



The Bahamas' **Tiger Beach**

— *Petting Zoo or the Real Deal?*

Text and photos by Don Silcock



Tiger shark with remoras, eyeball-to-eyeball with diver (left) and interacting with dive-master (previous page) at Tiger Beach in the Bahamas; Caribbean reef shark (above)



Hammerhead shark

Tiger Beach in the Bahamas is firmly established as one of those global dive destinations of which almost everybody has heard. Its fame is largely derived from the many published images of its most celebrated visitor—*Galeocerdo cuvier*, the tiger shark.

Tiger sharks are considered one of the "big three" most dangerous sharks, and along with the great white and bull sharks, are believed to be responsible for the vast majority of unprovoked attacks on humans. They are renowned for their inherently predatory behaviour in which, much like their terrestrial namesakes, they close

in on their intended prey slowly and silently before pouncing with deadly efficiency.

They are also infamous for consuming almost anything and are often referred to as the "garbage cans of the sea," since inspection of dead tiger sharks' stomach contents have revealed everything from sheep, goats and even horses, to bottles, tires, license plates and (believe it or not) explosives!

Tiger sharks are one of the ocean's largest sharks and typically grow to between 3m and 5m in length and weigh in at around 350kg to 700kg. They are formidable creatures with an intimidating reputation. So, how can it be that week after week in the season, dozens of divers enter the waters of Tiger Beach for open-water, eyeball-to-eyeball encounters?

Tiger Beach is not a beach

Physically, Tiger Beach is about a square mile in overall size and is located on the western edge of Little Bahama Bank, about 30km west of the town of West End on the north Bahamian island of Grand Bahama. And the first thing you need to know about Tiger Beach is that it isn't one—it is actually a shallow sand bank that looks like there is a beach nearby.

The general area used to be known locally as Dry Bank and was first dived by Captain Scott Smith of the *Dolphin Dream* liveaboard back in the late 1980s. But who actually started the whole shark diving thing is the subject of great discussion.

Smith would seem to be the person who started tempting sharks to the stern of *Dolphin Dream* on those early trips, and the first published tiger shark

Tiger Beach

TIGER SHARKS

The tiger shark (*Galeocerdo cuvier*) is the largest predatory fish in tropical seas. Tiger sharks get their name from the dark, vertical stripes found mainly on juveniles, which as they mature start to fade and almost disappear completely.

Their large, blunt nose and significant girth gives them a very commanding presence. They have a reputation as man-eaters and are considered second only to great white sharks in attacking humans. But because they are complete scavengers, with their predilection towards eating virtually anything, they are unlikely to swim away after the initial strike as great white sharks frequently do.

Tiger sharks are found in tropical and sub-tropical waters throughout the world. With the largest specimens reaching as long as 20ft (6m) in length and weighing in at more than 1,900 pounds (900kg). They are hunted extensively for their fins, skin and flesh, plus their livers contain high levels of vitamin A, which is processed into vitamin oil.

Tiger sharks have extremely low repopulation rates and long gestation periods, which makes them highly susceptible to fishing pressure, and as a result, are listed on the IUCN Red List as "Near Threatened" throughout their range. ■

images apparently were captured from the boat. While the legendary Jim Abernathy, owner of the *Shearwater* liveaboard, seems to be the person who first took bait boxes into the water in late 2003. Abernathy is generally credited with starting the process of tempting tiger sharks with the bait boxes and was the person who renamed the area "Tiger

feature



Diver with tiger shark at Tiger Beach in the Bahamas (above); Divemaster strokes a tiger shark near the bait box behind him (top right); Curious tiger shark eyes the camera (right); Sharks gather around the *Dolphin Dream* (left)

Under-standing Tiger Beach

The Bahamas are said to take their name from *baja mar*—which is Spanish for “shallow

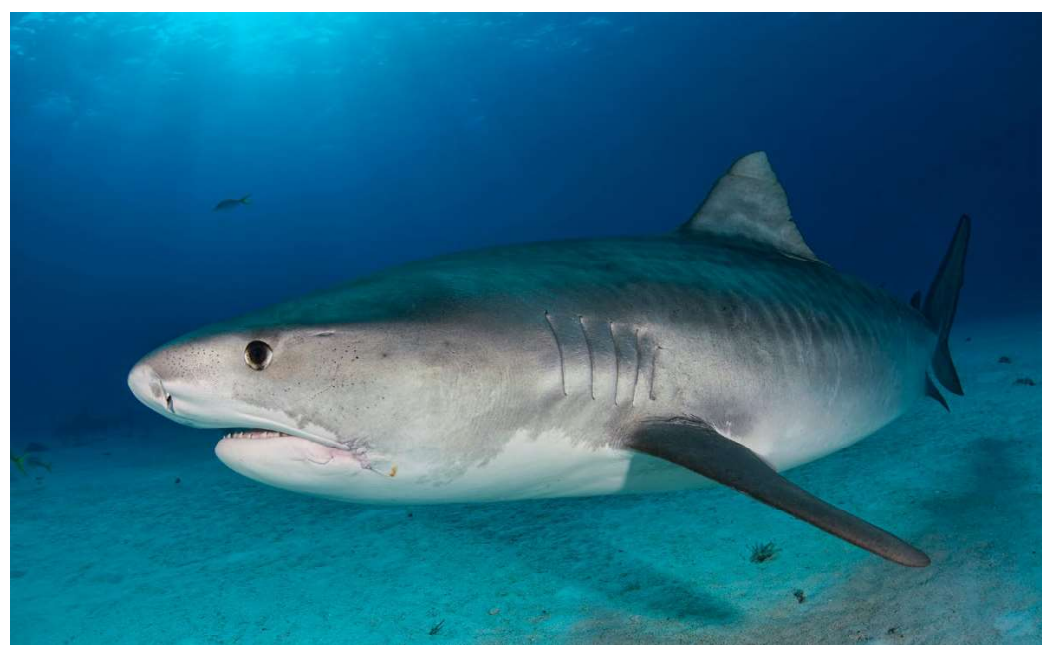
Beach.” Whoever did what does not really matter now, but what does matter is that we divers and underwater photographers owe a significant debt of gratitude to both Smith and Abernathy for creating what has become the premiere location in the world for tiger shark encounters.

seas”—because the archipelago of 29 main islands and roughly 700 cays that form the country reside on top of two main limestone carbonate platforms called the Bahama Banks. The Great Bahama Bank covers the southern part of the archipelago, and Little Bahama Bank covers

the northern part, with incredible channels as deep as 4,000m separating the two.

Those channels are flushed with the clean rich waters of the Atlantic Ocean, as the Gulf Stream makes its way through the Caribbean and then up the Florida coast. It is the combination of those rich waters and the shallow, sheltered cays and reefs of the Bahama Banks that make the area so prolific.

Satellite tagging of tiger sharks in Bermuda has revealed two really interesting facets of their behaviour. Firstly, they spend a lot of time at the surface, which is believed to be related to feeding and hunting patterns. Secondly, their migration patterns are very consistent,





Hammerhead shark (above and left) at Tiger Beach in the Bahamas

with five to six months of the northern spring and summer months spent in the open Atlantic Ocean to the north and west of Bermuda, followed by a migration south to the Bahamas where they spend the autumn and winter months.

It is believed (but not yet proven) that the months in the open ocean are related to mating and feeding on the migratory loggerhead turtles that pass through at that time of year, while the time spent in the Bahamas is related to gestation, as most of the tiger sharks observed at Tiger Beach are females and many of them are pregnant. Clearly, if the Tiger Beach area is the "tiger shark nursery," it

GREAT HAMMERHEAD SHARKS

The great hammerhead (*Sphyrna mokarran*) is a truly iconic shark, which typically grows to around 11ft (3.5m) in length and weighs in at about 500lb (230 kg)—although much larger specimens are seen occasionally.

It takes its name from its incredible hammer-shaped head, which it uses so effectively to hunt its favourite prey—stingrays. The front part of the "hammer" is where the ampullae of Lorenzini are located on great hammerheads, and they enable the shark to locate stingrays hidden in the sand.

The hammer-shaped head also enables great hammerhead sharks to pin stingrays down once they have been located. Typically, great hammerheads are solitary and nomadic predator creatures, which when in the presence of other sharks, such as at Tiger Beach, are given a wide berth.

Although potentially dangerous to humans, they are not known to be particularly aggressive and usually avoid divers completely, making good photographs difficult to achieve. Great hammerhead sharks are extremely vulnerable to overfishing and by-catch due to their low overall abundance and long gestation time. They are currently rated as globally "Endangered" on the IUCN Red List. ■

appears to be incredibly important to the long-term conservation of these animals, which are currently on the IUCN Red List as "Near Threatened" and have a declining population globally.

Conservation in the Bahamas

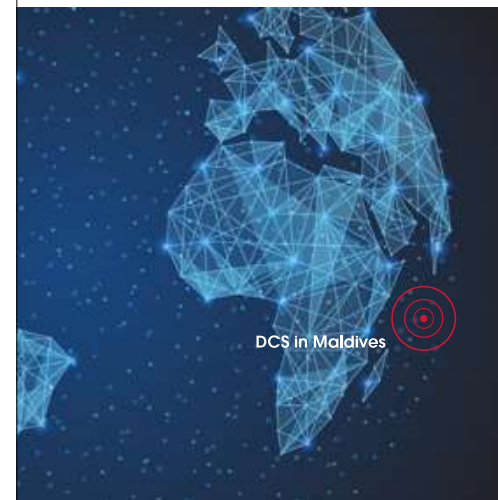
This island nation in the Atlantic Ocean, famed for its picturesque beauty and crystal-clear waters, has in many ways led the world in marine conservation. Although far from perfect, and indeed guilty of allowing periodic over-exploitation of its fish stocks together with the



A WORLD OF DIFFERENCE

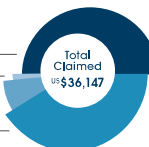
You are far from home and have nowhere else to turn. That's when DAN dive accident coverage can help.

DAN.org/JoinDAN



A couple injured in Maldives relied on DAN's Guardian Plan to cover 100% of their claim. See the full story at DAN.org/Claim-Stories.

Medical Center & Hyperbaric Chamber (Husband)	US\$ 18,475
Extra Meal Cost (Both)	US\$ 687
Extra Hotel Stay (Both)	US\$ 1,763
Medical Center & Hyperbaric Chamber (Wife)	US\$ 15,222
Total Expenses Covered by DAN Guardian Plan	US\$ 36,147



The scenario summarized above is offered only as an example. Coverage depends on the facts of each case and the terms, conditions and exclusions of the policy. Coverage may not be available in all states or outside of the U.S. Visit DAN.org for complete details.



feature



what can now be considered as an incredible piece of foresight. The Bahamas have since added another 26 national parks, covering over one million acres of land and sea, together with enacting substantial supporting

development of tourist resorts in ecologically sensitive areas, the Bahamas was the first country to establish a marine protected area (MPA).

That was way back in 1959 when the Bahamas National Trust was established to manage the 112,640-acre Exuma Cays Land and Sea Park in

environmental legislation, including making Exuma Cays a no-take marine reserve in 1986. Then, in 2011, the government went one step further and became the fourth country in the world to establish a shark sanctuary by formally protected all sharks in Bahamian waters.



THIS PAGE: Lemon sharks with remoras. Lemon sharks are one of the most researched sharks as they are able to cope with captivity for significant periods, allowing researchers the chance to make observations of their behaviours.

Shark tourism in the Bahamas While establishing the Bahamas as a complete sanctuary was an excellent step forward for shark conservation generally, it was also tacit recognition of the significance of sharks to the overall health of Bahamian fisheries. The marine environment is a complex and multifaceted thing, but if there is one global truism, it is that everything has its place in the greater scheme of things, and 400 million years of evolution have produced what could be referred to as a "fine balance." Sharks are a very necessary part of that balance and can be thought of as the masters of their ecosystems. Their role at the top of the marine food chain is to clean up the oceans with ruthless efficiency—the very thing that seems to most intimidate us humans!

Without sharks, the dead, the dying, the diseased and the dumb of the oceans would pollute and degrade the health of those ecosystems and



LEMON SHARKS

The lemon shark (*Negaprion brevirostris*) is one the best known and most researched sharks because it is able to handle captivity for extended periods of time, thereby providing scientists with extensive opportunity to observe its behaviour. Adult lemon sharks often reach up to 3.5m in length and about 190kg in weight, making it one of the larger sharks. Named for its bright yellow or brown pigmentation, it is found in tropical and subtropical waters in coastal areas of the Atlantic and Pacific oceans, usually in moderately shallow water no deeper than 80m.

Lemon sharks are a social species and are often seen in groups, which have a structured hierarchy system based on size and sex, and are known for migrating from area to area, often over hundreds of kilometres to reach mating locations. They are viviparous, and females give birth to 15 to 20 live pups after a gestation period of around 12 months. Lemon sharks rarely if ever demonstrate any aggressive behaviour to each other or towards humans, and there has never been a recorded fatality from one of them attacking. ■



feature



Caribbean reef sharks can grow up to 3m and weigh up to 70kg. Though thought dangerous, they have no history of attacks on humans, but can become aggressive when food is present, and will display aggressive postures when threatened.

nonsensational way—from how to prepare to go in the water to how to enter the water and what to do when under the water. But the fact of the matter is that waiting for a gap in the patrolling sharks and then carefully rolling in amongst them is not something you do on a daily basis.

Once underwater, however, nerves settle, and an awareness starts to form for the sharks and their behaviour patterns. From the pushy way the Caribbean reef sharks approach and tend to work in a bit of a pack, to the sneaky way the large lemon sharks come in low to the bottom, with a leery look straight out of

the genetic quality of its inhabitants. The many species of sharks are there for a reason, and they have evolved superbly, in true Darwinian fashion, to execute their mission. Remove the sharks and disruption occurs, something marine scientists refer to rather prosaically as “trophic cascades.” Think of the shark as the first in a long line of finely balanced dominos, and if it is tipped over, the rest start to go down as well.

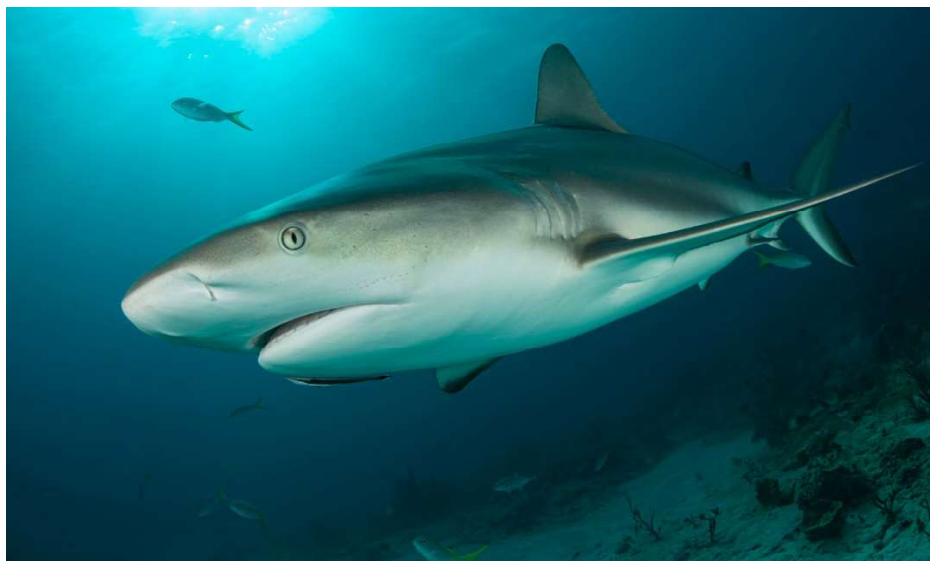
But all that said, there is also the cold hard fact that a live shark is worth a lot more in tourist dollars than a dead one. With one study published in 2017 indicating that 99 percent of the almost US\$114m in annual revenue generated by

the Bahamas dive industry came from shark tourism.

Eye of the tiger

Arriving for the first time at Tiger Beach is somewhat of a soul-searching experience. It is one thing to read and hear about the sharks that congregate there, but quite another to actually be there preparing for that first dive—particularly when there are up to a dozen two to three-metre sharks circling the back of the boat and lots of others visible in the clear waters!

The briefings provided on these trips are both extensive and exemplary, with everything clearly explained in a logical and





Your Buddies
Feel the Summer vibe

Book your summer vacation to Bonaire for unlimited diving and relaxing. Check out our summer specials now!

40 years

International Reservations: +599 717 5080
Call Toll Free US/Canada: 1-866-GO-BUDDY
WWW.BUDDYDIVE.COM/SPECIALS

CARIBBEAN REEF SHARKS

The Caribbean reef shark (*Carcharhinus perezi*) is almost the shark from central casting. Its distinctive robust and streamlined shape, coloration, large eyes and short but rounded snout is so shark-like to the human eye! Found on the eastern coast of the United States and southwards down as far as Brazil, Caribbean reef sharks grow up to a maximum of 3m in length and weigh up to 70kg.

Although considered dangerous to humans, they do not have a history of attacks on humans and are generally passive towards divers, snorkelers and swimmers. They can, however, become aggressive in the presence of food, and if threatened, they will exhibit threatening behaviour by zigzagging while dipping their pectoral fins at intervals of one to two seconds.

Adults begin to mate once they reach between 1.5 to 2m in length, but the reproduction cycle is long because females only get pregnant every other year and the gestation period is another 12 months. Caribbean reef sharks are viviparous, and the usual litter size is four to six pups, which are about 0.5m long when born. ■





one of those horror movies.

But that new awareness fades to grey when the first tiger shark arrives. Tiger sharks have an incredibly commanding presence that indicates they know their place at the top of the food chain. They move slowly and carefully, checking out what is going on, and the other sharks clearly defer to them.

The protocol at Tiger Beach is not to even worry about the lemon and reef sharks, as the only real chance of being bitten is if you break the cardinal rule of getting too close to the bait box. Even then, a bite is unlikely to be life-threatening, but you should always know where the tiger sharks are, and you should always face them—literally keeping the eye of the tiger in view at all times!

Creating inspirational experiences

Up close and personal

THE BAHAMAS

Call us today to book your next adventure.

wwdas.com | blueotwo.com

Tiger sharks are intelligent and curious animals, which tend to approach divers because their sensory systems pick up the tiny electrical and audible signals emitted from our instrumentation and photographic equipment. They will tend to bump with their

snouts, as they investigate the stimuli further, and there is always the chance that they will use their mouths. As their jaws are so powerful, even a gentle nip would be life-threatening. So, photographers are instructed to use their cameras as shields, with

the strict instruction to let go if a tiger shark decides to do a taste test—but remember to press the video button.

Petting zoo?

Being in open water with so many large and potentially very

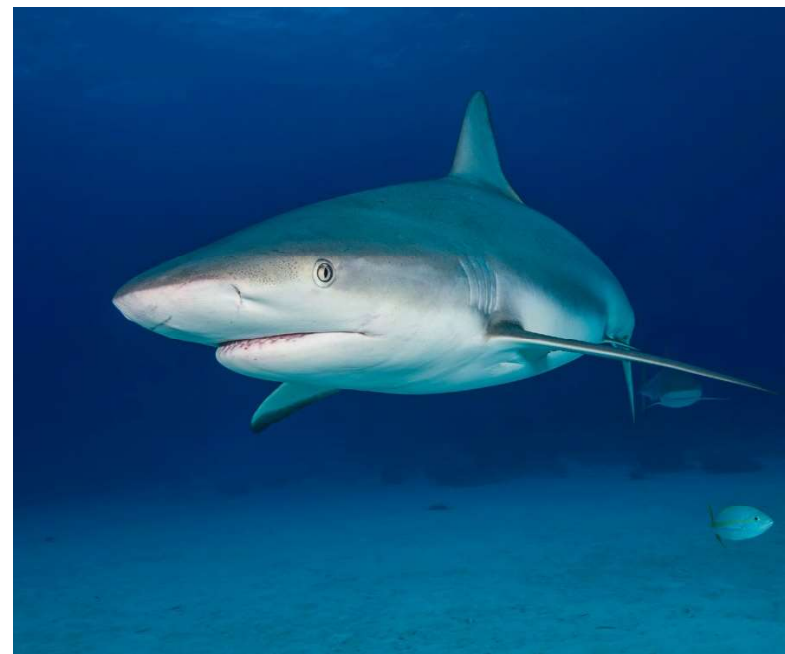


Hammerhead shark (above); Bull sharks (left and top left) are considered one of the “big three” most dangerous sharks, alongside tiger sharks and great white sharks.

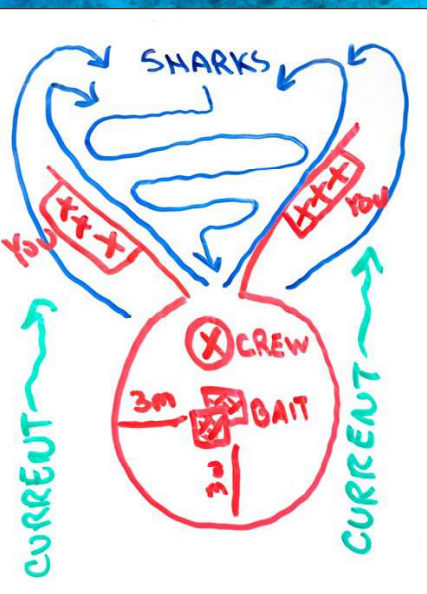
feature



Overview of the shark dive at Tiger Beach (left); Shark handler's interaction with a tiger shark (above)



Caribbean reef shark



Dive briefing map on Jim Abernethy's Shearwater liveboard

dangerous sharks verges on a life-changing experience. It really is a big deal to be there, and the first few days are a kaleidoscope of feelings—fear, awe, intimidation, excitement and an incredible sense of adventure at what you have done.

Then, a degree of complacency starts to settle in as you begin to think that maybe these animals have simply been misunderstood all along and they are really just kind and gentle creatures. This, for me, is when Tiger Beach becomes dangerous, because you are in a very special place where these creatures are both protected and well fed naturally, plus they get the snacks from the bait box. So, you are not really seeing them in their natural environment and, in a way, yes, it is a kind of petting zoo.

Or the real deal

Tiger Beach is quite unique in that there

really is nowhere else like it. Where else can one can be in open water, in "relative" safety, with so many large and potentially dangerous sharks?

The relative safety comes from the fact that the sharks at Tiger Beach have basically become accustomed to the presence of divers and, because they have plenty of other things to eat, they do not regard us as a principal food source. So, while it is absolutely not a completely natural setting, there is simply nothing else like it, if you want to see these creatures up-front and personal. It is the real deal! ■

Asia correspondent Don Silcock is based in Bali, Indonesia. For more information and extensive location guides, articles and images on some of the world's best diving locations, check out his website at: Indopacificimages.com.





SOURCES: US CIA WORLD FACTBOOK, CDC, GOV. STATE TRAVEL US, WIKIPEDIA.ORG, XE.COM, BAHAMAS.COM, CARIBBEANMAG.COM

fact file

The Bahamas



Text by Matthew Meier

History The Spanish gave the island the name Gran Bajamar, meaning "Great Shallows", and what the eventual name of the Bahamas islands as a whole is derived from. The islands were claimed by Great Britain in 1670. Grand Bahama was to remain relatively quiet until the mid-nineteenth century, with only around 200-400 regular inhabitants in the capital, West End. The island finally gained a stable source of income when in 1955 a Virginian financier named Wallace Groves began redevelopment with the Bahamian government to build the city of Freeport under the Hawksbill Creek Agreement and create the Grand Bahama Port Authority.

Geography Grand Bahama Island is approximately 150km (93 mi) long west to east and 20km (12 mi) at its widest point north to south. It has an area of 1,373km² (530.1 sq mi) and is the closest major island to the United States, lying 90km (56 mi) east of the state of Florida.

Climate The Bahamas are slightly cooler than other Caribbean island groups owing to their proximity to the continental North American cold air systems. The subtropical climate sees about 340 sunny days per year. Average air temperatures: Winter and Spring (December to May): 18-25°C / 65-77°F. Summer (June-August): 24-33°C / 75-91°F. Average water temperatures: Winter (December to March)

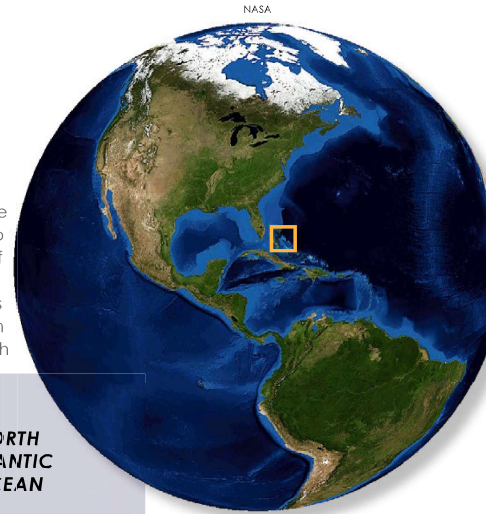
24°C / 75°F. Spring 27°C / 80°F. Summer (June to August) 31°C / 88°F. Average water visibility: 24-30 metres / 80-100 feet

Economy The Bahamas is a stable, developing nation with an economy heavily dependent on tourism and offshore banking. Tourism alone accounts for more than 60% of the GDP and directly or indirectly employs 40% of the archipelago's labor force.

Currency Bahamas Dollar The Bahamian dollar (B\$) is freely interchanged with the American dollar throughout The Bahamas. It is not necessary to change U.S. dollars into Bahamian currency. Traveler's checks in dollar denominations may be cashed almost anywhere. Credit cards are widely accepted. The Bahamas maintains cordial relations with all international banks and is known internationally for its banking and financial services.

Population Grand Bahamas population is approximately 75,000 (as of 2007)

RIGHT: Location of the Bahamas on global map
BELOW: Location of Grand Bahama Island on map of Bahamas
LOWER LEFT: Caribbean reef shark at Tiger Beach



US CIA WORLD FACTBOOK / PUBLIC DOMAIN

Tipping The usual tip on the islands, similar to the U.S. practice, is 15 percent. Sales tax does not exist in the Bahamas.

Driving British rules apply, so please drive on the left and watch those roundabouts. Visitors may use their home license for up to three months and may also apply for an international driver's license.

Airports/Visa Daily flights are available from Ft. Lauderdale (FLL) and Miami's (MIA) International airports to Grand Bahama International Airport (FPO). Citizens of the United States, Canada and The United Kingdom and Colonies do not need a passport for a visit that does not extend beyond three weeks. Visitors from these areas do need to present adequate proof of citizenship, such as birth certificate and photo identification.

Telephone From North America, dial 1 + 242 + the seven-digit local number. From elsewhere, dial your country's international direct dialing prefix + 1 + 242 + the seven-digit local number.

Hyperbaric Chamber The Bahamas Hyperbaric Centre The Lyford Cay Hospital Nassau, Bahamas

Language English

Time Zone Eastern Standard Time prevails on all the islands except during the summer, when Eastern Daylight Savings Time is adopted.

Voltage Electricity in The Bahamas is the North American standard 120 volts at 60 cycles.

Food Grand Bahama offers a wide variety of international cuisines for all tastes. The local Bahamian cuisine consists mainly of seafood, poultry, or pork, typically fried, steamed, or curried, with various kinds of rice and salads.



Scene from West End on Grand Bahama Island in the Bahamas

