding of another culture.
- 3. to instruct students in research methods and techniques.
- 4. to conduct initial surveys and advanced field studies of the island.

The Cross Cultural Experience

San Salvador and the GRC, with their cultural setting and geographic location, are not for everyone. Faculty and students will not live in a manner and style to which they have become accustomed at vacation resorts. San Salvador lies well off the coast of Florida, a distance which can be measured in cultural difference as well as miles. The language is English and the people are generally very receptive, but linguistic affinity and friendliness can easily be misinterpreted for cultural similarity. In fact, this island is inhabited by a largely agrarian people who are very religious, who have a value system and world view quite unlike our own. One of the



attractions of the GRC for all visitors is the cultural difference one finds on the island, but visitors have not always been sensitive to, or respectful of this difference. It is with good reason that we include "dress clothing" on the equipment list and insist that participants refrain from forms of personal behavior which might jeopardize the Research Centre. We want to continue to be deserving of the welcome that San Salvador and the Bahamas Government have extended to us, and feel that a posture of deference to another people's cultural values is the best one to adopt.

Faculty Housing

Facilities at the GRC were built over forty years ago by the United States Sea Bees. Faculty rooms are all on the ground floor and designed to house two or more people. Each room has a sink and mirror, 2 beds or more, a dresser and desk. Most of the rooms have private bathrooms. However, in some cases, two adjoining rooms share a toilet and shower. Each room has a ceiling fan, and a number of the rooms can be air-conditioned with window units for an additional fee.

The GRC furnishes bed linens and towels for each room, but does not provide daily laundry service. Each participant must launder his/her own towels and bed linens. Maids clean each room and lavatory daily.

Student Housing

Undergraduate students are housed in dormitories located in the barracks which housed the Navy personnel during their stay on the island. They consist of a number of separate rooms housing a maximum of five students each, in single beds and sharing a common bathroom. Men's and women's dorms are separate.

While these barracks were one of the finest built for military, they in no way compare with dormitories on your home campus. For a field station, however, living conditions are more than adequate for persons who are disciplined in keeping their quarters neat and who can function comfortably with minor inconveniences. Graduate students are housed in ground floor rooms that can accommodate two to five students. Each room has at least one dresser and a desk. Most of the rooms have private bathrooms. In one case two rooms (housing two students each) share one bathroom.

While the GRC furnishes workers to clean the floors and lavatories of the student dorms and rooms, each student is responsible for keeping his personal living area neat and clean. Undergraduate students are also responsible for supplying their own sheets, pillowcases, and towels.

Laboratory Facilities

The GRC has available 10 modest but adequate laboratory classrooms, most of which are air-conditioned. A limited number of compound and dissecting microscopes, as well as assorted laboratory glassware, are available for student and faculty use. There are two large air-conditioned lecture rooms with overhead and slide projectors and VCRs, a wet lab containing aquariums with circulating sea water, a library, and a specimen repository. Each faculty member submits, prior to his project, a list of those items of equipment and library references required to complete his/her research or individual course. In this way each project has equipment tailored to the specific research being undertaken.

Dining Facilities

The GRC has complete dining facilities for ninety people. The bulk of the food utilized on campus is shipped from Nassau by marine transport.

Fresh vegetables and fruits can be limited since we are dependent not only on availability of supplies from Nassau but also on the supply boat being able to sail from Nassau to deliver produce. With the aforementioned problems in logistics, our menu is sometimes limited, however, the kitchen staff will provide balanced meals and normally serves a vegetarian alternative. Other special dietary needs may be difficult to accommodate, and should be discussed with the GRC Director prior to booking.



Recreation and Entertainment

Sports equipment is provided for basketball and volleyball. Students should bring their own small games, such as cards, chess, etc. Paperback literature is available in our library for free time reading. Sodas, candy, snacks, postcards, and stamps are available for purchase at the Snack Bar located on campus. T-shirts are available for sale in the library.

Dress Code

The Bahamian dress code is more formal than the current one in the U.S. For instance, islanders feel insulted if visitors attend church in working clothes (i.e., jeans). In respect for the Bahamian sensitivity regarding dress, it is necessary to require that shoes, shirts, and bathing suit cover-ups are worn in all public and semi-public places, and also in the Research Centre cafeteria.

Insects

Like most tropical places, San Salvador has insects. The island has palmetto bugs, flies, and roaches which are not usually considered a nuisance to our participants. However, of the several hundred species of mosquitoes, San Salvador can boast of twelve. During the rainy season, the nuisance level builds to intolerable However, relief can be obtained in screened levels. especially during the twilight quarters, Throughout the year most participants should not experience mosquito bites during the heat of the day in unshaded cleared areas.

The biggest offender of the insect world on San Salvador is the "no-see-um." You may know them by the name of sand fly, punky, gnat, or nit. They can get through standard mosquito mesh and can sometimes crawl under covers to deliver a painful bite. Some people are more tormented by these insects than others. Two people sleeping next to each other may find one bothered by bites while the other experiences no discomfort at all. After the first two weeks on the island people either get used to the nuisance or develop immunity to bites. Insect sprays are useful in the control of these tropical nuisances, and anti-itch creams bring relief from bite

irritation. Occasional spraying for insects has begun around most settlements on the island, including the GRC. This has helped to keep the nuisance level of both mosquitoes and no-see-ums down as compared to previous years.

Other insects which at times can give a great deal of concern are wasps and bees. On San Salvador there are bees which can give painful stings. To date there have been no ill effects experienced even by those normally allergic to bee stings.

Bahamas Immigration and Customs

A passport is required for U.S. citizens to visit the Bahamas. Birth certificates will no longer be accepted for re-entry into the US.

Bahamian customs officials are subjecting incoming people and their luggage to rigorous search. It is illegal to bring into the Bahamas any illicit drugs, spear guns, or obscene literature (this includes "Playboy" and similar publications). Note that prescription and non-prescription medications are allowed. It can be expected that the Bahamas government will prosecute any person found to possess illegal drugs or marijuana according to Bahamian law, which is more stringent than U.S. law, regarding the possession, use, or sale of drugs and marijuana.

Things to Bring

- a. sun screen & sun hat
- b. insect repellent and anti-itch cream for bites*
- c. sun glasses, spare glasses, contact lenses (if applicable)
- d. band aids and antiseptic, other necessary sundries such as aspirin, feminine hygiene products, etc.*
- e. flash light and extra batteries*
- f. spiral note book, pencils, pens.*
- g. light washable clothing to include at least the following: rain jacket, sweater and/or sweatshirt (winter months), one set of dress clothing (if you plan to attend church), long sleeve shirt, jeans, shorts, T-shirts, etc.
- h. sturdy walking shoes and old sneakers, dive boots, or water shoes to wear in the water



- i. swim suits, plus snorkel, mask & fins
- j. cosmetic items and laundry detergent*
- k. Passport
- l. Undergraduate students should bring 2 sheets, 1 pillowcase, 1 blanket, and 2 towels.
- m. Watch and/or travel alarm clock (if you have trouble waking up in the mornings).
- n. Water bottle.
- (* Usually available on the island, but expensive)

Swimming and SCUBA Diving

SCUBA diving to a depth of 25 feet for research purposes is possible through the Gerace Research Centre. Students must be accompanied by the professor in charge when diving. Deeper diving can be arranged with the local dive shop on the island. All SCUBA divers must bring with them proof of certification (C-card) and their log book. They should also bring their own regulators, BC's, and weight belts (minus weights). Weights and tanks can be rented at the GRC.

Personal Funds

Personal funds must be brought for sodas, snacks, drinks, post cards, stamps, snorkeling or SCUBA equipment rentals, and souvenirs. Credit cards are not accepted at the GRC or most other locations on the island. The only exception to this is the Riding Rock dive resort which will take major credit cards. The Bahamian dollar is equivalent to the US dollar and they are used interchangeably on the island. Personal spending money must be in cash in small denominations. Travelers checks will be accepted. A safe is available on campus for safe keeping of funds, passports and airline tickets. Previous experience indicates that GRC visitors spend as much as \$20 to \$150 in a week on the above mentioned incidentals.

Medical Care

Persons who choose to participate in activities at the GRC must be aware that medical facilities and personnel on San Salvador are very limited and can in no way be compared with standards found in most parts of the USA. Thus, one must assume a certain amount of risk in the event of

serious or emergency medical situations. It is for this reason that the Research Centre requires individuals to procure our accident and sickness insurance policy which, in the case of an emergency, will cover the costs of a flying ambulance for evacuation to hospital facilities. Minor medical care on San Salvador is provided by a resident doctor and nurse in a modest government clinic. By Bahamian standards, San Salvador is considered to be one of the most fortunate Out Islands in having even this level of medical service for its population of around 1000. A modest fee, usually \$75 or less, is charged for medicines and treatment at the clinic. Participants should be prepared to pay such fees if they require medical treatment.

Special inoculations are not required, although a tetanus shot is strongly recommended.

Insurance Coverage

A student must purchase health insurance coverage for a fee of \$1.50 per person, per day.

Laundry

Coin operated washers are provided on the campus for personal laundry (\$1.50/load, US Quarters only). Laundry detergent can be purchased on the island, however, as with other imported products you will find it more expensive than in the USA.

Electricity

Electricity on San Salvador is provided by diesel powered generators operated by the Bahamas Electricity Corporation. As in the USA the electricity is 120 volts, 60 cycle.

Time

The time zone for San Salvador is the same as the Eastern Time Zone in the USA, including both standard and daylight savings time.



Churches

Catholic, Baptist, Anglican, and Seventh Day Adventist worship services are available on San Salvador. They welcome anyone who would like to attend their Sunday services. It is important that visitors follow custom and wear dress clothing, e.g. dress shirt and slacks for men and dress or skirt and blouse for women.

Transportation to, and on the Island

Travel has to be personally arranged through Bahamasair, the official commercial carrier that fly from Nassau to San Salvador. Bahamasair has one flight daily from Nassau to the island. It may be possible to travel from your home institution to San Salvador in one day depending upon flight schedules.

Flight schedules vary considerable depending on the time of year and you should contact the airline directly to confirm schedules and make group arrangements.

Bahamas Air: 242-377-5505

The GRC is **no** longer setting up charter flights. There are a number of charter companies working out of both South Florida and Nassau which are happy to work with you should you decide to charter one or more planes for your group.

Transportation for daily classes and church is provided by the GRC. A faculty member from the group will be responsible for driving. The cost of repair of any damage done to a vehicle **as a result of negligence and/or misuse** will be paid by the faculty who was driving at the time.

There is no regular bus or taxi service available on the island. Most visitors find it enjoyable to walk to the several night spots located within one to two miles of the campus after classes in the evening.

Telephone Service

The GRC's telephone number on San Salvador is (242)-331-2520/2521, and Fax (242)-331-2524. **These are business numbers and should be utilized for business/emergency calls only**. There are no phones

available on campus for general use. Phone calls can be made in town at the Bahamas Telecommunication Corporation (BTC). Depending upon carrier, US cell phones may work on San Salvador, though at a considerable cost.

In an emergency an individual attempting to telephone a student or faculty member should call the GRC's number between 8:00 AM and 6:00 PM, and the participant will <u>return</u> the call. Messages may also be passed on through the Bahamas Telecommunication Corporation (BTC) at 242-331-2308 (FAX).

Internet Service

As of summer 2013 our internet service has improved greatly. High Speed Internet service is available for use by students and faculty in the computer lab. All users of the GRC will be charged a \$10 technology fee to cover use of the internet. Wireless internet is available for faculty and researcher use only in most rooms (this is included with your \$10 technology fee).

Mail

Packages of any kind should <u>not</u> be sent to students or faculty. All packages are fully inspected and a rather high import duty is placed on most items, besides the fact that they will in all likelihood arrive after the participant leaves San Salvador. Mail sent through the Bahamian postal service can take up to four weeks to reach the island from the US, and vice versa.

All mail from the Bahamas must have Bahamian postage. U.S. postage stamps cannot be used. Post cards and Bahamian stamps are available for purchase at the Research Centre.

Property Damage Bond

Personal conduct on San Salvador must not jeopardize the GRC or cause undue property damage. Therefore, each student will be asked to post a \$10.00 property damage bond upon arrival on San Salvador. This fee will be refunded in full before departure from the island if no damage is incurred by the student or the students' group.



Personal Conduct

The GRC and its guests are present on San Salvador under the courtesy of the people and government of the Bahamas. As such, you will be expected to conduct yourselves in a manner that is respectful of local sensitivities, customs, and laws. Any violations of Bahamian law will be prosecuted in the Bahamas with no recourse to U.S. laws and attorneys. Any conduct that reflects negatively on the Research Centre will be grounds for immediate deportation at the expense of those involved.

Payment

Payment is requested at least two weeks in advance of your stay. Please contact us if this is a problem as we can usually work around this.

Cancellation Policy

Reservations cancelled up to 4 days in advance will receive a full refund. A fee equivalent to one night's stay will be charged on cancellations after this time.

There are no provisions made for any refunds if a student has to leave San Salvador due to medical or personal reasons.

Summary

Now that you have read the preceding description of the Gerace Research Centre and environment, it becomes your decision whether you can adapt yourself to this field situation. We recommend our facility for those who truly enjoy working and living with people from different places, who are especially sensitive to a people and culture that are different from their own, and who view scholarly field work as being especially appropriate to their personal goals. For those who have unique medical requirements, require special diets, have problems in adjusting to a completely new situation and different culture, or have difficulty in living with and meeting a variety of people, we strongly recommend that you consider this program with reservation. To those who feel they can adapt, the San Salvador experience may well be one of the highlights of your life.



SCUBA REGULATIONS AND RENTAL FEES 2014-2015

- 1-All students who wish to use SCUBA gear during their course of study on San Salvador must be certified, card carrying members of either PADI, NAUI, CMAS, BSAC, YMCA, SSI or any other internationally recognized SCUBA certification organization.
- 2-Prior to any diving on San Salvador, each diver will complete a diving application which includes certification type and number, dive history, and a signed statement showing recognition of hazards and a hold harmless agreement. At this same time we will photocopy your certification card for our files.
- **3**-Supervision of any SCUBA diving will be conducted by a faculty member who is himself a trained diver, and emphasis should be on their obtaining dive-master. **The depth limit for any dive will be 25 feet** and there will be no recreational diving unless the faculty member holds master diver status.
- 4-Persons involved in SCUBA diving should bring their own equipment with the exception of weights and tanks. The rental prices for equipment are as follows:

Full tank \$13.00 per dive Light, with batteries \$3.00 per dive

5-Use of the GRC boats is limited to Grahams Harbour, Fernandez Bay, and the inland lakes. Any SCUBA or snorkeling in other areas must be from shore.



SUGGESTED HOTELS IN NASSAU, BAHAMAS

ORANGE HILL BEACH INN

P.O. Box N 8583 West Bay Street Nassau, Bahamas PHONE: (242) 327-7157

FAX: (242) 327-5186 Email: <u>info@orangehill.com</u>