



BELIZE Field Trip

Belize, Central America – Management, Conservation, Biological Resources, and the Beautiful Belize Barrier Reef

Dates: 30 June to 5 July 2008

Trip Leaders: Dr. Melanie McField and Ellen McRae



Aerial photo: Hol Chan Marine Reserve

Field Trip Overview:

This is a seven day trip on a live aboard vessel where participants will visit seven Marine Protected Areas. Dives will focus on management, conservation, and biological resources of the beautiful Belize Barrier Reef.

Date: 30 June to 5 July 2008

Cost: \$900 US per person, double occupancy. Price includes all flights and boat transfers (to-from International airport) within Belize, all food and lodging, all diving/snorkeling (does not include travel to and from Belize City or dive gear).

Trip Leaders: Dr. Melanie McField from the Smithsonian Institute and Ellen McRae from the Siwa Ban Foundation/Forest & Marine Reserve Association and Caye Caulker.

Itinerary:

30 June (Day 1):

Fly in to Belize City and connect to a flight to the busy tourist community of San Pedro, Ambergris Caye, you will be transported to your hotel. Enjoy the ambience of a thriving community along the Caribbean Sea. Check out all gear in preparation for the water work ahead. After dinner we will go over trip plans, group interests and expectations with team leaders.

1 July (Day 2):

An early departure for Belize's northernmost marine reserve and World Heritage site—**Bacalar Chico Marine Reserve and National Park**. Divers and snorkelers will enjoy a full day of marine activities. You will get to see most of Ambergris Caye along the approximately 20 mile journey. The nearly continuous barrier reef transitions into a fringing reef that actually meets the land at one of Belize's few rocky shorelines (Rocky Point) We will dive on an interesting double reef formation (illustrative of back stepping). Enjoy a beach BBQ lunch and meet the reserve staff for discussion about management issues at this MPA. On the way home, snorkel or dive at Mexico Rocks patch reef, one of only a few well developed patch reefs in Northern Belize, characterized by large (~2m) *Montastrea faveolata* colonies (many of which suffered partial or full mortality in the last decade due to bleaching and disease). Out on the fore-reef we can see well developed spur and groove formations.

2 July (Day 3):

During an early breakfast we will learn about the history of the **Hol Chan Marine Reserve**—Belize's first marine reserve (established in 1987). We will discuss the habitats, past research, and unique features of the reserve. Then it's off for the four mile trip to the reserve where we will visit all of the linked habitats (mangrove, seagrass and coral reefs).

Famous Hol Chan channel boasts one of highest abundances of commercially important reef fish (snappers and groupers) in the world. Our visit will also include the somewhat controversial new extension to the reserve 'Shark & Ray Alley' where guides feed sharks and rays. Management issues will be discussed with park rangers and tour guides on site. This is Belize's oldest actively managed

MPA, which is well reflected in its rich and diverse reef fish populations. This will be your best site for fish photography

We will have lunch on Caye Caulker (8 miles from Hol Chan) where you will experience a diverse mix of culture on this smaller, less-developed island. Lunch will include discussions with representatives of the village council and other local organizations to discuss issues of coastal development and conflicts between local and national planning efforts – the role of science and politics. Caye Caulker hosts one of the largest stands of caye littoral forest in the country, along with fringing and basin mangroves. This rare habitat is home to a unique assemblage of island birds, including the threatened Black Catbird (*Melanoptila glabirostris*).

In the afternoon we'll visit the high-relief, spur-and- groove formations in Caye Caulker Marine Reserve at 'The Pyramid'. Snorkellers may board a local skiff for sites along the Barrier and Patch reefs in the southern portion of the Reserve, including two large channels. Caye Caulker Marine Reserve was created in 1998 following considerable grass-roots community effort. It is moderate in size, including 11 km of barrier reef, associated patch reefs, and seagrass beds; however it contains many attractions. Lunch will be served, Caye Caulker, the Rainbow Restaurant with a presentation by the reserve staff.

Time permitting, the group may opt to snorkel magnificent healthy Acroporid formations and perhaps seasonally resident West-Indian Manatee along the reef crest near North Caye Caulker Channel in Caye Caulker Marine Reserve.



Abundant fish in the Hol Chan Marine Reserve 'no-take for 20 yrs' photo: WWF/Cannon Anthony Rath

3 July (Day 4):

We will have an early departure for a day of diving and sightseeing on Lighthouse Reef Atoll, the easternmost reef in Belize and home to our famous “**Blue Hole Natural Monument**” and our first MPA (**Half Moon Caye Natural Monument** established in 1982). The Blue hole is a deep dive (140’) where we explore stalactites and stalagmites in its eerie depths. Then we’ll dive the lovely and colorful Half Moon Caye wall – one of our highest coral cover sites with tall *Montastrea* based spurs along the atoll rim, flanked by crystal depths on one side a white sandy slope with garden ells on the other. We’ll have lunch on the Caye with the reserve



managers, Belize Audubon Society, our oldest NGO and with the most park management experience. We’ll also get to see the booby birds that started marine conservation efforts in Belize (*Sula sula*). For those not flying the next morning a third dive is possible at a non-protected but very popular dive site called the aquarium near Long Caye. Snorkellers can also enjoy this site’s 25-30 foot rim/flat, while the divers can explore down the vertical wall. At the end of this exciting day our dive boat will drop up off on Turneffe Atoll, at the Oceanic Society’s research station on Black bird Caye – where we will base for the remainder of our stay (so all belongings will be stowed on the dive boat during this day trip – please pack lightly).

4 July (Day 5):

After breakfast, we will begin our exploration of Turneffe Atoll, Belize’s largest offshore atoll, The natural resources around Turneffe are impressive: Verdant mangroves (about a quarter of Belize’s offshore mangroves are found here). Lush seagrass beds throughout the central lagoon create some of the most productive lobster grounds in Belize; expansive sand and rubble flats provide habitat for prized sports fishing species, such as bonefish and permit; and a rich variety of coral reef habitats, including several fish spawning sites and deep conch mating banks, exist here. We will do two dives this day, including ‘the Elbow’ (**Caye Bokel Marine Reserve**) which is perhaps the most popular dive site on Turneffe. It features aggregations of permit, snapper and other species. It generally has a high diversity and abundance of fishes, corals, and sponges. We will survey fish diversity and compare the abundance and size of fish at this location with other reefs. This is one of two new spawning sites.

Marine reserves on Turneffe are just coming under active management (in late 2006) with the collaboration of the University of Belize and Fisheries departments. The other dive site will depend on weather and may be off Calabash Caye or on the western shelf edge, which is dominated by large sponges and *Diploria* spp. We will visit the saltwater crocodile nesting beach and bonefish flats in the afternoon and do some snorkeling on the North Eastern side of the atoll. We will invite managers from the University of Belize research center to have dinner and discuss park management challenges and opportunities on Turneffe – and the idea of turning these parks into a living laboratory for the University’s Natural Resource Management degree program.



Aerial view of Calabash Caye. Photo: M. McField

5 July (Day 6):

Participants may choose to do one last early morning snorkel in front of Calabash Caye on a vibrant shallow fore reef replete with *Agaricia tenuifolia* buttresses. We will depart for Belize City about 11:00 am (1 hour boat ride) and go directly to the International airport for the Miami American Airlines flight at 2:40 pm. Participants making other flight arrangements (via Houston, etc can fly out on the 6th).

Other Important Information:

Number of Participants: 8-11 people

Requirements:

Passports are required

Diving will be completed on 4 July by 1pm, so you can fly out the next day (2:40pm to Miami)

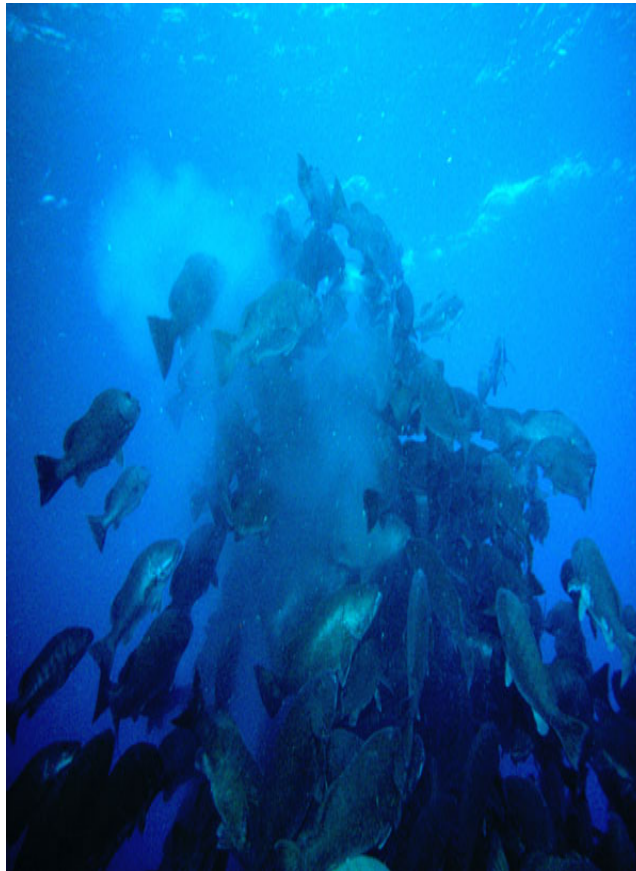
Dive certification proof is required for divers

Airlines serve Belize City from Miami (American Airlines, Continental Airlines, TACA), Dallas (American), Houston (Continental), San Francisco and Los Angeles (TACA), Charlotte (US Air) and Atlanta (Delta). Only AA flies direct to Miami so we have planned the schedule around this flight. Anyone needing to fly to another destination (on another airline) should plan to fly out on July 6 (we will be at the airport by 12:30 on July 5).

Equipment/materials needed: Mask, fins, snorkel; dive gear (optional rental available)

Pack lightly - this itinerary is full steam ahead

Recommended: Lightweight long pants and shirt; sunscreen; raingear, mosquito repellent.



Cubera snapper spawning at Caye Bokel. Photo: M. Paz

For further information and questions, contact:

Melanie McField: mcfield@healthyreefs.org

Ellen McRae: siwaban@yahoo.com