

October 10 2017

TRAVEL LOGISTICS
University of Minnesota and the Bimini Biological Field Station
Tropical Marine Biology and Shark Ecology (CFANS3502)



Lemon shark, Negaprion brevirostris by Tim Calver

Peter Sorensen
University of Minnesota
Dean Grubbs and Samuel H. Gruber

1. Rendezvous and Travel

The class departs from the Minneapolis International Airport (MSP). It is your responsibility to get your own ticket and be at the departure gate at least one hour before the class leaves (i.e. check in and go through security). I strongly suggest getting the air ticket recommended by the University (it is the best price and the only combination that works well) and arrive at the MSP airport 2 hours in advance of departure. Remember to bring money for meals while traveling and luggage check. Keep your passport on your person. If you miss a flight, I cannot guarantee that you will be able to catch up with the class and there can be no refunds. You are also responsible for getting to and from the airport yourself.

2. Daily Schedule at Bimini Biological Field Station (BBFS)

Everyone will rise at 7:30 AM for breakfast to be served by staff. Lectures are typically held from 8-10 AM although schedules will change with weather conditions. After the morning lecture, the class then travel by foot, boat or truck to the particular habitat discussed that morning in lecture. In the field, students will be guided by the staff and are responsible for collecting and observing common species as well as joining field lectures. Students return to BBFS for lunch around noon. A second lecture is typically given from 1-3 PM after which the class will travel to a new habitat and repeat the morning's field activities. The group returns to BBFS for a hot meal at 6 PM. ***All students are expected to participate in cleaning the dining room and dishes.*** Class will usually resume at 8:00 PM followed by a period with time for identification of specimens collected that day. There may be occasional lectures at this time as required. The formal laboratory period ends around 10 PM. Students are then free to study ***quietly*** and independently or in groups.

3. Study Area

Class is held at the BBFS on the island of South Bimini, Bahamas. The Biminis are located about 85 km east of Miami and are about 12 km long. Approximately 1,200 people live on North Bimini. South Bimini, is relatively isolated and with seasonal vacation homes and has about 200 residents. There are no stores! Bimini is a typical, relatively undeveloped West Indian island with all the associated charms (e.g., foods, clothing, architecture). Sunburn and insect bites are the main physical hazards.

4. Weather

Bimini is tropical and you can expect daytime temperatures to be in 90's and humid with evenings in the 80's with frequent showers. August is also the start of the hurricane season and these storms can be unpredictable and devastating in the Caribbean - you/ we must be prepared for this possibility. However, BBFS has considerable experience with these situations. Should a severe hurricane be predicted for Bimini, we would evacuate the class to a location on the mainland where the storm is not predicted to strike and where we would endeavor to continue the course or return. Unfortunately, in the case of a hurricane, a refund will not be possible because funds will have already been spent to run the course. (This is hypothetical and there is no point in worrying.) Be assured that BBFS and U of MN are ready for all weather events (hurricanes) and have held classes successfully during hurricanes in the past. Tell your parents/significant others that if a hurricane were to appear, communication will be difficult but BBFS is in marine radio contact with the mainland through Dr. Gruber's Miami Office in the event of an emergency. No news should always be interpreted as good news. Be aware that the ability to predict storms is poor so we will not make plans a long way in advance.

5. Accommodations

We will be staying at the BBFS which is a converted wooden frame duplex. It has five bedrooms (four persons per room in bunk beds), two bathrooms with showers, a small kitchen, a dining hall, a lecture hall, and a deck. BBFS has modest central air-conditioning, indoor plumbing, and reliable power. It is comfortable and safe, but not luxurious. It has a computer with sporadic and some wireless internet access. The station has several pet dogs so students who are allergic to dogs should bring medication. Freshwater is limited and you may have to take showers in brackish water. Two cisterns filled by wells supply brackish wash water and store captured rainwater. A desalinator supplies drinking water so fresh water must be used judiciously.

6. Food

While you will need to buy meals when flying because once on Bimini, the staff will prepare all meals. Food is of good quality and vegetarian meals (ovo-lacto) can be accommodated but advance notice is needed. The menu is a pleasant mixture of typical American meals (e.g., spaghetti, chicken) and Bahamian treats (e.g., conch chowder, souse chicken). The staff will strive to provide healthy, nutritious and adequate amounts of food, which will be needed considering the physical exertions of the students during field trips! All students will participate in dining room clean up on a rotating basis.

7. Physical Conditioning

Physical and psychological demands of the course are similar to those experienced when one spends a very active day at the beach, seven days in a row. Sunburn, insects, and salt water and *hot/cold* are the greatest physical challenges. Students should be able to swim/ snorkel and beach-walk several hours twice each day in the ocean where modest waves and currents can be expected. (Note that swimming in the ocean is more arduous than in lakes). No special exercise or preparedness is necessary but it will help to be in good condition.

8. Medical Advice

There are no particular health precautions or necessary immunizations. However, medical facilities on the island are very limited and all field work including that with sharks has some inherent danger. In an extreme emergency, people can be airlifted to Miami for treatment. Due to the isolated nature of the study site, students with chronic health problems, such as heart conditions, allergies or sun intolerance, anxiety disorders must consult with their physicians before registering. The station has several pets so if you are allergic to dogs you should bring your own medication. You will be required to sign a waiver of liability by BBFS. The university provides health insurance but it is concerned with severe problems.

9. Communications

There is no telephone at BBFS but Internet access (including Skype) is available although limited and slow. Cell phones often do not work in Bimini and if they do, they usually are very expensive because of international charges. There is no post office on South Bimini. Communications are limited and it is best to plan on not having them with the mainland. However, the instructor always has access to a phone and marine radio so can get messages out if there is an emergency. It is best to tell your friends and relatives not to expect to hear from you while you are in the Bahamas and that no news is very good news.

10. Supplies and clothing

Self-sufficiency and preparedness is important as there are no stores in Bimini. **You are restricted to 40 lb. of luggage. A small duffel or gym bag that can be carried on board the airplane is strongly recommended to save on luggage fees.** Bring the following:

Required:

- **Valid passport** (keep on your person) or if you are not from the USA you must have original copies of all Visas and passports. I suggest leaving a copy of your passport at home.
- **Personal medication** (Tylenol, allergy medicine for pets and dust if needed)
- Notebook and writing utensils (pencils) for general class notes and class journal (1 notebook can be used for both purposes, it will be returned)
- Notecards for species identification
- Good quality dive mask, fins and snorkel (visit a dive shop for advise, expect to spend about \$100)
(consider the type of fins that requires booties to reduce the chance of blisters and avoid fins with complex straps that could fall off and get lost)
- 2 Bathing suits
- 1 Bath towel (1 is provided by BBFS for the beach)
- Water bottle
- Sneakers or tennis shoes for wet and muddy or rocky beach walks
- Light jacket for occasional cool, damp evenings
- Light-weight rain gear (field trips are **never** canceled; a poncho is OK)
- Sunscreen (waterproof, 30; pump spray-on is good for back)
- Insect repellent
- Small bottle of baby oil for bugs
- Personal toiletries
- Cash (see costs below)
- Clothing (the basics for 7 days; maybe 8 pairs of underwear and t-shirts, a few pairs of socks, 2 pairs of shorts and a pair of pants?)
- Memory stick for photographs and optional powerpoint
- Cap (for the sun)
- Sunglasses (preferably polarized)
- Lightweight rash shirt to protect you from jellyfish
- Booties or socks for swim-fins
- Sandals

Recommended:

- Identification guides/texts for class (some copies available at BBFS)
- Camera (preferably waterproof – a disposable camera is fine, GoPro?)
- Motion sickness pills or ginger (if you are at all prone to seasickness)
- Band-aids in case you get blisters

- Laptop (BBFS has a communal computer but it still may be useful as there is wireless: the risk is yours)
- collecting net
- weight belt (for expert snorklers)
- Optional Texts: E.H. Kaplan. 1982. A Field Guide to Coral Reefs Caribbean and Florida, A Peterson field guide. Houghton and Mifflin Company, Boston (about \$20); E.H. Kaplan. 1988. A Field Guide to Southeastern and Caribbean Seashores, A Peterson field Guide Houghton and Mifflin Company, Boston (about \$20)

Not needed:

- Bed linens (provided by BBFS)
- Towels (provided by BBFS)
- Weight belt (provided by BBFS)
- SCUBA gear (no opportunity or need for this)
- Books (BBFS has a good supply of fiction and identification guides)
- Dress clothing other than for traveling (there are few places to go on Bimini)
- Cell phones (likely will not work and if they do, they will be very expensive)

11. Costs

Your University fee covers all transportation and accommodation. However, it does not include various miscellaneous fees such as possible luggage check-in fees in the USA (\$25), a final class dinner in Bimini (\$25?), airport incidentals (\$25?), a Sharklab souvenir (t-shirts are available for \$25), a Bimini souvenir (\$25), and lunch on the way home (\$25). You should therefore bring about \$200 US in cash for these expenses. Sharklab does not have a cash machine nearby and US dollars are accepted in town on par. Please bring a credit or debit card for emergencies (you would have to pay a deposit to the doctor and the Instructor cannot pay).

12. Code of behavior

All students are expected to represent themselves, the University of Minnesota, BBFS, and the United States in a responsible manner at all times. You need to be respectful of the laws in the Bahamas and the guidelines of the BBFS where you will be a guest. Drs. Sorensen and Gruber have the authority to expel students without refund from the class in extreme situations. The Sharklab does not permit alcohol.

13. Questions

If you have questions regarding logistics this summer, please email or call Peter Sorensen (612-624-4997 (O)); soren003@umn.edu.

Emergencies

In Bimini:

This international field class works in dangerous waters with sharks, jellyfish, tides and hurricanes. It is also relatively remote and communication links are poor. Although student well-being is the first priority of BBFS and university staff, there are situations they cannot control. In the event of a medical or personal emergency, the university would work with BBFS to evacuate you to Florida and inform your parents and significant others (if you give us permission) via the Learning Abroad Center and/or CFANS Student Services office (see below). These costs would be covered by University insurance. Note that instructors cannot provide any details of student condition if there is an emergency without explicit

permission from the student. Nevertheless, you should feel free to discuss any personal or health concerns with Dr. Sorensen before or during the class.

From Home:

We will let CFANS know that the group has arrived safely and will report any emergency situations if the arise. If there is an emergency on-site, we will contact the University International Emergency Contact number (612-301-2255). It is important to be aware that communication from BBFS is challenging. You should let people who communicate with a frequent basis (family, friends,) not to expect to hear from you as often. Consider technology applications that can aid in communication and develop a communication plan with your contacts prior to departure. It is also a good idea to have a folder of important documents including copies of your passport, itinerary, etc. We will let CFANS know that the group has arrived safely and will report any emergency situations if the arise. Please let your family and/or friends know that limited information can be shared because of privacy laws.

You can also find detailed information on student emergency information on-line: <http://umabroad.umn.edu/students/healthsafety/emergency>

Emergency Contacts:

Before, while traveling- Peter Sorensen (instructor): soren003@umn.edu; 612-624-4997 (O); 651-324-5641 (cell)

Bimini: a local number for Sharklab is: 242-347-4538. The Sharklab manager (on site at all times is) is Rachael Cashman (rachael.cashman@gmail.com)

UofMN (home base while gone): Learning Abroad Center: 612-626-9000 .

IMPORTANT NOTE: If for any reason you have to return home early (illness, family emergency, storms, etc.), you will personally have to cover the costs of your trip home. The costs of the course cannot be refunded. If you are concerned about this possibility you should consider private travel insurance.

CFANS 3502: Tentative Schedule 2017:

August 4:	<i>Afternoon:</i>	Flight to Bimini / Orientation to BBFS
	<i>Evening:</i>	Introduction to and History of Bimini (PWS)
August 5:	<i>Morning:</i>	Bahamian Culture (Saunders, Alicetown) Lecture: Introduction to Fishes (PWS)
	<i>Afternoon:</i>	Lecture: Introduction to Taxonomy – Plants, Animals through Chordates (RDG) Lecture: Marine Plant Communities I; Seagrass (RDG) Field Trip: Seagrass (snorkeling – Plane wreck)
	<i>Evening:</i>	Lecture: Introduction to Taxonomy – Plants, Animals through Chordates (RDG)
August 6:	<i>Morning:</i>	Lectures: History and Geology of Bimini Coral Reef History & Distribution (RDG) Field Trip: <i>Millepora</i> Community (Snorkeling – Turtle Rocks)
	<i>Afternoon:</i>	Lecture: Introduction to Taxonomy – Plants, Animals through Chordates (RDG) Lecture: Tides, Rocky Intertidal Ecology (RDG) Field Trip: Rocky Intertidal Community (walking) Field Trip: Beach Seining
	<i>Evening:</i>	Lab: Seagrass, Rocky Intertidal, Fishes

