

WILD DIVING BY NANOSCIENTISTS

IVAN SCHULLER PHYSICS DEPARTMENT UCSD

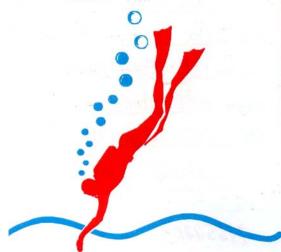
Weather:	Hastings	Sea Condition	s:	Vi	s:
Scuba: Pier/	Boat/Shore/Cave	rn/Other:			
Snorkel: Pier	/Boat/Shore/Oth				Kgs/l
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No. of Dives Hours This year 19 No. of Dives Hours To Date.



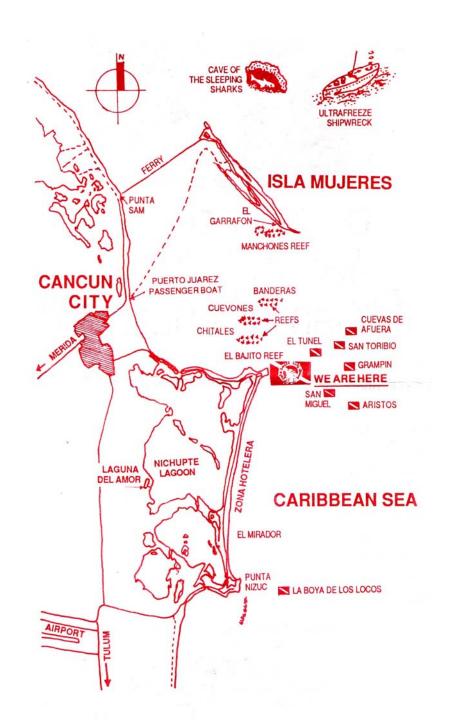


Av. Cobá No. 51, P.O. Box. 5116 Tel./Fax: 84-60-34 y 830800 Ext. Marina

Diver's Log Book

Bitácora de Buceo

CANCUN - MEXICO osports@groo1.telmex.net.mx



BITACORA No. LUGAR / LOCATION FECHA / DATE BUCEO No. / DIVE NUMBER CANCUN AREA DE BUCEO / DIVE SITE ENTRADA / DIVE IN SALIDA / DIVE OUT HORA HOUR ARISTO COMPAÑERO / DIVE BUDDY VISIBILIDAD WATER VISIBILITE TEMPERATURA AIRE / AIR AGUA / WATER DANI 6000 SALADA / SALAD CONDICIONES AMBIENTE TIBIA / WARM BOTE / BOAT CORRIENTE / CURRENT **ENVRONMENTAL CONDITIONS** DULCE / FRESH FRIA / COLD (MARQUE / CHECK) ORILLA / SHORE RESACA / SURGE PROTECCION CONTRA LA INTEMPERIE EXPOSURE PROTECTION PERFIL DE BUCEO / DIVE PROFILE CANT. LASTRE WEIGTH USED TRAJE SECO / DRY SUIT TIEMPO NITROGENO RESIDUAL TRAJE COMPLETO / WET SUIT FULL TRAJE CORTO / SHORTY RNT PARADA DE SEGURIDAD SAFETY STOP LICRA / DIVE SKIN TIEMPO REAL DE FONDO 15 FT ROFUNDIDAD / CAPUCHA / HOOD + ABT GUANTES / GLOVES TIEMPO TOTAL DE FONDO BOTAS / BOTIES SI INTERVALO SUPERFICIE
SURFACE INTERVAL PG GRUPO DE PRESION TBT COMENTARIOS/COMENTS

2 B 16 GREEN EELS

GRAY EEL BETWEEN LEGS

13 lobstevs VERIFICACION / VERIFICATION FIRMA / SIGNATURE COMPAÑERO DIVE BUDDY DIVE MASTER INSTRUCTOR









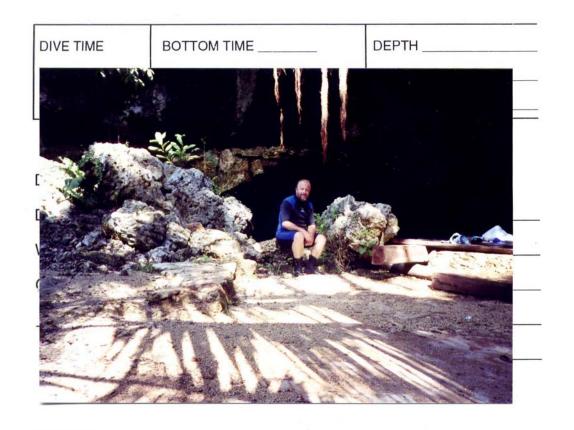




Devil's Throat

DIVE TIME IN S.OO AM	BOTTOM TIME Samia	DEPTH 25 +1. WATER TEMP. 76 °F	
OUT	AT END OF DIVE	DIVE # Cavern.	
	7.6	``	
DATE: 31-150			
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DIVE INSTRU	JCTOR/MASTER: Jaime!	Martiner 30383	
Tolo	m D, Roo HEX	CICO.	

DIVE TIME	BOTTOM TIME 30 min	DEPTH 46 Ft.
IN	REPETITIVE GROUP	WATER TEMP.74 °F
OUT	AT END OF DIVE	DIVE #
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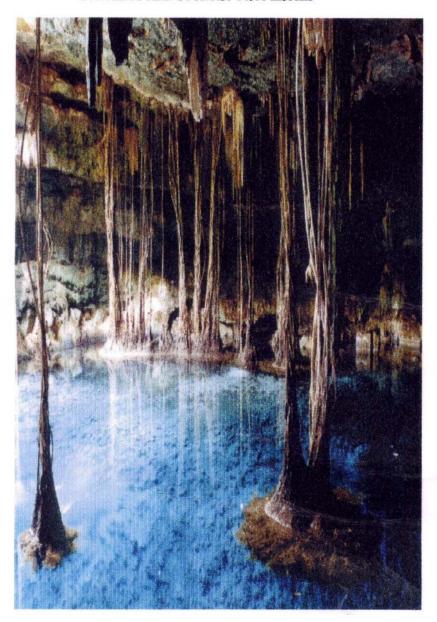






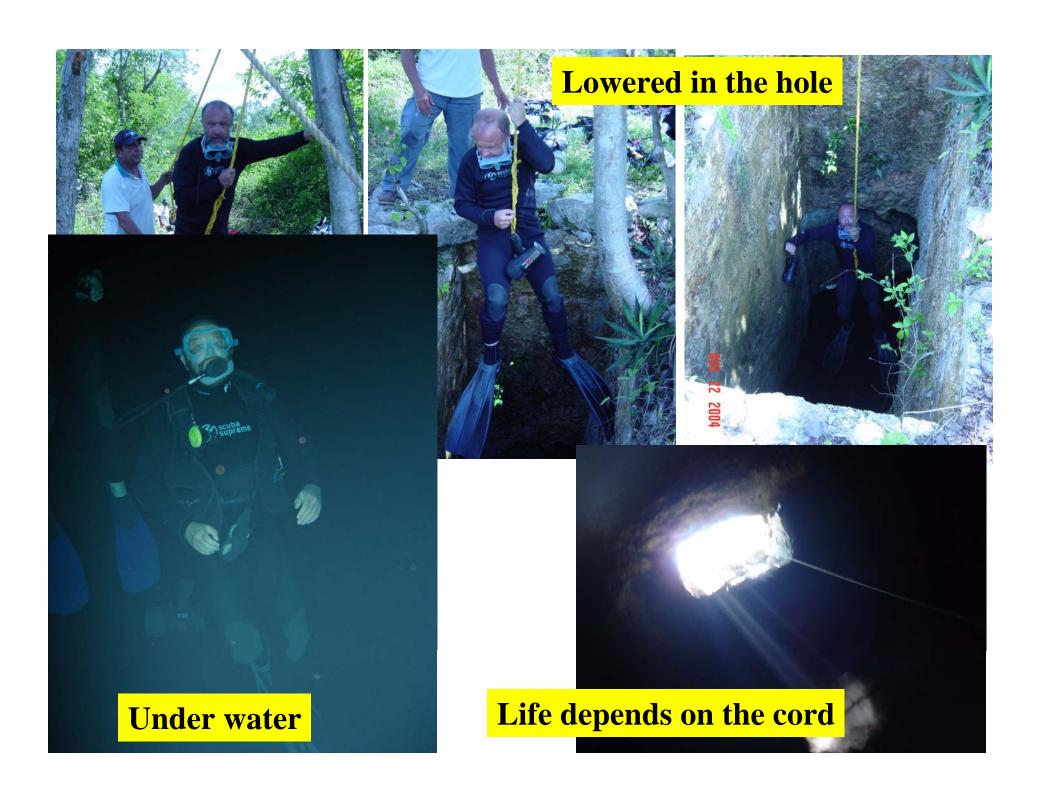
GUIDES ECO TOURISM YUCATÁN 2003

CENOTES, RESERVATIONS ECOLOGICAL ARCHEOLOGICAL AREAS
CONVENTS AND COUNTRY PROPERTIES











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My diving trip into the San Antonio cenote, a cave in the Yucatan jungle, was exhilarating. The almost-unexplored cave, two hours in the middle of the jungle, was used by the Mayans as a sacrificial site. Being lowered by a rope into this cave and having contact with the outside world only through a small hole in its roof, 80 feet from the water's surface, puts things in perspective. Life depends only on a thin nylon rope. Diving 80 feet farther toward the bottom of the cave added to the excitement. Finding many human bones, skulls, and ancient artifacts used for sacrifices is the way to "feel" history. — Ivan Schuller, La Jolla, California

My ultimate workplace would be on a sunny beach. All I need is a lounge chair, a small table for a laptop computer, and a rum drink (garnished with an umbrella, of course). I would rum drink (garnished with an umbrella, of course). I would be sitting by a palm tree that stretches toward the transpa-ent blue waters of the sea, as if to suggest that I should be doing the same. — Paul Gewirtz, Hoboken, New Jersey [Editor's note: We assume Paul is taking a break here with a "convertee"?] "coworker"?]



Ludwig Schulze of New York, New York, clearly believes in preparing for anything the road may throw his way. A few highlights: "Earplugs: to minimize the noise from my own snoring. Shoe-shine sponge: for a quick cleaning before a meeting. Apple iPod: all of my music. I'm in the bad habit of forgetting my iPod after waking up from a long flight (too much Tylenol PM?), so this is my third. To the people who have been lucky enough to find the last two, I hope you're enjoying my musical taste. FujiFilm Universal Adapter: the most universal one I've found. It works on every continent and in most every modern outlet. Laptop Cable Lock: by PC Guardian, for hotel rooms without a safe. My Nokia Bluetooth headset: allows me to talk hands-free with my wife while jogging to my flight."





Trying to tell someone you travel the world photographing hippos in zoos for a living is like trying to explain why you like to wear your underwear on the outside of your clothing. It's just not a normal thing to say. When I first accepted this job, my mother thought I was nuts. Ahead of me lay some 33 countries, five continents, almost 100 zoos, and 283 hippos. As I racked up airline miles abroad, I quickly lost all [sense] of who I was before this adventure began, and I became known solely as "the hippo girl." — Sarah Galbraith, Centre Island, New York





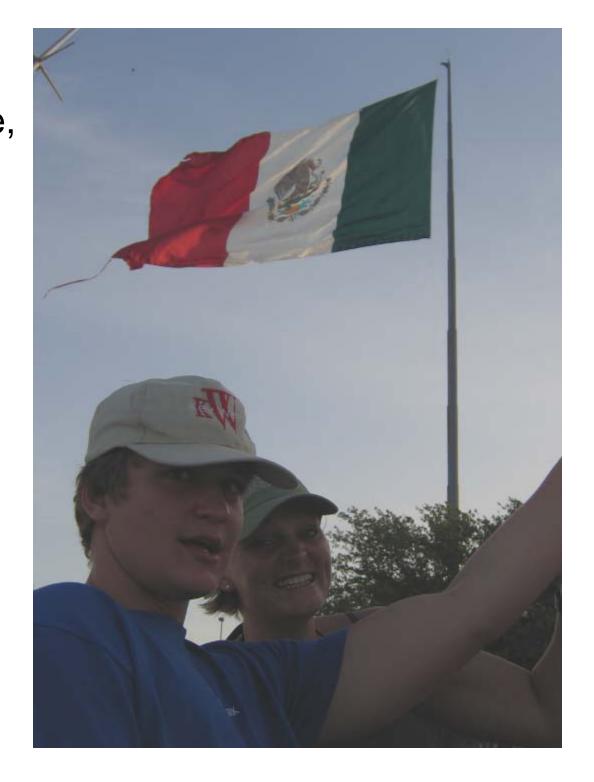






Whale shark

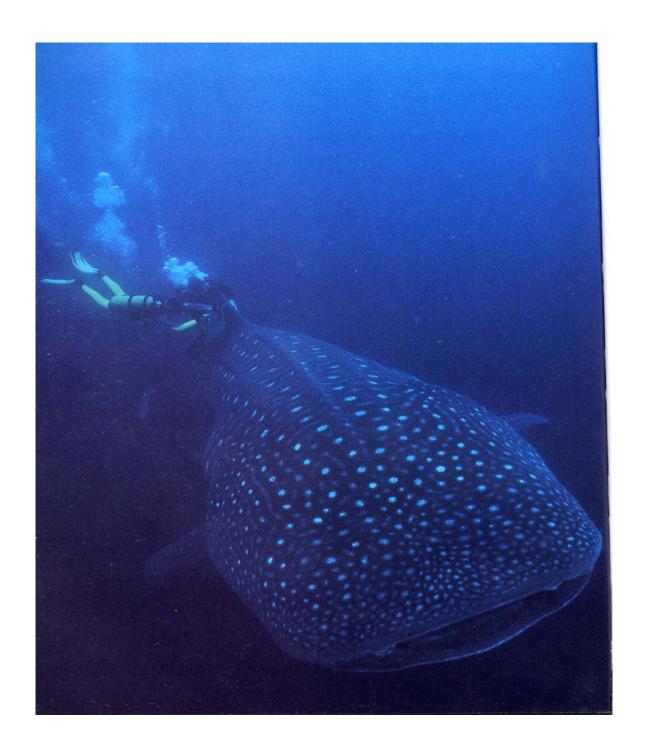
Pete, Ivan, Dan, Jaime, Manuela, Travis and Lisa (from San Diego), the mom and her daughter (that Ivan chewed out), and the crew leave from the marina under the **GIANT Mexican flag** that you can see from everywhere in Cancun to search for whale sharks.



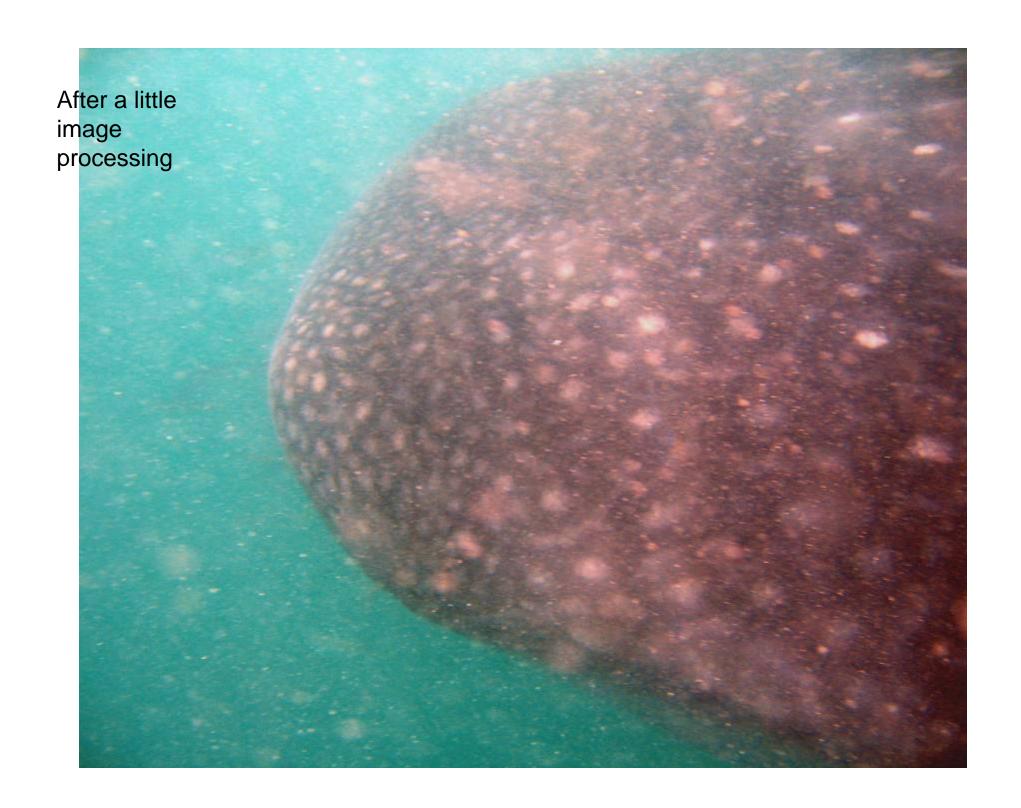






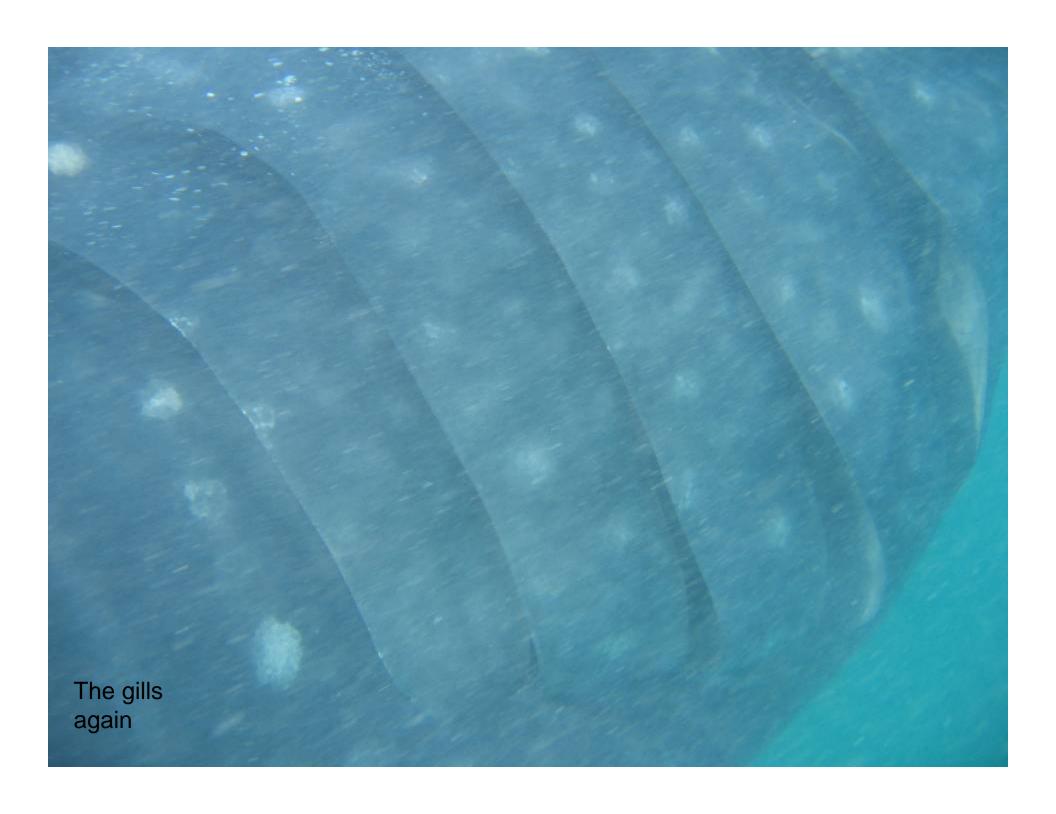




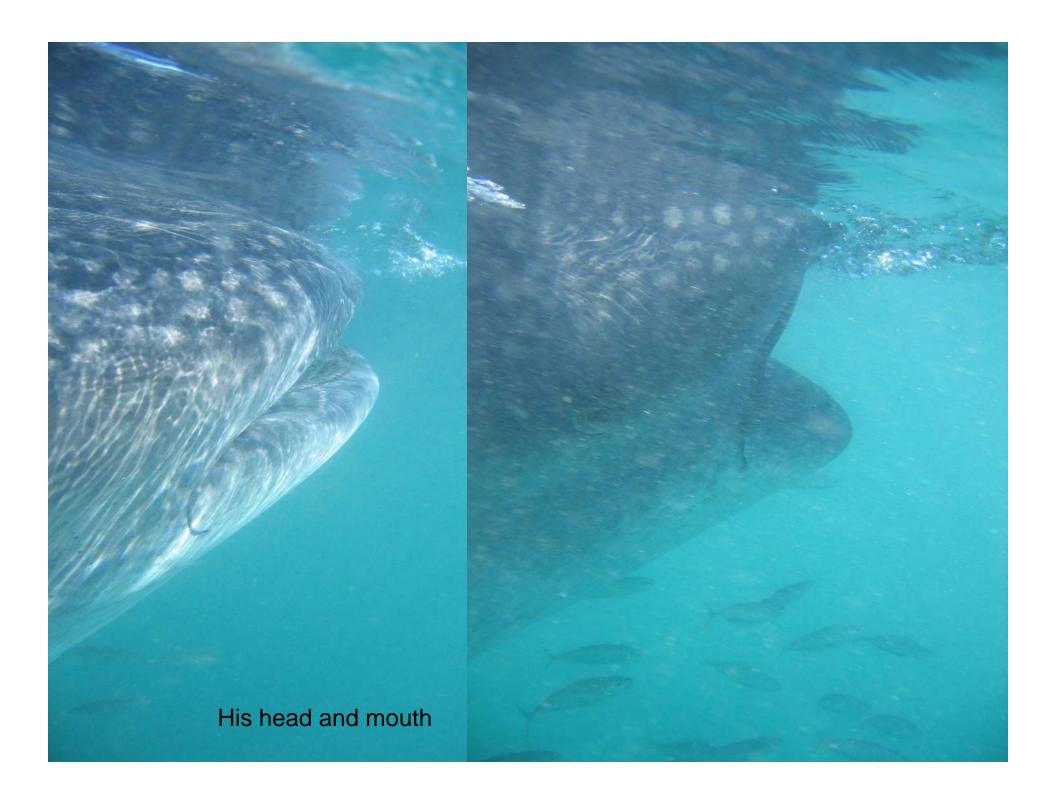


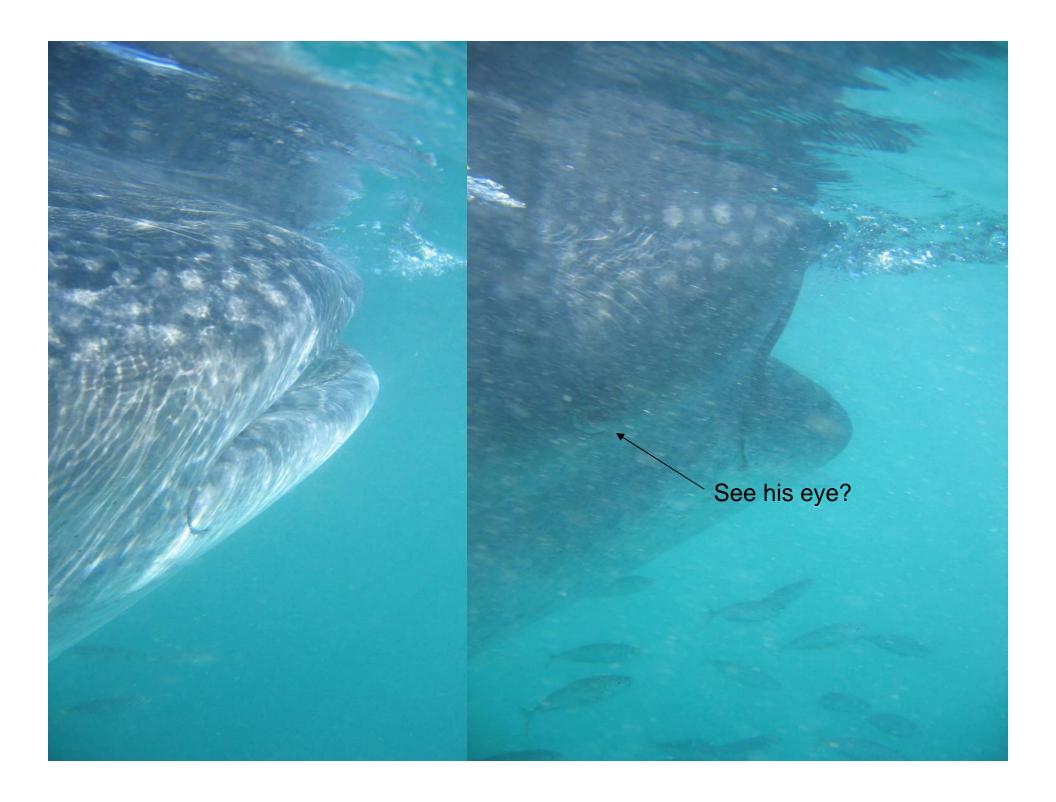


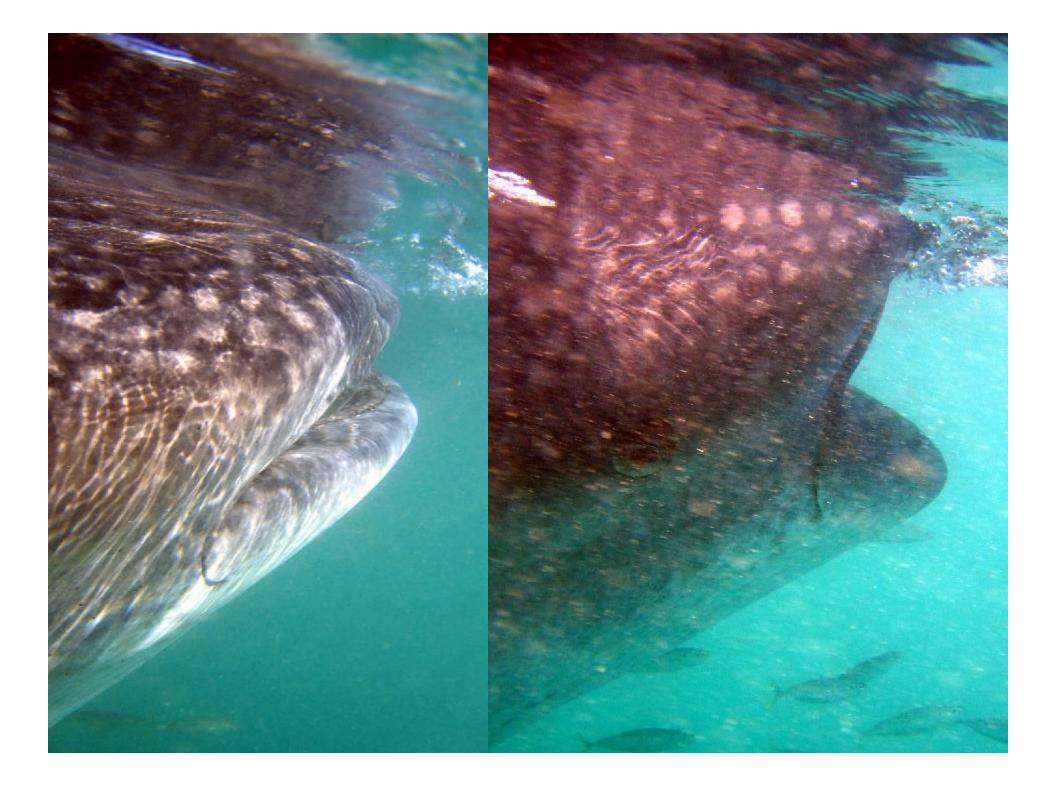


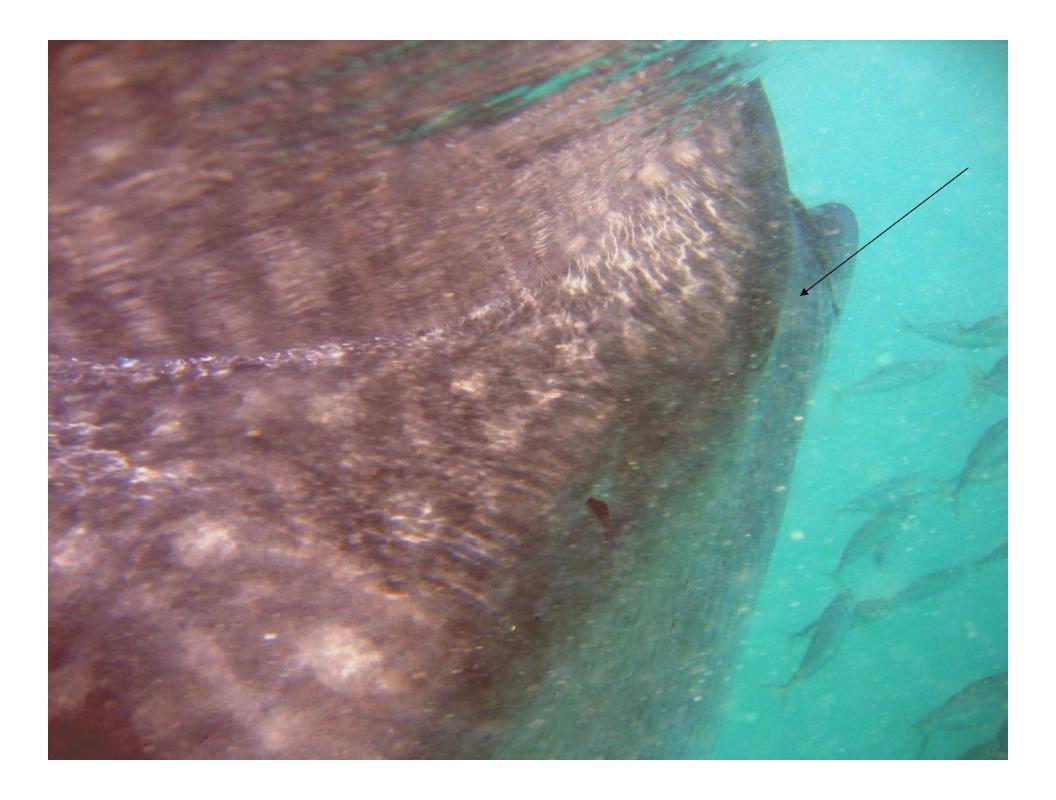










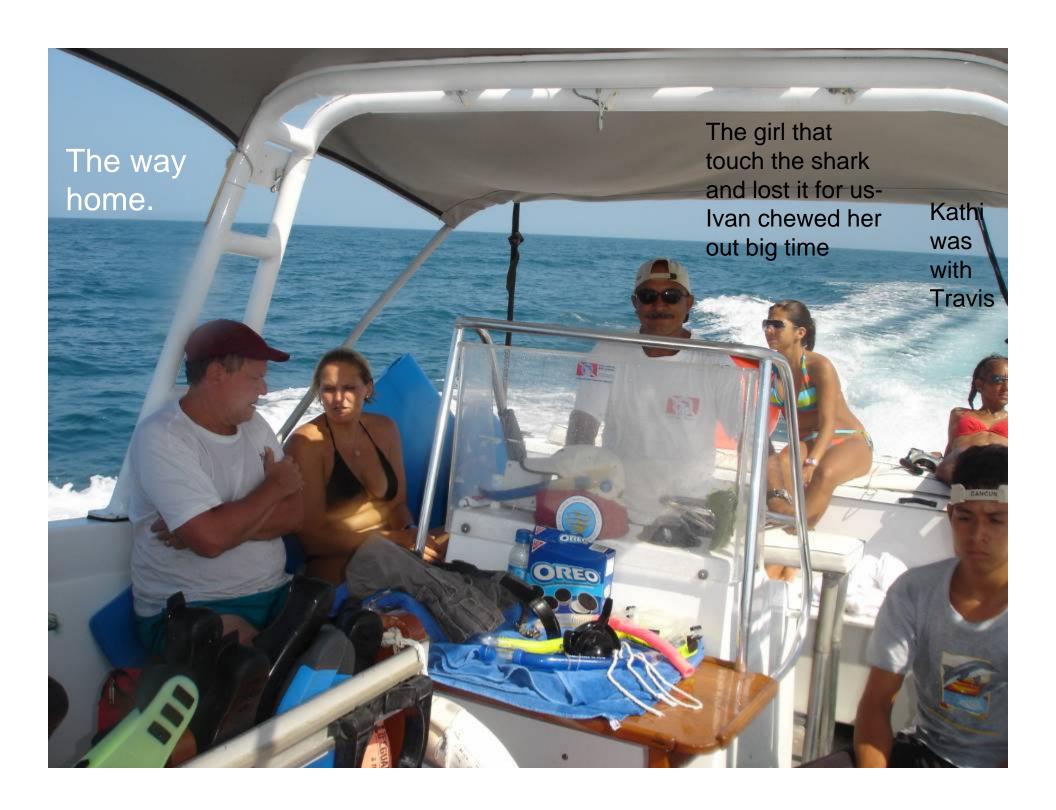


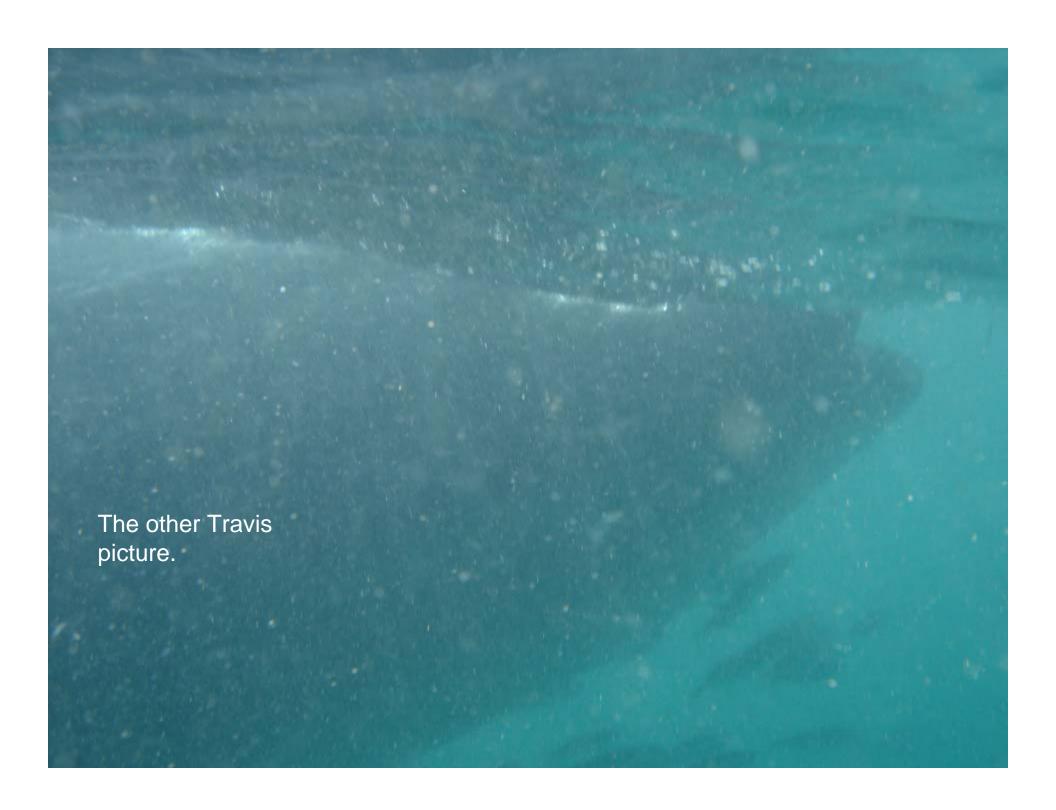


His tail, one of the two pictures Travis took.













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3m STOP ABT 32 ABT 32 STOP STOP	
天候 Air temp: 40 溫度	
浪 Wave: <i>low</i> ,/m m 翔汐 Tide:	
能見度 Visibility: <u>Excellent</u> 水流 Current:	
潛水目的 Purpose of dive	
領隊或同伴: Dive leader or companion: TSAY 〉	1-C
附記 Additional details: - Very Cloudy	
- Coral fully destroyed. - Presamably due to graphing Rachel 2 weeks before. Very little fish, lots of	
Sea urchius,	1

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潛水次數 Dive No: 潛水地點: Location: 日期 Date 年 田 Ш 郡



潛水次數 Dive No: 潛水地點: Location: 日期 Date 田 Ш 郡



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交通資訊

小門嶼 Hsiaomen Island Trans-Ocean Bridge aomen Geology Museum Hsiyu Hsiang 澎湖畜產試驗所 合界口 口 漁翁島遊客 ○大義宮 Ta-yi Temple 【西嶼小檔案】 全市面積:18.7148平方公里 大池口(行政區劃:11個村 Erkan Old residence area ○可□冰城 (Chan Family ancient housing) 人口數:約八千五百人 二炭聚落(陳氏古厝) [Hsiyu Hsiang Data] Total Area: 18.7148 sq. km. Administrative division: 11 villages Population Approx.: 8,500 赤馬口の赤葉桃殿 Neian Recreational Area 東台古堡 〇 ▲ 島山 西製西台 Western Fortress on Hsiyu (west island) 西嶼燈塔 Lighthouse of Hsiyu Island

嶼鄉位於澎湖本島(包括馬公市、 湖西鄉、白沙鄉)的西側,藉由跨 海大橋連接白沙鄉。西嶼鄉包含漁翁島 及小門嶼,多為玄武岩所構成,地形多 為緩起伏的玄武岩方山地形,海岸是西 嶼鄉所擁有的天然資源。

西嶼的開發,始於元朝設置巡檢司開 始,「西嶼頭」亦含括在內,隸屬於泉 州晉江縣。過去先民航行到澎湖來,必 須循本島航行,由於西流海面的漩渦流 域海象較不穩,因此,先民多經西嶼頭 後,停靠內垵的沙灣,拜祭觀音、媽 祖, 祈求航行的平安, 添加淡水並詢問 水性,之後,才發帆駛入馬公港,或是 轉駛台灣。

siyu Hsiang is situated to the west of Penghu proper (including Makung City, Huhsi Hsiang and Paisha Hsiang). It is connected to Paisha Hsiang via the Trans-Ocean Bridge. Hsiyu Hsiang includes Yuweng and Hsiaomen Islands. It consists mainly of basalt rock, with a rising and falling topography of basalt hills. The coastline is one of Hsiyu natural resources.

The development of Hsiyu was begun during the Yuan dynasty with the establishment of a military patrol station. It fell under the jurisdiction of Quanzhou Jinjiang county in Fujian province. When the early settlers reached Penghu they had to travel along the island due to the whirlpools created by the westward current. After having rounded the island, the settlers would therefore stop at the sandy bay of Neian to pray to Kuanyin and Matsu for safe continuation of the journey. They would also stock up on fresh water and make inquiries into water flow before setting sail to continue to Makung Harbor or further on to Taiwan.











Fernando de Noronha













Linguado Bothus sp

Coió ou Falso-voador Dactylopterus volitans





Peixe-agulha Hemiramphus sp



Trombeta

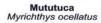
Aulostomus maculatus

Barracuda Sphyraena barracuda













Moréia-verde ou Caramuru Gymnothorax funebris



Raia-xita Aetobatus narinari

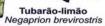


Raia-manteiga Dasyatis americana



Raia-manta Manta birostris







Octopus sp

Tubarão-lixa









Chelonia mydas



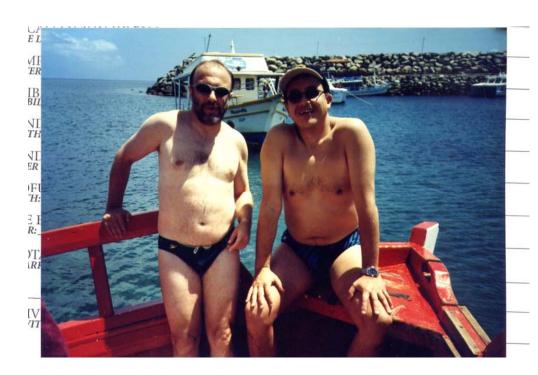
Lagosta Panullirus sp



FECHA: 8/12/2000 - NOITE BUCEO No DIVE NUMBER: 3
LOCALIZACIÓN DE BUCEO: P. de NORONHA SITIO DE BUCEO PORTO - RECEDENCE DIVENTE:
TEMPERATURA DEL AGUA: WATER TEMP:
VISIBILIDAD: 3m
CONDICIONES DEL TIEMPO: BOND TO TO THE WEATHER CONDITION:
CONDICIONES DEL AGUA: WATER CONDITION:
PROFUNDIDAD: 15 m TIEMPO DE FONDO 35 WY U BOTTON TIME:
AIRE ENTRADA: IN AIR: AIRE SALIDA: AIR OUT:
ANOTACIONES: Rech Die, Wary string, lobsters, LITE HIDREN
OCTOPUS, PRAYING CRAB!
ACTIVIDADES: DAND PVARBAS
Aguas Claras
SIGNATURE

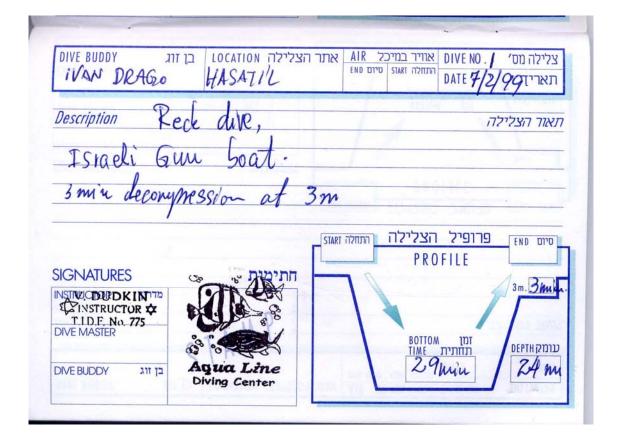


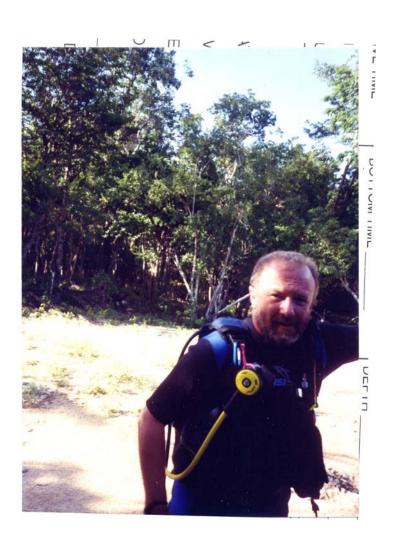


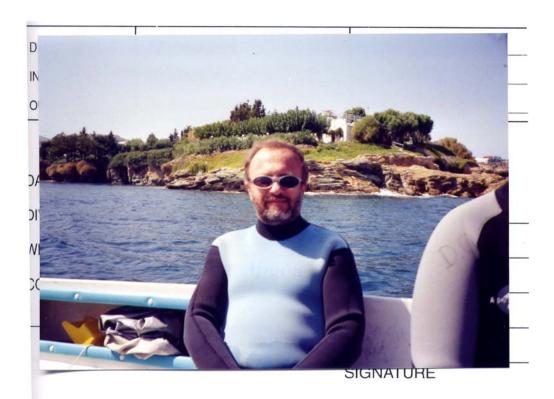


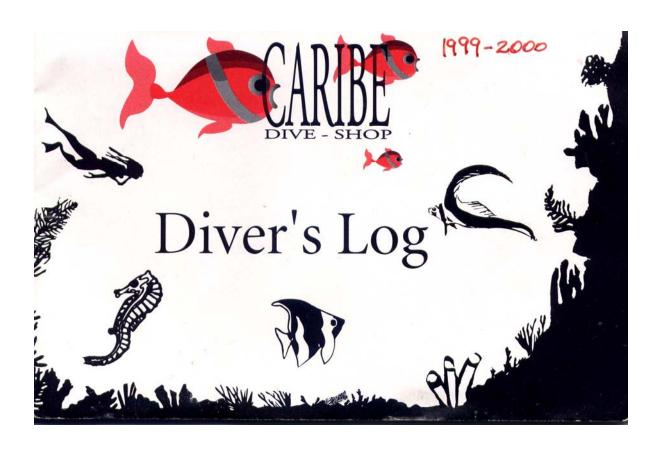














INFORMACIÓN Y RESERVAS



CARTAGENA DE INDIAS

Calle del Torno, Barrio San Diego Cartagena de Indias Colombia. Teléfono: (57)(5) 664 6070 Fax: (57)(5) 664 7010

SANTAFÉ DE BOGOTA

Carrera 13 #82 - 74 Piso 2 Teléfono (57)(1) 636 3230 Fax: (57)(1) 256 8841

NATIONAL TOLL FREE: 9800 - 53233 E-Mail: santaclara@ctgred.net.co

FECHA: 11/3/99	BUCEO N° 2
LOCALIZACIÓN DE BUCEO: CALTAGEN	COLOMBIA SITIO DE BUCEO PSA Majagua
TEMPERATURA DEL AGUA: water temp:	
VISIBILIDAD: visibility:	The second secon
CONDICIONES DEL TIEMPO: WEATHER CONDITION:	CIDIDA
CONDICIONES DEL AGUA:	AKIKH TO THE TOTAL OF THE PARTY
PROFUNDIDAD: 40 ft	TIEMPO DE FONDO 40 Un u
AIRE ENTRADA: 2800	AIRE SALIDA: 1/00
ANOTACIONES: Saw by crab, Full	ancular file blad - white dots beautiful
Coral.	ARIBA
ACTIVIDADES:	HOTEL CARIBE LOCAL # 9 TELS. (57-5) 6653517 6650155 Ext. 8005 - FAX: (57-5) 6653707
	CARTAGENA - COLOMBIA
SIGNATURE	STAMP



O Mapa do Tesouro



Ilha de Fernando de Noronha

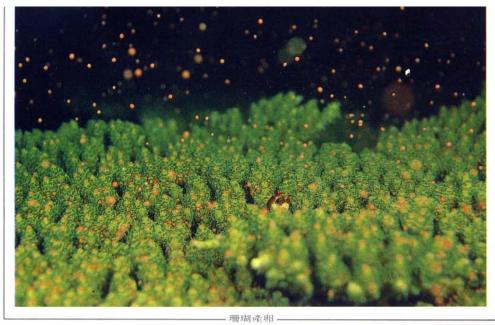
Dicas de Fernando de Noronha

- responsabiliza por passeios opcionais realizados por terceiros.
- Esteja pronto em frente ao local de hospedagem, esperando nosso veículo para início do passeio, no horário marcado.
- Cancelamentos com direito a devolução integral deverão ser feitos com 24 horas de antecedência. com 12 horas de antecedência a devolução será de 50% e com menos de 12 horas não haverá devolução.
- Todos os nossos passeios os controlmentos de guia con controlmentos de controlmentos de controlmentos de controlmentos de guia contr
 - Aconselhamos o uso de tênis e protetor solar.
 - Quem compra o passeio ao MIRANTE DOS GOLFINHOS estará contribuindo com o projeto Golfinho Rotador, pois parte da renda deste é destinada ao Centro Golfinho de Pesquisas.
 - Cancelamento e remarcações de passeios só poderão ser feitos através de nossa central de atendimento, e nunca com os guias locais.

ATALAIA EMPREENDIMENTOS TURISTICOS Ltda. Alameda Boldró, s/n Fernando de Noronha - PE CEP: 33, 999-00 Cabra Postal 65 PABX:(81)619.1328









COZUMEL ISLAND

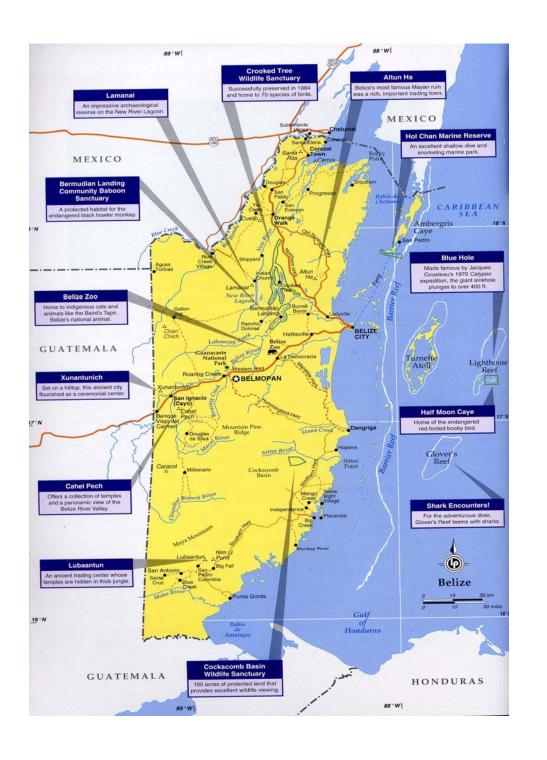


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Belize



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GLOVER'S REEF & TURNEFFE ATOLL



23 Blue Hole

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 reason-



The combination of shallow reef and deep water makes the Blue Hole great for both diving and snorkeling.





Large stalactities in a dimly lit cavern are sculptured by thousands of years of geological change.

ably 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, comparitive 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 arious urchins occupy the shallow lagoon habitat.



CHILE







