



## Diving Lighthouse Reef

Of the three atoll reefs off the coast of Belize, Lighthouse Reef is the farthest offshore. It is far from neglected, however, since dive boats from San Pedro visit the atoll regularly and the larger live-aboard vessels are always found in the vicinity.

Within the confines of the reef, the depth is generally about 9 feet (2.7 m) with sufficient room between the numerous patch reefs to maneuver any craft with shallow enough draft. The seabed is sandy and this, at least, allows the skipper to see the darker-colored patches of coral. As long as the sun is over the shoulder, the patch reefs are clearly seen. However, as soon as you turn and face the sun, the glare from the surface obscures the coral and extreme caution is advised.

There are also six cayes. In the north, Sandbore Caye is one of the two cayes equipped with lighthouses occupied by a keeper and his family. Nearby is Northern Caye and these two cayes are known locally as Northern Two Cayes. On Northern Caye is one of the newest offshore diving resorts. Much of the caye has well-matured mangroves and there is an internal lagoon. The caye is noted for its saltwater crocodiles and snowy egrets.

Halfway down the west coast, there is a small caye called White Pelican Caye. The white pelican is not regarded as a species indigenous to Belize, so their being here is unusual. I first saw a large flock of these splendid birds in 1988, and have heard that they frequently stop at this point when in transit. Further south, there is Long Caye, which is a veritable jungle and home for far too many mosquitoes for reasonable comfort. However, some of the best diving is found to the west of Long Caye. The nutrients are pushed westward by the prevailing winds and there are no lagoons of fresh or brackish water to destroy the reef. Just below Long Caye is Hat Caye which is very small and inaccessible by boat.

The Great Blue Hole is a circular hole in the middle of Lighthouse Reef Atoll. About 1000 feet across and just a little over 400 feet deep. In it, the diver will find coral only at the very top, on the rim of the hole. The lack of sunlight prevents coral growth on the inclining walls of the hole. Lack of coral leads to few fish as well. At about 130 feet of depth, one can see huge stalagmites hanging off the overhang. Some of them more than 20 feet in length. Also at this depth several reef sharks and an occasional bull shark greet the divers. At certain days more than 20 of them chill out in the cool depth of the Blue Hole. These sharks have just recently named the hole their home and make for a very exciting dive.

The dive exceeds the depth limit of an Open Water Certified Diver by a few feet. On each dive there, the guides very carefully survey the dive party as to whether they want to see sharks or not. Never heard a group vote turn down a chance to see some sharks, which are singularly absent at any other dive site, except for harmless nurse sharks.

After the whole group is safely placed behind the big stalactites or stalgmities or whatever those hanging thingys are called... which begin at 125 feet or so at the top of the opening into the caves, forcing one to go down 25 or so feet lower where there is room for a diver with a tank on their back to squeeze into, down into the opening to the caves. The dive master or his helper swim out about 15 feet away from the wall and dump a load of chum bait into the water. And then they too swim over to the somewhat dubious safety of the wall.

The sharks, especially if you're in an early group (which means they haven't all gorged yet) arrive en masse and have a feeding party. I've seen 15 foot Bulls, really huge Tigers, lots of Black tip reef and even a couple Hammers in schools exceeding 15 sharks at these events. I've even witnessed a diver accompanied by a guide swim INTO this party for a photo opportunity by their dive buddy with a really big double strobe flash attachment. And saw them swim out again... all parts intact!!!

For further information on the Great Blue Hole, [click here](#). For photographs of the area, [click here](#).

The one remaining caye is possibly my favorite place on earth. Half Moon Caye sits at the lower southeast corner of the reef and is nothing short of paradise. This small, idyllic tropical island and the immediate surrounding waters are a National Park and home to a protected bird sanctuary. The caye is divided into two distinct halves: the western half is the bird sanctuary and is densely overgrown. The remainder of the island is made up of coconut palms and sparse vegetation, with a few small buildings and a solar-powered lighthouse. [Click here](#) for photographs of Half Moon Caye.

The lighthouse keeper on Half Moon Caye has seen many divers come and go. He keeps a visitors book which most of them sign. In addition to making his living from fishing and his duties as lighthouse keeper, he is the park warden and keeps a close eye on all visitors. He has even built a platform amongst the trees, which enables visitors to view the birds from a position which looks down onto the treetops.

The nesting birds are mainly frigate and redfooted booby birds, but a total of 98 species have been recorded here: pelican, osprey, egret, gulls, storks and terns, to name but a few. Every day the frigate and booby birds put on a remarkable social display. At first light they can be seen soaring high above the island as one large flock. With hardly any noticeable wing movement, they ride the early morning air currents. Later, during the intense heat of the day, they can be easily photographed at their nests from the viewing platform. There is no obvious segregation in the nesting arrangements. Each bird, irrespective of species, has its own site. These are all very close to each other, often no more than pecking distance apart.

The magnificent frigate bird, to quote the full name, is much larger than the booby bird. It has a seven-foot wingspan and a much longer beak. Every day it uses this advantage of size to rob the booby bird of its food. By mid- afternoon, when the heat from the sun is diminishing, the booby birds go fishing. Like many species of seabird found around the world, it dives onto its prey from a great height over the sea.

By contrast, the frigate bird never lands on water, although it is very adept at plucking a dead fish from the surface. The afternoon ritual between these two species is one whereby the booby bird runs a gauntlet of harassing frigate birds which attempt, quite viciously, to make the booby bird drop its catch. And so the truce which had prevailed since last evening is broken. One cannot help but will the booby bird on to victory, and feel like cheering each time one of them returns successfully to the nest to live in peaceful coexistence with its aggressor until the following afternoon.

Admiralty Chart 959 also shows a Saddle Caye just to the north of Half Moon Caye, but this does not appear to exist anymore.

On the eastern side of Lighthouse Reef are six wrecks and these are clearly marked on the chart. From a distance, three of these look quite intact as they sit high and dry up on top of the reef. The largest of these vessels is about 1,000 yards (909 m) north of Half Moon Caye and dominates the scenery. The Ermlund was a total write-off in 1971. This ship of approximately 4,000 gross tons lost power during a storm and was deposited on the reef by a large wave.

Five miles (8 km) north is another vessel, which is a key landmark in locating the Great Blue Hole. Originally sitting intact on top of the reef, it was used by the RAF for target practice some years ago (a

practice no longer allowed). The ship was literally split in two and moved some distance down the reef crest, initially causing great difficulty for navigators trying to find the entrance to the Great Blue Hole.

The ship has been given a number of uninspiring names over the years, such as Broken in Two Wreck or Two Halves Wreck. Recently, however, the wreck has succumbed further to the ravages of the relentless Caribbean swells and is now in at least three main sections. The best name that I have heard is Harrier, after the type of aircraft used by the RAF to target the vessel, and hereafter in this book it is called Harrier Wreck.

At the very north of the reef is one of the few substantial entrances through the reef crest. One ship, misjudging the entrance, foundered here during a storm. This Northern Wreck is well broken up with almost all the wreckage below the surface. Diveable, it is ideal for rounding off the day with the air remaining from the last dive. The entire wreckage is teeming with grunts. In the shallows, divers have to be careful not to be thrown about by the prevailing Caribbean swells.

South of Half Moon Caye are the other two wrecks which, from a distance, look intact. Although different in design they are similar in size. Relatively small, I would describe them as inshore cargo vessels.

Southern Wreck is located at the southern tip of the atoll and is very similar to Northern Wreck. The large engine block is still above the surface, but the remainder of the wreckage is scattered far and wide, and has nothing to offer divers.

The entire circumference of Lighthouse Reef comprises coral which breaks the surface, forming a natural barrier against the sea. The prevailing winds and waves are from the northeast and, therefore, the calmer water is found along the western coast. Very few people dive the eastern coast of Lighthouse Reef, yet it is quite splendid and often spectacular.

On the east, Saddle Reef stretches from Half Moon Caye to Harrier Wreck. Long Reef then continues as far as Northern Wreck. This entire reef crest is dominated by staghorn, elkhorn and giant brain coral with many other varieties also present. This is one of the most extensive stretches of healthy and abundant coral in Belize. Sloping down rapidly at first from the surface, the reef continues down to about 40 feet (12 m) at a less severe rate. Here there is an underwater ledge, up to a half mile (.8 km) wide in places. It is to this ledge that the fishermen come from Belize City. In their small teresita sailing craft with holds full of ice, they catch grouper and jewfish of tremendous proportions on hand-held

lines. The ledge slopes very gradually until the top of the dropoff is reached between 120 and 140 feet (36 and 42 m). The vertical drop continues down to depths of over 2,600 feet (788 m).

This is one of the most unexplored stretches of coastline in Belize, as the conditions are usually unfavorable for diving.

Northern Cut is one of only two substantial breaks in the reef. The underwater ledge is still very wide in this area and Nassau Point is another area where grouper like to spawn. Large Nassau grouper and rock hind are found all year round in the deeper waters, with countless snapper in the shallows.

Moving south along the western coast is Sandbore Reef. Here the continuous ledge begins to break up, and spur and groove formations begin to appear. The coral structures are, however, very impressive and rise up some 40 to 50 feet (12-15 m) above the sand chutes. There are many tunnels, small caves and swim-throughs which add to the overall dramatic effect.

Throughout the length of Pelican Reef to the south of Sandbore Reef, divers are confronted by endless varieties of coral to a depth of 30 feet (9 m) before encountering the wall. Tube and barrel sponges are common, and there is a good chance of seeing nurse and bull sharks.

At Flamingo Tongue Point gorgonians and sea fans adorn the coral compositions. On many of these, flamingo tongue cowries are found, usually in pairs. This is a delightful little shellfish which is easy to photograph as it grazes slowly along the gorgonian stalks. Many divers have collected these shells only to discover that the beautiful spots disappear when the animal dies as they are not on the shell, but are part of the retractable mantle.

Underwater the spur and groove configurations continue as far as Cousteau Point. The large coral heads remain exciting and contain many creatures which divers might see for the first time.

There are few breaks through the reef crest north of Long Channel. Two that are used by the diving trade are Fairweather Cut and Finger Cut. Both are very narrow and can only be found by those with detailed knowledge of the reef.

Along Western Dip the design of the ledge begins to take on a more continuous look with the spurs becoming much wider and the sand chutes very narrow. The ledge eventually becomes unbroken just before the dive site called the Corner. From a depth of 40 feet (12 M) the reef wall is vertical, becoming more gradual at depths of 100 to 120 feet (30-36 m). Bull and nurse sharks are regular visitors, as are manta and spotted eagle rays.

Continuing south are rich and colorful coral structures at the very edge of a precipitous drop-off which are a feature of almost the entire length of Hat Reef. Each group of corals creates a unique arrangement. While each is very different, they all are worthy of attention.

South of Silver Point, the drop-off continues to enthrall. Elkhorn and staghorn corals peer over the top of the barrel and tube sponges which adorn the wall. Brain corals and mountainous star corals compete with each other to cover the reef wall while at the same time providing an anchorage for tunicates of all shapes and sizes. Hammerhead sharks have been seen cruising the reef, but these encounters are rare. It is more likely that divers will confront nurse sharks, spotted eagle rays or very large barracuda.

From Lonely Point north along Wreck Reef, the underwater ledge is wider and very similar to the ledge north of Half Moon Caye. Queen conch are found here, but oddly enough, I have not found any areas of sea grass on which it is so dependent for food. Once again the area is constantly buffeted by the Caribbean and is unsuitable for diving except on the calmest of days. When conditions are right, however, it can be a most rewarding experience with sightings of some of the larger pelagics.

From Eastern Dip all the way to Half Moon Shoal, the south-facing reef compositions are as exciting as anywhere else in Belize and very popular among divers. With the winds and waves originating from the northeast, nature has created a unique, sheltered spot on the eastern coast.

Lighthouse is the farthest atoll from shore and offers some of the best underwater visibility in Belize. Exquisite reef formations and walls beginning as shallow as 35 ft are draped with colorful sponges and corals that burst through the crystal clear water. The famous Blue Hole, a seemingly limitless turquoise lagoon in the middle of Lighthouse Reef, is a unique experience you won't want to miss. Some of the most spectacular wall dives exist on Lighthouse, including a series of shallow drop-offs on the ocean side of Half Moon Caye, where excellent opportunities exist for both land and water exploration.

## SPECIFIC DIVE SITES

Listed below is a selection of some of the best dive sites on Lighthouse Reef.

### NORTH LONG WALL CAYE

SCUBA at 25 nominal feet along sheer 2000 foot wall. Beautiful corals, lots of fish varieties; clear, clear water!!! Breeding and brooding grottos and canyons bursting with life. Outstanding colors, dense schools and shoals. Drop in to 45 feet and follow guide along - slowly planing up to 20 feet. If you've refrained from being an "air hog" you can finish dive by going through shallow caves hiding giant Grouper, Jew Fish, etc. Most "three tank" dive excursions end with this shallow, no-deco dive. An unsurpassed 50 plus minute last dive! It can also stand alone as being worth the trip to make this dive only!!!

Many different individual dive sites are housed on this stretch of reef. Being on the leeward side of the atoll this wall usually presents itself in wasteful colors and life. Several caverns, filled with glass fishes are found along this seemingly endless wall of beauty.

### GREAT BLUE HOLE

Typical Depth Range: 5-412 ft (2 to 126 meters) to unlimited (wall)

Typical Current Conditions: None

Typical Visibility: 100 ft (30 meters)

Expertise Required: Advanced

The origin of Blue Hole dates back to an ice age about 15,000 years ago. Enough sea water was frozen in glaciers during this time to lower sea level more than 350 ft, exposing the limestones of Lighthouse Reef. Huge subterranean caverns formed when fresh water flowed through the limestone deposits. Since then, the roof of the cavern has collapsed to form the sinkhole.

Made famous by a Jacques Cousteau's 1970 Calypso expedition, Blue Hole is one of the best known dive sites in Belize. It is a circular, deep depression in the center of more than 75 sq miles of shallow, blue-

green water. Its diameter at the rim measures 1,045 ft, whereas its maximum depth is 412 ft. Except for two narrow passages on the eastern and northern rims, Blue Hole is completely rimmed by living coral.

For the advanced diver this site is well worth the trip. You should plan to dive either the north or south side to a depth of 100-150 ft where the shallowest cave features are found. Begin your dive by snorkeling to the coral rim. This serves two purposes: first, it conserves air, and second, it provides an opportunity to get everyone making the dive together before you descend. Your no-decompression bottom time is short at the planned depths so it is best to snorkel toward the center to Blue Hole, just beyond the vertical wall, before descending.

A good way of maintaining your orientation during descent is to stay reasonably close to the wall. As you descend, you will notice that the wall crests between 40-55 ft and continues as a vertical cliff to a depth of 90-100 ft before receding at a 55° angle. The resulting overhang forms a cavern ceiling from which hang stalactites more than 3 ft in diameter and up to 20 ft in length. Also found adorning the ceiling are numerous dripstone pillows. More than 50 ft below the crest of the ceiling, the cave floor is riddled with a collection of fallen stalactites, muddy sediment and an opening to a cave system. Surprisingly, the dimly lit walls of the cavern are covered by a variety of filamentous green algae, boring sponges and encrusting worms. Little other marine life appears present in the cavern, but the walls above are covered with cornflake algae and isolated growths of gorgonians. Sharks and turtles may be found here, but their presence in Blue Hole is unpredictable.

Marine life in Blue Hole and on the broad muddy sand slope that surrounds it is rather dismal, comparative to other sites in Belize. Algae and encrusting sponges mantle the walls to depth. Scattered growths of unhealthy stony coral rim the wall and occur scattered across the broad, muddy sand slope between the wall and shallow reefs. Most corals are heavily encrusted by red algae, hydroids and gorgonians. The only other conspicuous organisms here are shaving brush and mermaid's fan algae.

The most varied and lush marine life is found on the coral reefs that rim the perimeter of Blue Hole. The reefs occur in only a few feet of water, making them excellent for snorkeling. Stands of elkhorn, club finger and shallow-water starlet corals, giant green anemones and various urchins occupy the shallow lagoon habitat.

## GORGONIAN FOREST

The entire northwest corner of the atoll offers underwater visibility at its best, and the terrain below the surface is truly magnificent. The massive coral outcrops rising up from the ledge at the very edge of the precipice are covered in a splendid gorgonian forest. The "foliage" ranges from the palest pinks and greens to the deepest reds and darkest blues and purples. Some of the finest examples of reef fishes in their prime are found here in good numbers.

## HAT CAYE DROP-OFF

Typical Depth Range: 50 ft (15 meters) to unlimited (wall)

Typical Current Conditions: None to minimal

Typical Visibility: 50 ft (15 meters)

Expertise Required: Novice

A short distance west from a tiny island called Hat Caye is a reef drop-off that bears its name. Situated along the main wall in the western limb of Lighthouse Reef, it has an interesting shallow reef and is the southernmost site dive boats regularly visit on this atoll.

The shallow reef is wide, with an extensive patch of sloping sand separating two reefs: a very shallow reef near the island and a narrow line of reefs that hug the drop-off at 50 ft.

Dive boats typically anchor above the sloping sand areas close to the wall. Both the drop-off and adjoining reefs offer some exciting diving with dramatic wideangle photographic possibilities, but the sandy slope behind the reef rimming the wall should not be ignored. It has some unique marine life.

Along the rim of Hat Caye Drop-off are some huge basket sponges, the largest quite capable of completely hiding a diver. In the midst of such grandeur, many divers feel the need to climb inside the cavernous sponge opening. However sponges, which take a long time to grow, invariably get damaged by fins, tanks, or hands during such maneuvers. Damaged sponge tissue is susceptible to disease, which can eventually kill the sponge.

Basket sponges are also home to many other animals and their rough exterior surface should be checked over carefully. Brittle starfish by the hundreds are quite common, but during the day most hide in the deep pits of the sponge. Often, only a few hairy starfish arms can be seen wrapped around the many knobby external sponge growths. Look here for white antennae that belong to the red and white coral shrimp.

The drop-off also has several other major marine life attractions, including an abundance of deep-water lace coral, giant yellow tube sponges and lots of fish. You may have to do several dives here to appreciate everything this site has to offer.

## THE PLAYGROUND

The Playground begins as a fairly featureless, sandy course sloping gently down to a depth of about 50 feet (15 m). Here a vertical wall drops to a narrow ledge at 100 feet (30 m). At the very limit of this ledge the coral rises up like a wide fence, some 25 to 30 feet (8-9 m) high on the far side of which is the final dropoff. This curious profile is full of big lobster, while fish life is abundant at every depth level.

## EAGLE RAY WALL

Typical Depth Range: 35 ft (11 meters) to unlimited (wall)

Typical Current Conditions: None to minimal

Typical Visibility: 80 ft (24 meters)

Expertise Required: Intermediate Opposite a tidal cut through the north end of Long Caye and near Nurse Shark Lodge lies Eagle Ray Wall. This area has an excellent shallow reef and colorful wall, exciting and ideal for snorkelers. The reef is no more than 3.5-40 ft beneath the surface right up to the wall. A series of long, straight coral ridges separated by sand gullies serve as natural navigation aids. Snorkelers following these structures into shallow water are led straight to the reef crest, whereas divers are directed to the wall in the opposite direction.

The wall plunges dramatically into deep water all along this part of the reef trend, where it is rich with corals and colorful red cup sponges. Here too, many painted tunicates occur clustered on a variety of soft coral branches between 60-65 ft deep. This wall is also riddled with many holes and grottos, which are home to a variety of fish and invertebrates.

On most dives here you can see eagle rays in graceful flight just off the wall. Usually, these magnificent creatures are seen about 40 ft below the surface, moving effortlessly through the water with majestic, slow sweeps of their wings. Their regular occurrence here may enable you to plan for some spectacular photographs or video with much depth of field.

Even if rays don't happen by, there are still plenty of photographic opportunities. Boats anchored here will sometimes swing parallel to the wall, making excellent silhouette shots with lots of colorful foreground.

## THE AQUARIUM

Typical Depth Range: 30 ft (9 meters) to unlimited (wall)

Typical Current Conditions: Minimal to strong

Typical Visibility: 80 ft (24 meters)

Expertise Required: Intermediate

Off the northwestern corner of Long Caye, the main reef trend turns abruptly to the east. In doing so, it forms a major point and begins a significant change in reef topography. Well-defined, long coral ridges and sandy canyons run perpendicular to the reef line here and farther eastward. These begin shallow, extending seaward to 60 ft or more below the surface. Like Silver Caves, the coral ridges have many holes and grottos, providing a haven for all kinds of invertebrate and fish life.

Moderate to strong currents flow across the reef here almost all the time. They are strongest over the reef top and may be entirely absent along the wall itself. Divers who explore the north-facing wall of the point may find troublesome currents too and are advised to plan their dive accordingly. Currents along the point generally sweep across the reef from the east. To minimize the effect of the current, divers should drop down to the reef surface. By swimming east at the start, you will enjoy an effortless return trip to the boat.

Named for its varied invertebrate life, the Aquarium is a good place to see the common and unusual. Crinoids or sea feathers are of special interest here during the day. Many of these animals, which are normally hidden deep in the reef elsewhere, are more visible at the Aquarium. A good place to look for them is near the crest of the wall. Their orange or yellow feather-like arms are fully exposed here. Only the small body and cirri (attachment appendages) are tucked beneath the coral formations.

Deep-water lace coral and black coral are other common animals along the top 50 ft of the wall. Most extend horizontally away from the wall with their network of branches oriented perpendicular to the slight current that occasionally sweeps the reef.

Fish are also varied and colorful at this site. If you look on top of the reef and in the dividing channels, you can find the usual variety of tropicals. Parrotfish of all shapes, sizes and varieties graze on the algae patches that mantle much of the reef top.

#### TRES CABEZA

Just north of West Point is a bare, rocky outcrop. About 100 yards (91 m) due west of this marker at a depth of 30 feet (9 m) is Tres Cabeza, meaning "three heads." Here one encounters three large and magnificent coral structures. They provide countless hideaways for grouper and lobster. Turtles are regularly seen here and there is good chance of seeing manta and large spotted eagle rays.

#### SABO WRECK

25 - 35 feet, wreck dive. Grounded freighter. Shoals of Snapper!

#### THE ABYSS

40 to 100 feet, sheer wall.

#### TARPON WALL

Just below West Point is Tarpon Wall with a distinctive profile all its own. The sandy ledge drops gently to a depth of 35 feet (11 m) over a distance of about 100 yards (91 m). Here the coral has formed another barrier and rises up to within 15 feet (5 m) of the surface. On the far side of this barrier is a 75-foot (23 m) vertical drop to a narrow ledge at a depth of 90 feet (27 m). Beyond this ledge the reef wall continues its vertical descent. Lobster, grouper and snapper fill the many tunnels and small schools of jacks and tarpon can be expected on every dive. on every dive.

#### MANTA WALL

This site is well known for its manta rays which are often seen leaping out of the water in the distance- an impressive spectacle. The wall is rife with other intriguing marine life as well, which on one occasion had occupied the last frames of my film when I turned to see what seemed like a monstrous apparition- a huge albino manta ray. Thus you'll just have to take me at my word on this.

#### LONG CAYE RIDGE

Typical Depth Range: 40 ft (12 meters) to unlimited (wall)

Typical Current Conditions: Minimal

Typical Visibility: 80 ft (24 meters)

Expertise Required: Novice

Long Caye Ridge is the third in a series of excellent walls and shallow reefs off the western side of Long Caye. It gets its name from a protruding ridge of reefs that form a small promontory just north of Tres Cocos. Spur-and-groove formations are well defined here on the bottom, leading to the wall and a drop-off of major proportions. The grooves run perpendicular to the wall and feed directly into the open sea.

The sponges, coral and fish here are similar to those seen on Hat Caye Dropoff. Near the drop-off and all along the wall are many large and colorful sponges and delicate gorgonians. Beneath the canopy of softcoral, tube and vase sponges are fresh growths of boulder, yellow pencil and finger corals. Deep parts of the wall are shingled with large plates of sheet and sunray coral, along with wire coral and small feather black coral trees. Look among the coral recesses for spotted filefish, arrow blennies, crabs, and lobsters. Threespot and dusky damselfish will charge you if you get too close to their algal gardens along the reef top. This is another stop along the Long Caye wall where your searching will reward you with some great photographic subjects.

#### TRES COCOS

Typical Depth Range: 30 ft (9 meters) to unlimited (wall)

Typical Current Conditions: Minimal to moderate

Typical Visibility: 80 ft (24 meters)

Expertise Required: Novice

Named for a cluster of three tall coconut palm trees due east on Long Caye, this reef lies about 1 mile north of Hat Caye Drop-off. It is the second of a series of superb dive sites found on the main western reef line of Lighthouse. The first of its many attractions is a shallow coral reef and wall with some large overhangs. Although algae cover much of the shallow reef, you'll find a satisfying collection of other marine life. Large spotted moray eels, lion's paw sea cucumbers, several kinds of urchins, coral shrimp, arrow crabs and sea feathers are just some examples of the invertebrates that seek refuge here. Cowfish scull around patches of coral and juvenile jackknife-fish stay close to the protective holes found everywhere on the reef. A host of damselfish, parrotfish and blue tang are attracted by the algal lawn, and schools of jacks share the water above the reef with very large and hungry black groupers.

Black coral bushes develop on the wall at 30 ft. Turtles are common visitors, coming here to graze algae on the sand slopes, while Spanish mackerels and Creole wrasses look for food just off the wall.

Following the wall northward, divers will discover large sand flats replace the reef and a wall enhanced with beautiful coral arches 30-40 ft below the surface. Conch, rays and peacock flounders are the main attractions on the sand flats. Graceful tube sponges and delicate soft corals hang elegantly from the arches and wall. At 45-65 ft, divers can find small schools of blackcap basslets close to or under the overhangs. On exceptional days, this part of Tres Cocos offers some of the most dramatic and colorful underwater photography possibilities found anywhere in Belize.

#### EAGLE REEF

Long Channel is the main entrance to the atoll and is continually used by small craft. just north of this channel, west of the reef crest known as Eagle Reef, there is some spectacular diving. However, the diver must always be aware of the surface traffic. Diving here is best later in the day when the sunlight penetrates to greater depths. The underwater ledge is narrow and covered in an abundance of coral, especially black coral. All the reef fishes are present along with some splendid grouper and snapper. This is where we begin to find small groups of the very largest spotted eagle rays cruising the reef.

#### THE CORNER

The Corner is the beginning of the Northwest Wall. The scenery as seen from 30 feet (9 m) above this living vertical wall is as sensational as anywhere else in the Caribbean. Manta. rays are still seen, but the small groups of large spotted eagle rays are ever present. Single large barracuda hover almost unnoticed in these well- chosen hunting grounds. At the top of the cliff face, large angelfishes abound, and in the deeper waters the grouper are always ready to confront the diver with a challenging stare.

## WEST POINT I & II

Typical Depth Range: 25 ft (8 meters) to unlimited (wall)

Typical Current Conditions: Slight to moderate

Typical Visibility: 50 ft (15 meters)

Expertise Required: Novice

Along the northern limb of Lighthouse are two infrequently visited dive sites. The southernmost is called West Point 1, with West Point 11 to the north. Both have excellent diving, but visibility can drop to 50 ft or less when the winds blow steadily out of the east or northeast. But the poor visibility is normally limited to the upper 20 ft. Both reefs have a narrow rim adjacent to a wall that plunges to 125 ft. The wall is vertical to slightly overhanging in most places. A variety of sponges and corals decorate the wall with many shapes and colors. Below 125 ft there is a narrow terrace covered with sand and a sparse cover of coral. The gently sloped terrace leads right up to the edge of a second deep wall.

If watching or photographing fish is on your list, this is the one place you don't want to miss. Schools of smooth trunkfish, all four angelfish (queen, gray, French and rock beauty) and lots of parrotfish congregate here. Yellowtail snappers appear in great numbers, along with queen triggerfish, white spotted filefish, hogfish, barracudas and tiger groupers. All the butterflyfish feed on the reef here too, including the rare longsnout. A variety of creole wrasses, blennies, gobies and hamlets need to also be included on this partial list.

Even if fish are not your main interest, you will find this site a joy to dive. Here too, the coral is healthy and at least as varied as the fish life. Conch and garden eels are found in the sand slopes behind the reef wall, whereas spotted and green moray eels hide in healthy coral growths.

## NURSE SHARK LODGE

Typical Depth Range: 40 ft (12 meters) to unlimited (wall)

Typical Current Conditions: None to minimal

Typical Visibility: 80 ft (24 meters)

Expertise Required: Intermediate

East of the Aquarium, on the same reef, lies Nurse Shark Lodge, a wall that plunges steeply into deep water all along this section of northern Long Caye. It offers great diving, but the site is singled out by dive charters because it constantly features large marine life.

Dive site names are often drawn from physical characteristics of the site or from exciting animal sightings. This site is no exception, regularly offering shark sightings, although I've not seen any during my dives here. The "Lodge" portion of the name refers to shallow caves that riddle the reefs and are reportedly used as sleeping quarters for sharks.

Why sharks persistently visit here is not known, but elsewhere in the world they are attracted to a particular promontory because of unusually rich feeding conditions. Whatever the reason for their presence here, sharks are a thrilling site for any diver.

Spur-and-groove formations that dominate here are also excellent for photography of corals, sponges and a variety of other invertebrates. Reef fish also like the many nooks, crannies and alleys that make excellent hiding places and predator escape routes.

#### THE "V'S"

Here at a depth of 30 feet (9 m), divers are above a narrow ledge, looking down on a magnificent reef wall which continues unbroken for some distance around a complex and very interesting part of the coastline. This site is named after the V-shaped coral formations at the top of the wall.

#### THE ZOO

This site is so named because of the tremendous variety of fish in a single spot. All the common reef fishes are not only here, and in good numbers, they are each a splendid example of the species. Along the ledge above the reef wall, the corals are arranged in tidy little combinations, each being attractive to a particular species. Sergeant major damselfish will occupy one coral head with the blue chromis firmly inhabiting another. Below them the longspine squirrelfish and rock beauty seek refuge in the large holes. All around, French angelfish, gray angelfish, banded butterflyfish and foureye butterflyfish flit from coral head to coral head-always in pairs. The very edge of the reef is at 30 feet (10 m) and below this, the wall is as equally exciting in terms of fish life.

## SILVER CAVES

Typical Depth Range: 40 ft (12 meters) to unlimited (wall)

Typical Current Conditions: None to minimal

Typical Visibility: 80 ft (24 meters)

Expertise Required: Intermediate

Just north of Cathedral, the reef forms a promontory. The reef here is shallow and deeply segmented. Coral development sets this site apart from all others. Huge coral formations create a framework riddled with cavities that make excellent hiding places for animals trying to escape predators.

Exciting discoveries can be made here and photographers can have some interesting challenges. Many of the nocturnal or light-sensitive animals can be found here during the daytime. A flashlight will reveal brittle starfish and sea urchins, waiting for sunset in their cave refuge. It will also turn what normally appears as a black hole into a brilliantly colored grotto. Red and orange encrusting sponges and moss animals carpet the sides and ceilings. Some searching among the richly colored surfaces may lead you to discover basket starfish and some rare sponges in shallow water. Basket starfish look very different during the day. With their arms wrapped around their round bodies, they form thin, white disks. Cave ceilings are an especially favorite resting place for these animals.

Few people have seen and recognized sclerosponges. In fact, they were considered extinct and were only rediscovered in the last 20 years when diving made studying deep reefs possible. These sponges are important reef builders below 150 ft and are now known to occupy caves in shallow water. Although rare, you can see them at this dive site. Peer into the grottos and look among the red sponges for small mounds of yellow to pale green that have the typical star pattern of the sclerosponges.

Like Silver Point, this site takes its name from a wealth of small silverside minnows. Countless numbers, perhaps even millions, of these small fish swim in such tight formations that they obscure the reef. Quite often the shoals will be attacked by hungry jacks and other predators all very good for divers with underwater video equipment. As a diver swims through this avalanche of fish, they open in unison and the diver enters a tunnel of living fish which parts ahead of him and closes the door behind him. Like all shoals they move in perfect harmony, as though obeying a single command inaudible to the human ear.

It is above this stretch of reef that some of the larger live-aboard dive boats anchor. The depth here is never more than 20 to 25 feet (6.8 m) above the ledge.

## CATHEDRAL REEF

Typical Depth Range: 30 ft (9 meters) to unlimited (wall)

Typical Current Conditions: Minimal

Typical Visibility: 50 ft (15 meters)

Expertise Required: Intermediate

Cathedral Reef starts shallow with the wall cresting at 30 ft. Unlike other parts of the Long Caye reef system, those at Cathedral are deeply segmented. Sculptured by and rising above the glistening sand channels are colorful coral spires and formations, which have inspired the name Cathedral. Divers will find exploring the top of the reef a rewarding experience especially when descending among the coral towers. You'll find great narrow passages and short tunnels beside some interesting and different marine life.

Macro photographers will love Cathedral. A lush coral garden adorns the reef top and a collection of sponges paints the deep parts of each coral stack red and orange. Healthy growths of boulder, brain and large plates of cactus coral make excellent photographic subjects. Sea anemones are varied and spread their tentacles out from protective coral nooks. Many act as protective hosts for little spotted brown and Pederson Cleaner shrimps. A varied and friendly fish population adds to the spectacle. Fish watchers will take delight with large French angels, stoplight parrots, trumpets, groupers and schools of yellowtail snappers. The angels and snappers are particularly easy photographic targets.

Beyond the shallow reef, large sheet coral up to 6 ft across mantle the wall. Here, huge basket, rope and long yellow tube sponges add form and grace to the rocky wall. Wire coral, deepwater lace and other soft coral form elegant growths that extend up to 5 ft from the wall. Look for turtles and lobsters among the living cover on the wall. Also keep an eye on the deep parts of the reef below you, and on the open sea, for large pelagics, such as eagle rays and huge groupers or jewfish.

At this point the ledge is very wide and contains a veritable catalog of the most exquisite fishes and marine creatures. Moray eels, especially green moray, are fairly common. Right in the center of the site

is a tall arrangement of corals which rise like a small cluster of church spires. The tallest of these is over 8 feet (2.4 m) tall.

Between Silver Caves and Cathedral at the top of the reef wall, I witnessed a curious mating spectacle. Numerous creole wrasse were swimming around in pairs. Altogether there were thousands of these fish, but each pair was swimming independently. The male would swim above and behind the larger female. The fish were swimming with their pectoral fins, causing an erratic, almost comical, motion as they engaged in this ritual. ed in this ritual.

#### QUEBRADA

Typical Depth Range: 40 ft (12 meters) to unlimited (wall)

Typical Current Conditions: Minimal

Typical Visibility: 80 ft (24 meters)

Expertise Required: Novice

If you move .5 mile north of Long Caye Ridge you will come to a small reentrant in the reef known as Que Brada or "broken reef." This is another great dive site. Here, a narrow ridge of corals rims a crescent-shaped wall. As elsewhere off the west side of Long Caye, the wall is vertical to slightly overhanging. At about 130 ft, a narrow sandy terrace littered with coral provides the only respite on this plunge to unexplored depths. Most dive boats anchor in one of several large sandy areas that interrupt the otherwise continuous coral growth just south of the reentrant. Divers entering the water will see abundant isolated stacks of coral scattered across the sandy bottom beneath the boat. The coral patches extend right up the wall which, if followed north just a short distance, turns abruptly to the east.

Like elsewhere off Long Caye, coral and sponge growth provide plenty of interesting photography and color, but the most exciting photo subjects are friendly and varied fish. Live-aboard dive boats have been feeding fish here for several years now. Schools of yellowtail snappers shadow divers on the reefs. Large black groupers, ocean triggerfish and a host of others are abundant on the shallow wall and reef crest. Virtually all can be approached and photographed without much difficulty. Large spotted eagle rays and turtles also frequent the wall of this dive site.

#### HALF MOON CAYE WALL

Typical Depth Range: 30 ft (9 meters) to unlimited (wall)

Typical Current Conditions: None to minimal

Typical Visibility: 100 ft (30 meters)

Expertise Required: Intermediate

Half Moon Wall is an exceptional dive site now included in the newly erected Half Moon Caye National Monument on Lighthouse. Anyone who has the opportunity to dive the offshore atolls should try to dive Half Moon Wall. Here, you can make several different types of dives without moving the boat, and between dives you can take time to picnic or observe the boobie bird colony on Half Moon Caye. It is one of my favorite dives because the reefs are so spectacular and varied.

Located on the south side of Half Moon Caye are two striking reef features. First, the coral formations form a narrow rim at the edge of the wall which, in most places, is only 100-200 ft wide. Second, an extensive gently sloping, seemingly barren sand flat separates the reef rim from shallow reefs along the shore.

As you glide down to the reefs 30 ft below, you will see the reef rim has a spectacular development of spurs and grooves. The living spurs are massive coral accumulations subdivided by seaward sloping grooves up to 30 ft deep at the wall. Many grooves are quite narrow, but easily negotiated by a diver. One of the exciting aspects of this dive is entering one of the grooves and following it seaward. Muddy sand floors the grooves and divers should take special precautions not to stir up the bottom with their fins. Many grooves feature pronounced overhangs that locally coalesce to form tunnels, also known as Grover's Grottos. All tunnels are short and straight so no special dive equipment or experience is needed. As the tunnels near the wall they reach depths of 70 ft or more.

Large and small marine life abounds on the Half Moon Wall reefs. It is extremely varied because of the abrupt and extensive change in bottom type. If you want to see garden eels, conch, rays, flounder, star-eye hermit crabs and tilefish, check out the sand flats behind the reefs rimming the wall. Manta rays and a variety of reef fish forage in this area regularly, too.

On the reef, groupers and yellowtail snappers hide out beneath the coral hanging over the reef canyons. Razorfish and toadfish are another common sight on the reef, adjacent to the sloping sand flat. Large pelagics frequent the reef wall. Spotted eagle rays and turtles are most common, but occasionally sharks

and large black groupers visit the area. Most of the large marine life is found more frequently along the eastern part of this dive site, as the large pelagics venture in from the open sea to the east.

All divers should take time to see the spectacular field of garden eels found on the sloping sand flats behind the reefs along the wall. Thousands of eels can be seen from a distance off the western end of Half Moon Caye. But you will only see their graceful, slender bodies protruding from a hole in the sand from a distance. These animals are extremely shy and getting a close look may take considerable time. As you approach them you will see successive waves of eels retreat into their protective sand flat shelters.

Half Moon Caye Wall is one of the best dive sites of the world. It is, as the name says, a wall dive if you ever get to see past the barrier of coral that separates the inner and outer reef. The dive can be done fairly shallow and will never get boring. Abundance of all kinds of marine life make it hard to keep concentrated on just one thing. Should you choose to visit the outer walls, majestic Eagle Rays and Manta Rays are known to patrol this steep abyss.

The reef crest comprises a veritable thicket of staghorn coral with other corals also present. The reef drops steeply to a shelf at a depth of about 15 feet (5 m). Along this shelf there is a large expanse of sand which at first glance appears totally uninteresting. It is here, however, that a large community of garden eels is found. From a distance divers will think they are looking at sparse vegetation, but on closer examination each "leaf" turns out to be the upper half of a small eel protruding upright from its hole in the sand. A diver may get as close as 10 to 15 feet (3- 5 m) before they all disappear from sight. Also known as sand eels, there are very few colonies of this mysterious little creature found in Belize, and none allow divers to venture too close.

The sand continues to slope gently until reaching a depth of between 45 and 50 feet (14-15 m). Here divers are at the back of Half Moon Wall, facing an outcrop of coral which rises up like a barrier along the very edge of the reef wall. To reach the front of the wall, you can rise up to within 20 feet (6 m) of the surface and swim over the barrier. There are also narrow gaps between the splendid outcrops of coral just wide enough for a single diver. The most interesting route is, as always, to find a tunnel and swim through the archway of living coral. Whichever route is taken, it is nothing compared to the breathtaking scenery

South of Cathedral is Quebrada (the break), a single sand chute through the coral which reaches all the way to the reef wall. This wide ledge in such shallow water is absolutely amazing. The corridor allows

divers to swim along inspecting the marine life which hides at the bottom of the coral. Arrow crabs, redbanded coral shrimp and juvenile spotted drums are all there, as well as a good number of green moray eels.

#### HOGFISH CUT

Towards Hogfish Cut the continuous coral ledge begins to break up and the gaps between each coral head become very wide. Large hogfish are found here in significant numbers. The male, which can grow up to 3 feet (1 m) long, is a contrasting, almost black and white fish with three long spines at the beginning of the dorsal fin. It is shy and often difficult to photograph.

#### FLATS WALL

Right in the middle of Eastern Dip there is a little-known cut through the reef crest. No more than 15 feet (5 m) wide, it is an entrance to be used only by those who know the area well. Below this cut is a curious dive site known as Flats Wall. From the reef crest the bedrock slopes gently and consistently away to a depth of 45 to 50 feet (14-15 m) at the top of the drop-off.

This bedrock is covered in conch grass. One assumes from the name that the conch feed on this grass as well as sea grass, but no conch were seen on my visits to the site. Conch grass is different from sea grass; it looks like a covering of green moss and definitely attracts a number of different minute creatures. Hydrozoans, tunicates, small crabs and shrimp take the place of the common reef fishes, although a small number are always present. Large sea fans and gorgonians dominate the edge of the ledge, which awaits.

Half Moon Wall is incredible. The vertical wall at times cuts back in on itself, displaying many interesting features. Sponges protrude at right angles to the reef, competing for space with gorgonians and sea fans. Mountainous star and giant brain coral are interspersed with smaller clumps of staghorn, brain and lettuce coral. Anchored amongst these are the hydrozoans and tunicates.

The top of the wall is ablaze with fish life: large angelfishes in groups of four or five; every variety of butterflyfish, always in pairs; large squirrelfishes posing outside their holes; and small grouper, impatient to see the world deeper down, looking and behaving in the same way as their much larger parents.

Turtles are common-they lay their eggs on Half Moon Caye-but the real excitement is generated by the pelagics. This is the only sheltered dive site on the eastern side of any of the three atoll reefs and divers can expect some really amazing encounters. Oceanic whitetip sharks (complete with their attendant pilotfish), lemon, blacktip and bull sharks,are likely to be seen. The very largest of manta rays and good specimens of spotted eagle rays are frequently seen. At the very limit of safe diving are very large jewfish- some so large they might stalk the diver, although they pose no danger. The wall continues down well beyond the safe reach of scuba divers.

This magnificent site is only a short distance from the idyllic tropical island of Half Moon Caye, and combines marine and terrestrial beauty in a manner which is, in my experience, unsurpassed.

#### SOUTHWEST CUT

Typical Depth Range: 40 ft (12 meters) to unlimited (wall)

Typical Current Conditions: Minimal to strong

Typical Visibility: 50 ft (15 meters)

Expertise Required: Intermediate

Bordered by a wide channel, this site is exposed to a flood of lagoon water and sometimes ocean swells that cross the lagoon from the windward side. Frequent changes in current strength, visibility and water temperature can be expected during the day, except when winds come from the north or northwest. Even when favorable winds exist, water temperature will change dramatically near the wall, where a plume of warm lagoon water escapes in the channel, crosses the reef and passes over the cool water of the open sea.

The reef at Southwest Cut is peculiar. Much of the reef top is covered with algae, soft coral and sand. The reef is dissected by wide sand channels that plunge steeply to great depths. Except for local accumulations of turtle grass mats, the channels are pretty much barren of marine life. Only the wall with its many grottos and holes appears to team with life and offers the best opportunity to see shrimp, eels and various other organisms.

The variety of marine life seen during the day at this site can take your breath away, but the most consistent good diving occurs here at night. Dozens of basket starfish can be seen clinging to soft corals near and on the wall. A varied collection of eels also emerge from their shelters in the reef. Many come

to the turtle grass mats in the channel to feed, while others, such as sharptail eels, are most frequently spotted in the large coral heads behind the wall. Here and elsewhere on the sand flats or among the scattered coral heads are good places to find scorpion fish and loads of tarpons can be seen swimming above the reef. You might also see some unusual critters here, such as the yellow-banded coral shrimp or the sail-finned blenny. You can also get right up to some of the trunkfish and filefish for some excellent photographs. Huge hogfish congregate here too, and there are always some nudibranchs or manta rays to spice up the diving at this site.

#### PEAGLE LANDING

#### PUNO COCO

#### PETER'S PLACE

#### JULIE'S JUNGLE

#### SHIPWRECKS AT LIGHTHOUSE REEF

Although there are many unexplored shipwrecks at Lighthouse Reef, the following list represents a mere few. The "Bangor" galley, lost in 1719, off presently submerged Sandbore Caye: This was a small merchantman coming from Jamaica to Belize with Owner-Captain Nathaniel Uring. Uring discusses errors made by his pilot which led to the loss of his ship. They apparently salvaged what they could and made a base at Half Moon Caye. As Uring relates, they were trying to save the bread, and he was trying to get the crew to help and this was his comment: "they would not give themselves the Trouble to preserve it; such unthinking, ungovernable Monsters are Sailors, when once from under Command." The following other quotation probably typifies a seafaring merchantman's sentiments at losing his ship. "and sat down to rest with an aking Heart, not SO much for fear of my Life, as for the Loss of my Fortune, though the Thumping of the Ship against the Rocks, and the Sea breaking violently upon us, the Sails fluttering with the Wind, and the ill Government of the Seamen, were enough to shock a stout

hearted Man; so that I passed the remaining Part of the Night in melancholly Reflections " Uring made it to Half Moon Caye where he set up a base camp. He built a raft and finally made it to Belize City, surviving the attempt of his pilot to start a wreck-island based mutiny. (He did leave some chickens to breed on the island of Half Moon Caye.)

"Hantord" Wreck: lost south of the "Bangor" on the reef, no date available.

"Spitfire" Wreck: apparently a ship of iron construction, lost on the eastern reef, south of Northern Two Cayes.

"Johnny Two" Wreck: wooden refrigerated ship, lost in the mid-50's on the main reef north of Northern Two Cayes.

The large, modern steel wreck on the reef, immediately north of Half Moon Caye was the "Ormlund". It was a 350-400 ft Norwegian freighter. On the southwestern tip of Lighthouse Reef Atoll, there are the remains of several steel hulled wrecks that are awash.

#### PIRATE TREASURE ?

Buried treasure. Credible reports state that at northern Two Caye in the 50's, explorers excavated a large pit in the sand which was lined with conch shells. This pit contained several large (4 ft. high) amphora (clay vessels), which were filled with treasure and were recovered.

Half Moon Caye-Long Caye Buried Treasure: In the 30's, several expeditions were launched from Belize City to attempt to recover a buried treasure. One of these was lead by a Joe Lewis (not the boxer), and apparently met with little success. The area they reportedly looked at on Half Moon Caye is presently an "aguada" or low area, in the middle of the island, north of the Booby bird preserve.

Hard to believe, but in reality a fact, several of the finest and fastest sailboats (approximately 40+ ft long) in Belize were built at Half Moon Caye by a Mr George "Gigi" Young, now deceased. One of these boats was called "The Poison Arrow".

## LARGER WILDLIFE

On northern Two Caye, in the southern mangrove swamp environment, there is a population of *Crocodylus acutus*, the American crocodile.

Halt Moon Caye, A Wildlife Sanctuary and A National Monument The Red-footed Booby (*Sula sula*) and many of the Frigate birds (*Fregata magnificans*) nest on the southern part of Halt Moon Caye in the zircote (*Cordia sebestana*) stands. There are large populations of hermit crabs that feed on the bird droppings. There are large (4 ft long! edible iguanas (*Iguana iguana*) found in these same zircote stands. At dusk on Half Moon Caye, the aerial birdfight (dogfights?) between the Frigate birds and the Boobie birds are so swift and remarkable that even the Red Baron in his aerial sorties (dogfights) would at best remind one of a lumbering Pterodactyl. On northern Two Cayes there is a breeding area for the American crocodile, *Crocodylus acutus*.

## DIVE EXPERIENCES

8/12/2000

There was a minimal current for the majority of dives, no significant thermocline. Water temp was 84 at depth on all dives. Except for a few northern sites, visibility was always over 100 ft. First and last day dives were at sites closer to the Northern Caye and were not interesting. Divesites west of Long and Hat Cayes, e.g., Cathedral, Dos Cocos, Hat Caye Wall, as well as those around Half Moon Caye (Half Moon Wall and Chimney) were gorgeous. I think they are regularly visited by the PH and Aggressor boats. Pristine reefs, excellent visibility and a good variety of fish life. Huge coral heads, several eagle rays, gigantic tube sponges, 4 turtles, largest puffer on my list, lobsters-crabs, schools of creole wrasse, spotted moray, swimming green moray, several friendly groupers (petted one for the first time) and also baby groupers, knobby anemone, rough fileclam, blue bell tunicates, Pederson cleaner shrimps and 2 reef sharks.

Most of the diving was along walls, which started at 40 to 70 feet. I was at my no-decompression limits on nearly every dive because of my desire to swim along the edge of the walls, with occasional excursions over the edge to see something interesting. Nitrox diving, offered on the live aboards, would

be quite useful here. The diving was about as good as it gets in the Caribbean. There were plentiful large game fish (grouper, permits, jacks, etc.), eagle rays, sting rays, turtles and nurse sharks. Visibility was usually greater than 100 feet, but sometimes less above 20 feet.

Most dives were drift dives on either a wall or between coral heads. Water temperatures were between 80 (my wife's computer) and 84 (my computer) degrees. We used 1-mill microprenes the whole week, some used shorties, while others just used suits and a shirt. (There was a group of nudists coming the week after us (called Buff Divers) that dived au-natural, prompting the usual jokes "watch out for barracudas". I see the water is colder today "don't swim too close to the reef" etc)

The Dives:

Since my wife and I are newbies, we opted out of some of the more difficult dives (or napped during the afternoon dives), but here is a synopsis of some of the dive we did do.

Fish Life: The running joke all week was "What fish did you see on the dive?". All of them! Through the 12 dives we did (max of 17 possible), the following were encountered: spotted eagle ray, barracudas (one was 3.5 ft), angel fish (many varieties), parrot fish (many varieties), jacks, snappers (many varieties), sergeant majors, wrasse (many varieties), rock beauties, butterfly fish, damselfish, blue chromis, trunkfish, moray eels (couple of varieties), blue tangs, doctor fish, flying fish (on the Blue Hole trip), grunts, graysby, basslets, puffers, gobies, file fish, turtles, flounders, lobster, banded coral shrimp, lettuce leaf slug". In many cases, there were large schools "

Coral/Sponges: Huge barrel sponge, tube sponge (brilliant colors), sea fans, huge brain coral, black coral, fire coral, stag horn, elk horn, anemones,... too many to remember".

Noted dives:

All of the dives were great (is there such a thing as a bad dive?), but a couple dives will be remembered for a long time..

At the Blue Hole, my wife and I decided that we didn't want to do the deep dive (130 ft) into the Blue Hole, so we decided to snorkel around the reef. The reef in some places is merely inches below the water surface, so it wasn't necessary to get deep to see some excellent coral and fish. Later that day, the dives at Halfmoon Bay (Halfmoon Caye, LightHouse Atoll), and at the Aquarium (Light House Atoll) were superb! The visibility was over 70+ feet. You truly felt like you were in somebody's aquarium, the only thing missing was the deep sea diver with the sunken chest! This was a very shallow dive and you could stay under for extended periods.

At Turtle Bay, one diver found a cleaning station with couple of cleaner shrimp and we each took turns having our nails done. This was a first for my wife and me our divemaster also found a baby flounder that we all settled onto the sandy bottom to watch.

At the Coliseum, Bart found a lettuce leaf slug and brought my wife (the photographer) over to see it. At one point, an almost endless 'river' of blue tangs came swimming by no more than four or five fishes wide, but the line continued for several minutes

In Conclusion:

My wife and I had a wonderful time diving in Belize. The entire group of people was great and we made many friends. Everybody knew that we were inexperienced and went out of his or her way to show us stuff and provide any assistance if we needed it. Bart, our dive master, went out of his way locating new things for us (it was all new!). In our extensive dive history (30 to date, 20 or 30 more and maybe we'll move up from newbie to novice divers), this has been the best.

## DIVE EXPERIENCES II

6/6/2000

We had arranged to dive with Hugh Parkey's Dive Connection. He had promised that we would find him right across the pier from where the tender docked. He had promised he would wait for us, but we had given him an arrival time of 8:00 a.m., and we weren't going to make it until 10:00. I just hoped he was familiar enough with the cruise schedules to understand our predicament.

When the tender finally pulled up to the pier, there was Hugh's big white Wayward (identical to the boat from Anthony's Key Resort), waiting exactly where he said it would be. We dragged our gear bags from the tender all of twelve feet to Hugh's boat, where Hugh's assistant, Tony, took everything. A minute later, we were speeding across the water toward the barrier reef. When booking the trip, we'd originally asked to be taken to the barrier reef, but Hugh had vetoed that plan, noting that the water there is often too rough for beginning divers. As we passed over the reef, I could see his point. Though it was a clear day and a calm sea, the waters around the barrier reef were a bit rough.

Our companions on the boat included two American business travelers and four folks from the UK, each with better than five years diving experience. Dory and I were the decided neophytes of the trip. On the trip out we discovered that one of the American business travelers was a cruise ship captain from a nascent cruise line that will be operating out of New Orleans. He was in Belize researching cruise excursions. Tough job.

We reached Turneffe atoll and hooked up to a mooring line (the mooring buoy had been replaced with an orange life preserver) over a spot Hugh called the Terrace. The wall there drops down in scalloped steps. Starting at about fifty fsw, the wall is undercut and drops off to a ledge at about ninety fsw. From the ledge at ninety fsw the wall again drops off to a second level spot at about 140 fsw and then to somewhere in the vicinity of 200 fsw. After that, the wall drops off into the abyss. From seventy fsw, I could just barely make out the contours of the second tier (90 to 140 fsw), but with only 60 feet of visibility, I couldn't make out much detail. I could see the ledge at 200 fsw just faintly.

The Terrace has a dark, foreboding aura. Shadowy branches of black coral waved from the overarching wall, interspersed by the reaching rubbery fingers of various gorgonians. As we finned along under the overhang at about seventy feet, schools of fish hovered at the precipice and wove their way through sea fans poised to block out the sun. Blue tangs, black durgons, blue chromis: dark fish appropriate to these dark environs. Long-spined squirrelfish--pale and ghostly, not the brighter red squirrelfish of Grand Cayman--watched me suspiciously with their stark black eyes. Interspersed among the occasional red or yellow sponge, we saw wan, translucent violet sponges that seemed to glow out of the shadows. It struck me that diving down along the second tier of the Terrace on un-enriched air would be a Bad Idea. I would not want to be narced in a place like this. Between the darkness, the looming overhang, the eerie clutching octocorals, and the dark clouds of fish, this site would be the ideal setting for a delusional paranoid episode. Oh, sure, I saw a few colorful fish, a couple of bright cheery coral shrimp and Christmas tree worms, the occasional neon yellow sponge, but generally I do not recall much color or light. No one creature on that dive stands out in my memory as powerfully as the overall haunting gloom of the Terrace. Odd how a wall teeming with life could seem so funereal.

I would love to dive this spot again, perhaps covering less distance and paying closer attention to the wall's smaller denizens.

Above the wall on the return to the boat, Hugh found a sea cucumber making its gradual way through a sand chute. Dory looked on in puzzlement at the hairy limp sausage Hugh pointed out, and I began signing C-U-C-U-M-B-. My signing just seemed to make matters worse (I get a bit overly enthusiastic and sign too fast), and she waved me off. Hugh picked up the cuke and dusted off the sand. I again signed--more slowly this time--C-U-C-U- and she nodded understanding. Then Hugh held the critter up so that Dory and I could pet its rubbery velvet rows of feet. Later, Dory confessed that she was initially confused not by the speed of my signing but by the creature's size. Having seen no source of perspective in any photos, she had expected sea cucumbers to be only about six inches long. So when I began signing "cucumber," she had been certain that couldn't be right.

Back on the boat, Tony moved our regs and BCs to fresh tanks while we ate a lunch of baked chicken and potato salad. Then Hugh moved the boat around the atoll to our second dive site: Chasbo's Corner. This site was mostly low lying coral heads interspersed with small, irregular patches of white sand. As on the Terrace wall, I found the coral here rife with feathery sea fans and other gorgonians, also whip sponges, barrel sponges, black coral, feather dusters, and the occasional crinoid. The overall impression it left was of a sunken prairie, with the sea rods and the bushy and feathery black corals playing the role of sagebrush. Schools of tangs percolated out from behind various coral heads protected by damsels of every variety. Scamps, young groupers, and yellow-tailed jacks seemed to appear from crevasses at every turn. Here and there a queen angel or a rock beauty flashed a little spot of color, and I failed repeatedly to get close enough to photograph playful banded, four-eyed, and spotfin butterflyfish.

Perhaps the most amazing sea creature I had the pleasure of observing on the second dive was Hugh Parkey himself. Hugh is a huge, robust, bearded man with a bright smile and a good word for everyone. He is also an elegant diver, who obviously loves what he does. I would not have believed so large a man could evince such grace as Hugh Parkey wending his way fluidly among the octocorals. What an astonishing man.

Chasbo's Corner was beautiful, and while I warmed up in sun and sweatshirt, Hugh and one of the British couples showed Dory around the rest of the reef, pointing out various juvenile fish, the black coral, some Pedersen's cleaning shrimp, an anemone, a crinoid. She and Hugh surfaced about 25 minutes later.

As promised, Hugh got us back in time to make one of the last tenders back to our cruise ship. Sadly, Hugh's shop was out of t-shirts in our size.

### Glover's Reef Dive Sites

Named for pirate John Glover, Glover's Reef is the most southern of the three offshore reef systems and features some spectacular dive sites. Glover's distance from Belize City and Ambergris makes it a less frequently visited destination. Many of the islands in the southern part of Belize are virtually uncharted virgin territory, so southerly dive trips take a little more planning and creative organizing, but are well worth the effort. Those divers up for the adventure will find all the reefs along the atoll's southeastern limb feature dive sites abounding with shallow walls, fresh reefs and abundant pelagics.

### SPECIFIC DIVE SITES

Listed below is a selection of some of the best dive sites on Glover's Reef.

#### EMERALD FOREST REEF

Typical Depth Range: 15-70 ft (5-21 meters)

Typical Current Conditions: None

Typical Visibility: 50 ft (15 meters)

Expertise Required: Novice

Emerald Forest Reef is a new dive site along a stretch of virgin reef that forms Glover's western limb. It is located about 7 miles from both the light on Glover's northeast end, and from the northern most group of cayes on the atoll's east side. Here, the reef slopes uniformly to the west from its crest to a sloping wall.

The water is only 1 ft deep above the reef crest and no more than 50 ft below the surface near the wall. The shallow water, lack of currents and marvelous fresh reef make this site an excellent place for new divers or those who have been away from diving for some time. Even snorkelers will find this an excellent spot because the most luxurious and active reef is no more than 25 ft below the surface. Experienced divers will find Emerald Forest equally rewarding, both in the shallows and on the wall.

Emerald Forest is named for its huge elkhorn coral that dominates the reef crest in shallow water. Impressive growths of this coral feature trunks more than 1 ft in diameter and a canopy of branches 10 ft above the reef surface. When the sea is calm look for crabs, reef urchins, brittle starfish and boring sponges among the stands of huge coral.

Just a short distance seaward from the elkhorn stand is an absolutely luxurious coral garden every photographer will want to visit. Every variety of stony coral known to live in shallow water can be photographed in this one area. All are healthy and the dense growth of coral life provides ample shelter for many snappers, groupers, trunkfish and angels. Wrasses and blue chromis are especially abundant.

Divers should also explore the reef along and on the wall. The terrain near the wall is a series of weakly developed coral ridges and shallow sandy gullies. On the ridges sit a fine collection of club finger coral, large brain coral, yellow pencil coral, the ever-present boulder coral and lots of forked sea feathers. This growth of animals houses numerous gobie and shrimp cleaning stations for groupers, bar jacks and parrotfish.

The wall is a good place to look for large lobsters among shingled and platy growths of boulder and sheet coral. There are also large basket, tube, rope sponges and a wide variety of small marine life, all of which make interesting photo subjects.

#### SPLIT REEFS

Typical Depth Range: 40-100 ft (12-30 meters)

Typical Current Conditions: None

Typical Visibility: 50 ft (15 meters)

Expertise Required: Intermediate

Named for its characteristic reef development, this dive site features a profile with two distinct reef zones over a distance of about 800 ft. A shallow reef extends from sea level to 40 ft and a deeper reef begins at 70 ft, extending to more than 100 ft at the wall. Between them is a sloping sand flat with a few scattered growths of stony and soft corals.

The shallow reef is a photographer's and videographer's delight. A healthy, colorful and varied growth of corals makes this an ideal place for coral close-ups. Magnificent stands of elkhorn, meandrine brain, large cactus, thin fungus and staghorn coral form crowded coral stands. Colorful sea whips, sea rods, corky sea fingers and Venus sea fans also grace the reef. Movement and additional color are provided by crowds of blue chromis, sergeant majors and blue-headed wrasse that glide over and through the corals. By looking beneath the coral canopy and into some of the countless nooks that riddle the reef, you can find additional tropicals and abundant, brilliantly colored sponges. Because the reef is more than 300 ft wide, a virtually unlimited number of reef organisms can be found. Best of all, you can stay here a long time because most of the reef is less than 30 ft deep.

If you are more impressed by size than variation in marine life, the deep reef is for you. Beginning at depths of 70 ft, a mountainous coral mesa towers as much as 50 ft above the sloping sand flats leading to the wall. Much of the deep reef is built by boulder, lettuce and large-cupped boulder coral and adorned by a variety of deepwater sea whips and rods. An interesting ecological adaptation to low light that you can look for on the deep reef is the development of skirts or platy growths among the boulder corals.

#### BAKING SWASH REEF

Typical Depth Range: 15-100 ft (5-30 meters)

Typical Current Conditions: None

Typical Visibility: 70 ft (21 meters)

Expertise Required: Novice

Baking Swash is a narrow cut through the western limb of Glover's atoll. Two weathered tree limbs mark the channel on each side. The cut through the reef is wide and deep enough to accommodate only small, manageable boats with a shallow draft. It is lined with coral and no more than 10 ft deep. Although shallow, narrow and remote, the channel itself can be a dangerous place to dive. Wave and tidal currents are not a problem, but power boats from local resorts use this passage because it is the only cut in the western limb of the atoll. Most captains are familiar with the cut and speed through it with little expectation of divers.

Reef development occurs over a broad, sloping bottom in two zones separated by a sand flat. The shallow reefs grow up to sea level on either side of Baking Swash channel and extend 30 ft below the sea surface. The deep reefs are seaward of a wide sand flat that features only a sparse cover of corals. Huge towers of coral form impressive mounds with up to 50 ft (15 meters) of relief.

Considerable variation exists in the marine life found on the two reef zones. Deep reefs are dominated by huge large-cup boulder coral and elegant growths of deep water lace coral. They are usually not nearly as varied and spectacular as the shallow reefs, so unless you simply want to do a deep dive, it is best to stay on the shallow reefs. Because the visibility is low, macrophotography is probably the best here. Corals are very healthy and varied with most of the Caribbean species of hard and soft corals present.

#### SOUTHWEST CAYE WALL

Typical Depth Range: 50 (15 meters) to unlimited

Typical Current Conditions: Minimal to none

Typical Visibility: 90 ft (28 meters)

Expertise Required: Intermediate

Squarely off Southwest Caye's east side and only a short distance from the Manta Resort Pier, you'll find a sloping reef and wall that offer consistently good diving. Both are part of a narrow reef line that forms the southeastern limb of Glover's Reef. Depth increases rapidly away from the reef crest before deepening more gradually a short distance from the wall. Overall the reef has little topography, uneven only near the wall. Here, wedged coral ridges are separated by wide, shallow sand channels. While doing a safety stop at 10 ft, divers will see all coral wedges border and point away from the wall.

Like many walls on the windward limbs of the atolls, the Southwest Caye Wall is a dramatic drop-off. From its crest at 50 ft, this underwater cliff plunges to 130 ft. A narrow shelf floored by platy boulder coral, a tangle of wire coral and an abundance of sand occur at this depth. From there, the wall resumes its vertical descent to more than 350 ft before changing to a steep slope. Submarine dives made here show invertebrate growth is sparse at these depths.

Shallow parts of the wall have either giant overhangs or are deeply furrowed. Graceful gorgonians, wire coral and some very attractive and photogenic sponges adorn the overhangs, which are ideally suited for pictures with dramatic and colorful compositions. Divers taking pictures beneath an overhang need to remember to plan their pictures in advance so they can avoid lots of breathing while under the overhangs. Otherwise, exhaled bubbles will dislodge enough sediment to make good photography impossible.

Wall diving is an exhilarating experience, but it also means deep diving at Southwest Caye Wall. Unlike some dropoffs elsewhere on these atolls, this one begins at a modest depth and does not allow divers to work their way up to a shallow reef. Check your time and depth frequently and allow plenty of time for your ascent. This way you should have plenty of air left for a slow ascent and a three-minute safety stop at 10 ft.

#### MIDDLE CAYE REEFS

Typical Depth Range: 20 ft (6 meters) to unlimited

Typical Current Conditions: Minimal to none

Typical Visibility: 100 ft (30 meters)

Expertise Required: Intermediate

Located about a third of the way up on the windward southeastern reefs, Middle Caye Reefs is one of the most remote dive sites on Glover's Reef. The site derives its name from the small palm and mangrove covered caye developed behind the reef crest.

Many of the dive boats visit this reef, but it is usually a charter rather than a regularly scheduled run. If you want to dive this area, it is best to check with various live-aboards to determine when they intend to go there, or arrange for a trip to Manta Resort on Southwest Cayes at the extreme southern end of Glover's Reef. Even if you manage to arrange a trip, exceptional conditions are required to actually make the dive. Calm or westerly winds are needed to keep boats from swinging over and crashing into the shallow coral growths of this narrow reef tract. Another problem is large, incoming swells, which are common while storms are blowing in the Gulf and Caribbean. These can make getting back into your dive boat too dangerous for safe diving. But if the conditions are right, this site is well worth it.

Middle Caye Reefs offer some exceptional diving opportunities. A large variety of reef organisms can be found in a limited area because reef zones are condensed on the narrow fore reef. The entire area between the reef crest and wall is only several hundred yards wide. Reef formations are lush and healthy in this zone, with few areas overgrown by fleshy algae. The wall, which crests at 40 ft here, is spectacular and richly adorned with reef organisms. It also differs from wall profiles seen at most other locations because it is terraced at depth. Clear water and minimal currents allow you to see at least two terraces without making a dive below 100 ft. The first terrace at 150 ft and the second terrace at 210 ft are seaward sloping surfaces covered by platy boulder coral. Coral coverage is thorough and gives these terraces the appearance of a shingled roof.

Virtually every kind of invertebrate and a wide variety of fish can be found at Middle Caye. Turtle grass beds with their unique collection of tiny organisms flourish in patches adjacent to the northern and southern shores. Small foraminifera, encrusting red algae and hydrozoans cling to the blades of these grasses, whereas several kinds of clams seek shelter among the plant roots. Turban snails abound in the rocky areas bordering the island. Here large heads of common smooth star, smooth and depressed brain corals and yellow porous coral form isolated growths that are surrounded by coral rubble, much of which is coated with red algae. Exceptional growths of tan lettuce-leaf create shallow coral spurs at 10 ft. Reef urchins, red boring sponges, and many other kinds of organisms hide or live on these large elongated coral growths.

By far the greatest diversity of marine life exists near the drop-off. You'll find some less common stony corals such as meandrine brain, rare rose, giant brain, large flower and large cactus corals. Forked sea feathers, knobby candelabra, deadman's fingers and common bushy soft corals sway elegantly on the reef surface. Red finger, lavender tube, giant tube and variable sponges decorate the reef with their brilliant colors and create homes for thousands of small shrimp, crabs and fish. The orange sea lily is especially common here. Densities of 25 individuals are not uncommon.

## LONG CAYE WALL

Typical Depth Range: 30 ft (9 meters) to unlimited

Typical Current Conditions: None

Typical Visibility: 90 ft (28 meters)

Expertise Required: Novice

Long Caye Wall offers more than just wall diving. Just off its eastern shore is a shallow reef and snorkelers or divers can enter from the beach. Getting in is a bit rough and a beach entry is not advisable on days with large swells or heavy seas. Fire coral and elkhorn coral grow in great profusion close to shore, but there are some openings in the coral. On good days, look for openings among the dense coral growth before getting in the water. Once you get past this initial barrier, the snorkel or dive is easy. A large variety of stony and soft corals flourish on this shallow reef. Many of the corals grow in less than 20 ft of water, so snorkelers can see everything.

Farther seaward, divers reach a sand and coral rubble zone. The coral rubble is part of a gradual transition from coral reef to a broad sand slope. Between 20-30 ft, the belt is mostly a barren blanket of rippled sand. Its only residents are sand divers and jawfish, which disappear into sand or burrows when approached.

Sand ripples die out below 30 ft, but the sand belt continues to trail off to 45 ft before ending abruptly at the base of a reef ridge. The sand is marked with burrows, feeding marks and a variety of animal trails.

Garden eels are one of several permanent residents. A small group of these shy creatures lives in burrows close to the area of sand waves. Other invertebrates here are alpheid shrimp and various mollusks. All live in the soft sands and are rarely found during the day except by visiting rays or other fish actively rooting for them.

Reaching within 35 ft of the surface, the wall is an exciting experience found 700 ft squarely off Long Caye. Seasoned divers soaring over the wall can explore a vertical drop with many overhangs. The wall is mantled with giant plates of sheet and boulder coral below 50 ft. Colorful sponges, wire coral, black

coral and many hydroids are most abundant on deep parts of the wall. Every kind of soft coral imaginable forms a dense forest on shallow wall and its crest. Divers who prefer to watch for large animals will not be disappointed here either. Turtles, eagle rays, manta rays and barracudas are regular visitors all along the wall. This drop-off can provide you with many thrilling dives.

#### GROUPER FLATS

Typical Depth Range: 40-60 ft (12-18 meters)

Typical Current Conditions: None

Typical Visibility: 70 ft (21 meters)

Expertise Required: Intermediate

Another site standing out along the northeastern reef tract, Grouper Flats consists of lens-shaped reefs similar to those at Shark Point. It is a gently sloping reef of little relief and home to a large variety of groupers. It has two types of reefs, a shallow reef that extends to 30 ft and a very wide, deep reef beginning at 40 ft and extending to 80 ft. The shallow reef features mature elkhorn and huge masses of lettuce coral that look like loaves of bread densely covered with a growth of lettuce leaves.

These shallow coral formations are replaced by lens-shaped reef masses that are subdivided by winding and coalescing rivers of white sand. Although the reef has little relief, it is riddled with holes and crevices.

Grouper Flats got its name, naturally, from the many groupers that inhabit the gentle topography of the deep reef. They seek shelter within a virtual forest of soft coral and the endless number of crevices in the stony coral growths. Nassau, tiger, black, spotted and marble grouper are seen lying amid the sea whips and sea feathers. They are especially abundant and varied in the shallow part of the deep reef.

#### SHARK POINT

Typical Depth Range: 50-90 ft (15-27 meters)

Typical Current Conditions: None to heavy

Typical Visibility: 100 ft (30 meters)

## Expertise Required: Intermediate

Located at the eastern end of the windward northern reefs, Shark Point is one of the more remote dive sites on Glover's. Heavy seas generally pound this exposed stretch of reef, making it a difficult site.

Distance and weather play a major role in determining if you can dive. The nearest resort equipped with day boats is nearly 9 miles away from Shark Point. Even if divers are willing to make the hour-long trip to get there, prolonged periods of excessive boat roll can make for an unsettling experience. Heavy seas create extreme boat motion and increase the risk of injury to divers exiting the water on day boats or live-aboards. Experienced divers may visit this site using Zodiacs launched from a larger vessel anchored inside the lagoon. These small rubberized crafts can quickly and safely transport divers to and from the reef, in fair weather.

When weather and sea conditions allow access to the reef point, the diving is sensational. A wide variety of sharks, seen almost always on these reefs, offer a unique and exhilarating experience. Nurse, blacktip, hammerhead and tiger sharks can all be seen together here on the sloping white sand channels and coral hills. Why they are attracted to this part of the reef is uncertain, but it may be because this exposed point is one of the premier spawning grounds for groupers and other fish.

Huge, lens-shaped reefs are sculptured by the constant pounding of heavy seas on the gently sloping point down to a depth of 90 ft. Below 20 ft, they are made up of a mixed collection of small living coral colonies and stacks of coral debris. Riddled with holes and spread across a reef more than 1 mile wide, the coral mounds contain millions of hiding places for a dazzling array of tropicals.

