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TURKS & CAICOS ISLANDS

NATIONAL REPRESENTATIVE / REPRESENTANTE NACIONAL

MAURICE HANSHELL



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WESTERN ATLANTIC TURTLE SYMPOSIUM San José, Costa Rica, July 1983

NATIONAL REPORT FOR THE COUNTRY OF

TURKS & CAICOS ISLANDS

NATIONAL REPORT PRESENTED BY

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NATIONAL REPORT PREPARED BY

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With a grant from the U.S. National Marine Fisheries Service, WIDECAST has digitized the databases and proceedings of the **Western Atlantic Turtle Symposium (WATS)** with the hope that the revitalized documents might provide a useful historical context for contemporary sea turtle management and conservation efforts in the Western Atlantic Region.

With the stated objective of serving "as a starting point for the identification of critical areas where it will be necessary to concentrate all efforts in the future", the first Western Atlantic Turtle Symposium convened in Costa Rica (17-22 July 1983), and the second in Puerto Rico four years later (12-16 October 1987). WATS I featured National Reports from 43 political jurisdictions; 37 presented at WATS II.

WATS I opened with these words: "The talks which we started today have the multiple purpose of bringing our knowledge up to date about the biological peculiarities of the marine turtle populations of the western Atlantic; to know and analyse the scope of the National Reports prepared by the scientific and technical personnel of more than thirty nations of the region; to consider options for the orderly management of marine turtle populations; and in general to provide an adequate forum for the exchange of experiences among scientists, administrators, and individuals interested in making contributions for the preservation of this important natural resource."

A quarter-century has passed, and the results of these historic meetings have been lost to science and to a new generation of managers and conservationists. Their unique importance in providing baseline data remains unrecognized, and their potential as a "starting point" is neither known nor appreciated.

The proceedings document what was known at the time concerning the status and distribution of nesting and foraging habitat, population size and trend, mortality factors, official statistics on exploitation and trade, estimated incidental catch, employment dependent on turtles, mariculture operations, public and private institutions concerned with conservation and use, legal aspects (e.g. regulations, enforcement, protected areas), and active research projects. In most cases it was the first time a national sea turtle assessment had been conducted.

Despite the potential value of this information to agencies responsible for conducting stock assessments, monitoring recovery trends, and safeguarding critical habitat in the 21st century, the hand-written National Reports, largely illegible in the published proceedings, have slipped into obscurity. To help ensure the legacy of these symposia, we have digitized the entire proceedings, including the National Reports, plenary presentations and panels, and annotated bibliographies of both meetings, and posted them online at http://www.widecast.org/What/RegionalPrograms.html.

Each article has been scanned from the original document. Errors in the scan have been corrected; however, to be true to the original content (as closely as we can discern it), potential errors of content have not been corrected. This article should be cited:

Fletemeyer, J. 1984. <u>National Report for the Turks & Caicos</u>, pp.409-422. *In*: Bacon, P., F. Berry, K. Bjorndal, H. Hirth, L. Ogren and M. Weber (Editors), Proceedings of the First Western Atlantic Turtle Symposium, 17-22 July 1983, San José, Costa Rica. Volume III: The National Reports. RSMAS Printing, Miami.

Karen L. Eckert WIDECAST Executive Director June 2009

COUNTRY: TURKS & CAICOS ISLANDS

INTRODUCTION

Beginning 7 July 1982 a seven-day sea turtle socio-economic and nesting survey study of the Turks and Caicos Islands was conducted. The purpose of this study was to collect data to complete a national report of this area for the Western Atlantic Turtle Symposium (W.A.T.S.) to be held in 1983 in San José, Costa Pica. The data for the report was collected using the following objectives as a guideline.

- 1. Conduct surveys of all the marine shoreline within the British territory known as the Turks and Caicos Islands.
 - a. Record the types of shoreline present for the purpose of recording actual or potential sea turtle nesting beaches (so that subsequent surveys can be more time and cost-effective), and to document the kinds and amount of shoreline throughout the area.
 - b. Record all signs of sea turtle tracks and nests or nesting beaches for the purpose of developing a comprehensive index, of the extent of sea turtle nesting activity, including updated data on prior known concentrations, determination of extent of dispersed nesting activity, and determination of any prior unrecorded nesting sites.
- 2. Compile data of all kinds to determine the status of sea turtle populations.
- 3. Review present conservation and management programs related to sea turtles
- 4. Determine socio-economic importance of sea turtles.
- 5. Make recommendations to help promote the survival status sea turtle populations inhabiting the territorial waters of the Islands.

BACKGROUND

General Geographic Description of the Turks and Caicos Islands

The Turks and Caicos Islands represent a British Crown Colony. The colony consists of two groups of islands at the southern extremity of the Bahamas chain lying between 21° and 22° North and 71° and 72° West (refer to Fig. 1).

The Turks and Caicos Islands consist of eight inhabited islands and many uninhabited islands. These islands have a total land area of 166 square miles; South Caicos and Middle Caicos have the largest land areas.

Population estimates for these islands vary, but the 1970 census reveals that it is 5,657 (Sadler 5:2). During, the last decade or so the populations of these islands has been declining, due to primarily the emigration of people to Freeport and other areas of the Bahama Islands. The breakdown of the 1970 census is as follows:

Grand Turk	2,335	Kew	290
Salt Cay	350	Whitby	52
Conch Car	155	Sandy Point	64
Bambarra	123	Blue Hills	312
Lorimers	102	The Bight	114
Bottle Creek	601	Five Rays	8
South Caicos	1,032		

The Turks and Caicos Islands may be considered part of the Bahamas. In terms of terrain and vegetation these islands are comparable to Great Inagua and Mayaguana. The drier islands of Grand Turk, Salt Cay. South Caicos and East Caicos resemble great Inagua; Middle Caicos. North Caicos and Providenciales resemble Mayaguana. The latter has sufficient rainfall to support a moderate state of coppice vegetation.

Coastline and Offshore Areas

The coastline of the Turks and Caicos Islands varies greatly. On the north side there are long stretches of moderate to high-energy beaches. Typically these beaches have a moderately sloping beach profile which is usually well vegetated about 10 meters above the sigh tide lire. The vegetation consists of sea grapes, saltbush, purslane, beach morning glory and buttonwood. Similar but much shorter beaches are found on many of small, offshore cays located to the east and south.

Laboratory analyses of sand collected from many of the beaches reveal that the sands are carbonate it origin. The sand is usually medium grain and well-sorted. However, a few beaches have a few beaches have predominately fine-grained sediments. The color, according to Menzel's color scheme is white to light tan.

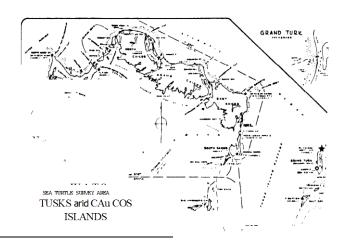
In addition to long stretches of sandy beach there are areas of coastline on the windward side of the islands that are extremely rocky. Well-stratified sandstone areas have been exposed by wind and hydraulic erosional forces.

A completely different description is applied to much of the southern coastline. Here vast communities of mangrove are common. Extensive tidal swamps with long meandering tidal creeks sometimes stretch more then 4 kilometers inland.

Only Middleton Coy does not fit the above description. This .5 kilometer island apparently was built iron the gradual accumulation of conch shells which fishermen have left for countless decades (Hodgkins, personal communication).

The offshore areas bordering the Turks end Caicos Islands are quite diverse. On the south sides of many of the islands vast expanses of shallow-water tidal flats predominate. In most cases, the water is about one meter deep and grass beds (consisting of *Thalassia* and *Syringodium*) occupy the bottom. Grass vegetation is common on the bottom of most of the tidal creeks; however, some of the creek bottom has not been colonized by vegetation because of extensive siltation. Much of this exposed bottom is blanketed by jellyfish.

Figure 1. Turks and Caicos Islands – W.A.T.S. National Report Study Area.¹



¹ Editor's note (2009): Maps and figures are reprinted exactly as they appear in the original WATS I Proceedings (Bacon et al. 1984); we regret the poor quality exhibited in some cases.

Farther south is the Caicos bank which extends 20 to 40 miles south of the island chain. On the windward side, of many islands are spectacular fringing reefs which range between 5 meters and 20 meters in depth, Here there are rich and spectacular populations of reef fish and hard corals. Occasionally, farther away from shore some "patch" reefs may be found.

One unusual submarine feature worth mentioning is the 'Ocean Hole.' A dive and two aerial surveys of this feature (conducted during the July 1982 survey) revealed that the hole is about 1 kilometer in diameter. The rim is located in about 4 meters of water and then descends perhaps a hundred meters or more almost straight to the bottom. The water is extremely turbid with visibility of 10 meters at the surface dropping down to almost nil at 80 meters. Although there are large populations of reef and pelagic fish as well as large numbers of green sea turtles (mainly juveniles) in the Ocean Hole, there is a conspicuous absence of hard corals.

A History of Sea Turtles in the Turks and Caicos Islands

Green sea turtles were an important factor it the colonization of the American tropics because they were abundant, easy to keep alive for months, and represented an important protein source. There are reports from the time of the Spanish exploration until the late nineteenth century of ships stopping to replenish their stores with water and turtles in the Turks and Caicos Islands. Unfortunately the number of turtles taken and the relative abundance of turtles is unknown. The earliest record on this subject is from 1906. During that year the Turks exported \$3,538.00 worth of turtle shell (Sadler. 1972:37). In 1907, the local sea turtle industry reached its peak and during the same year the government passed the Turtle Protection Ordinance, which protected turtles from poaching by fishermen from the Bahamas and other nearby islands. In 1909, the Caicos Development Company leased Chalk Sound for raising and canning turtles. Although the sea turtle industry became quite large during the first decade of this century, it gradually declined to nil by 1930. Although the reasons for this decline are unknown, presumably a decline in the population of these animals and a lessening demand for turtle products were responsible.

Although there has never been a resurgence in the turtle industry, there is still a keen interest in these animals among the local island population. There is a rich oral tradition in which the turtle is frequently mentioned. Today, there are only a few "halftime" turtle fishermen on the island and perhaps about seventy fishermen who will tale a turtle where the opportunity presents itself. Virtually all turtles are consumed locally and can be found it markets only sporadically but on a year-round basis.

Based on the July 1981 survey, it is estimated that about 850 turtles are caught annually. Most of these turtles are juvenile green sea turtles which weigh between two and eight kg. Some hawksbills (juvenile to adult size) are taken incidentally in the lobster season and occasionally a loggerhead or an adult green will be taken when encountered by fishermen on deepwater reefs. Based on the results of the survey, fishing pressure at this level does not seem to pose a serious threat to the survival of sea turtle populations in the waters off the Turks and Caicos Islands.

Status of the Knowledge of See Turtles

Very little is known abut the sea turtle populations that inhabit the Turks and Caicos Islands. This is due to the lack of any government records and to the lack of systematic studies of these animals. What is known comes from two sources: incidental observations of local divers and fishermen and a survey conducted by Anne Meylan in 1979 (NMFS Technical Memorandum, 1979, 35-36).

Information from these two sources indicates that there is no concentrated nesting by any species in the islands. The July 1983 survey confirmed this belief; however, a few beaches were found on which a large number of crawls could be identified. Most of these crawls belonged to hawksbill sea turtles but a few belonged to green sea turtles. No crawls belonging to leatherbacks or loggerheads were observed. However, David Winn (personal communication), one of the most active turtle fishermen in the area, is certain that loggerhead sea turtles do occasionally nest there. He has also observed turtles nesting in the daytime!

There are some reports of "Bastard" and 'Mulatto" turtles in the Turks and Caicos Islands, but the reports are conflicting. Meylan also reported mention of "Mulatto" turtles during her 1979 survey. It is

probable that these are "folk" names for loggerheads. However, the possibility that these names might be used to refer to "ridleys" cannot be completely discounted.

Local fishermen also mention a large population of juvenile green sea turtles present in the tidal creeks on the south side of Middle Caicos and North Caicos Islands. Both aerial and boat surveys confirmed this belief. During the 1982 observation, a large number of juvenile green sea turtles in the channels were seen in most of these creeks (refer to Table 7A). Some sightings of juvenile greens were made almost four kilometers inland. A special collecting survey that involved capturing a representative sample of these animals indicated that they were in the 3 kg to 10 kg size range. Smaller and larger greens were not encountered in the creeks during these surveys. A stomach content analysis made from a selected number of juvenile greens revealed that these animals were subsisting on turtle grass (*Thalassia*) although other materials were present but which could net be positively identified.

Larger greens as well as a wide size range of hawksbills were observed in deep water Most sightings of hawksbills were made on fringing and patch reefs where coral was abundant. Only one Juvenile was encountered on a grass bed. During the aerial surveys only one loggerhead see turtle could be positively identified. This animal was a juvenile swimming over a deep-water reef in about 100 meters of water.

A larger number of green sea turtles end one hawksbill were observed in the Ocean Hole during two aerial surveys. All of these sightings were of juvenile animals. Meylan also reports sighting some large green turtles in the Ocean Hole. Local interviews with native fishermen indicated that a large number of turtles have been attracted to this area.

Information on seasonality and migratory patterns of turtles for this is nonexistent. However, it is possible to say with same degree of confidence that nesting occurs between the months of April and August with the heaviest nesting month being May. Some fishermen report that adult greens are more common in the spring and that hawksbills of all ages and juvenile greens are seen year-round. There have been no observations of hatchings. Meylan reports an, interview with a local fisheries officer who has observed a seasonal movement of leatherbacks past Drum Point in East Caicos. No collaborating observations of this nature could be found.

METHODS

To obtain the most accurate and comprehensive data on sea turtles and to prepare the national report for the Turks and Caicos Islands, this investigator employed five different strategies: (1) beach and pelagic aerial surveys, (2) visits to many of the beaches for the purpose of 'ground truthing', (3) researching governmental records, (4) conducting personal interviews with local fishermen, and (5) participating in turtle fishing with native fishermen.

<u>Aerial Surveys:</u> A total of 9.1 hours were spent conducting aerial surveys. A Cessna 177 was used to conduct these surveys. The entire coastline of the Turks and Caicos Islands was flown over at least once. These Surveys were conducted according to the method described in the <u>Manual of Sea Turtle Research</u> and <u>Conservation Techniques</u> (pp. 43-64). Before each flight, each large island to be surveyed was divided into zones which were usually defined by a major geomorphological coastal feature (i.e., the mouth of an estuary or a large rock easily identified on a chart) or some kind of human architecture (i.e., an airstrip or marina).

In most cases the surveys were made at an altitude of 100 feet and at are airspeed of 80 KTS, and in all cases flights were made so that the observer could see the coastline on his right. Pelagic surveys ware conducted in the same manner but the elevation was increased to 400 feet and the air speed was increased to 120 KTS.

The pilot and the recorder were instructed to watch for turtles over open water. When a nest or turtle was identified, it was plotted on a chart. Using a small hand-held tape recorder, a record was made of the time of the sighting, the location, and the species and size of the turtle. The zone in which each nest or

turtle was observed also was recorded. It was possible to record all of this data in the plane because of the small number of turtles and nests which were observed on each of the survey flights.

<u>Ground Truthing</u>: Visits were made to many of the beaches where turtle nests had been observed from the air. Most of the visits were made by boat, and the observers walked the entire length of the beaches. In addition to recording nesting activity and other features of interest (i.e., vegetation type), sand samples were collected for later analysis and comparison.

<u>Research of Local Records</u>: One day was spent on Grand Caicos talking with government officials about local information on sea turtles (i.e., laws, local statutes, records of catches).

<u>Interviews with Fishers</u>: Four local fishermen were interviewed to gain some additional useful information for this report. Interviews were conducted according to the Questionnaire found in the <u>Manual</u> of Sea Turtle Research and Conservation Techniques (pp. 81-91).

<u>Turtle Fishing</u>: One day was spent turtle fishing. This involved actually participating in a turtle hunt and provided a great deal of useful information on size, numbers, and techniques of turtle fishing in the Turks and Caicos Islands.

RECOMMENDATIONS

Based on the findings of the 1982 survey, the following recommendations would make a significant contribution to the survival of the sea turtles inhabiting the waters of the Turks and Caicos Islands.

- 1. Actively enforce the marine turtle protection act.
- 2. Prohibit the taking of hawksbill sea turtles during lobster season.
- 3. Restrict the taking of sea turtles except for local consumption.
- 4. Establish major nesting beaches as natural marine sanctuaries and restrict pedestrian traffic on the sanctuaries from April I through September.
- 5. Establish artificial hatchery for relocating endangered nests using the <u>W.A.T.S. Sea Turtle</u> <u>Conservation Manual</u> as a guideline.
- 6. Establish a "headstart" program aimed at revitalizing local sea turtle populations.
- Develop a public education program for the Turks and Caicos Islands involving the government, local hotels, library, public school system and the PRIDE Foundation, which stresses the need to manage the sea turtle population so that its continued survival can be guaranteed.
- 8. Continue the tagging program initiated in July 1982 and intensify the research effort to learn more about the natural history (by species) of turtles inhabiting the area.

TABLE 1. GEOGRAPHIC INVENTORY	
Length of Coastline*	212.2 Km
Km ² of Continental Shelf Area	
Seaward Extent of Jurisdictions	
Territorial Sea	321.9 Km**
Extended Economic Zone	321.9 Km**
Fisheries Jurisdiction	321.9 Km**
Other (Describe)	

* Coastline length is the measurement of the national seaward boundary of a country; i.e., the distance from border to border for a coastal country and the distance around an island country.

** *Editor's note (2009):* Values in the original National Report were listed in miles (200). The Editor converted them to kilometers.

		Km of Shoreline	
Marine Shoreline Characteristics*	Undeveloped	Developed**	Total
1. Sand Beach (Total)	42.5	10.0	52.5
A. High Energy	22.0	6.0	28.0
B. Low Energy	20.5	4.0	24.5
2. Reef (exposed)	10.0	0.0	10.0
3. Rocks	15.0	2.0	17.0
4. Cliffs	0.0	0.0	0.0
5. Vegetation (Total)	100.2	***0.5	100.7
A. Vines	0.0	0.0	0.0
B. Grasses	0.0	0.0	0.0
C. Mangroves	100.2	0.0	100.2
D. Coconut Trees	0.0	0.5	0.5
E. Other Trees or Shrubs	0.0	0.0	0.0
F. Marshes	0.0	0.0	0.0
6. Mouths of Lagoons, Rivers, Canals	30.0	1.5	31.5
7. Total Shoreline	***197.7	14.0	***211.7

TABLE 2. COASTAL HABITAT INVENTORY OF MARINE SHORELINE

* Refer to SEA TURTLE MANUAL (Aerial Survey)

** Human development or use (See MANUAL)

*** Editor's note (2009): Totals corrected from values listed in the original National Report to reflect accuracy in summed values

TABLE 2A. MARINE HABITAT INVENTORY OF BOTTOM TYPES (supplementary page)

Habitat Bottom Types	Km ² of Habitat	
	Inside 25m (shoreward)	Outside 25m (shoreward)
1. Sand	375	900
2. Mud	225	?
3. Rocks	25	?
4. Submerged Vegetation	250	300-900
5. Reefs (Total)	200	300-400
A. Fringing Reefs	80	250
B. Patch Reefs	20	50
6. Other		

TABLE 3. NESTING BEACH INVENTORY

List beaches in geographic sequence. Provide additional information on following page.

Nai	me of Beach	Length in meters	Species Nesting (use abbreviations)*	Months of Recorded Nesting
1.	Big Ambergris Cay	600	Cm ? **, E	April, May, June, July, August
2.	Big Sand Cay	900	E	April, May, June, July, August
3.	Bush Cay	100	Ε?	
4.	Cotton Cay	100	Ε?	
5.	East Caicos Island	8,000	Cc, Cm, E	April, May, June, July, August
6.	East Cay	210	E	April, May, June, July, August
7.	Fish Cay	300	Cm ?, E	April, May, June, July, August

TABLE 3. NESTING BEACH INVENTORY

List beaches in geographic sequence. Provide additional information on following page.

Name of Beach	Length	Species Nesting	Months of Recorded Nesting
	in meters	(USe	
	400	abbreviations)*	April May Jupa July August
3. French Cay	120	Cc ?, Cm, E	April, May, June, July, August
 Gibb Cay Grand Caicos Island 		Cm ?, E ?	
	6,000	Cc ?, Cm, E	Annil Mary Lung Luby Assessed
11. Grand Turk Island	2,500	Cc ?, Cm ?, E	April, May, June, July, August
2. Nighes Cay	300	Cc ?, Cm, E	April, May, June, July, August
13. Horse Cay	20	E?	
14. Little Ambergris Cay	1,200	Cm ?, E ?	
15. Long Cay (East Caicos)	400	E?	
6. North Caicos Island	1,500	Cc ?, Cm ?, E	April, May, June, July, August
17. Parrot Cay	1,400	Cc ?, Cm ?, E	April, May, June, July, August
18. Pine Cay	2,000	Cc ?, Cm, E	April, May, June, July, August
19. Providenciales	2,000	Cc ?, Cm ?, E	April, May, June, July, August
20. Salt Cay	900	Cc ?, Cm ?, E ?	
21. Sand Bore Cay	400	Cm ?, E ?	
22. Shot Cay	150	Cm ?, E ?	April, May, June, July, August
23. South Caicos Island	1,600	Cs, ?, Cm ?, E	April, May, June, July, August
24. Stubbs Cay	900	E	April, May, June, July, August
25. Water Cay	1,600	Cc ?, Cm ?, E	April, May, June, July, August
26. West Caicos Island	3,000	Cc ?, Cm, E	April, May, June, July, August
27. West Sand spit	350	Cc ?, Cm, E ?	
28. White Cay	50	E	April, May, June, July, August
Species*	Abbreviation		
Caretta caretta	Сс		
Chelonia mydas	Cm		
Dermochelys coriacea	D		
Eretmochelys imbricata	E		
Lepidochelys kempi	Lk		
_epidochelys olivacea	Lo		

TABLE 3A. NESTING BEACH INVENTORY (supplementary page)

Please give additional information about each nesting beach identified in Table 3. Include information on color of sand, particle size, beach profile, backbeach vegetation, artificial lighting, etc.

Refer to TABLE 3A.1 to 3A.21 for supplementary data on beaches.²

² *Editor's note (2009):* Original document included 24, 3A Supplemental Tables. However, three were duplicates and contained identical information; they were not included in the following list. The three duplicates include: Long Beach on East Caicos Island; East Cay Beach on East Cay; and Fish Cay Beach on Fish Cay.

TABLE 3A.1. Supplemental data on beaches		
Name of island	East Caicos Island	
Name of beach	Long Bay Beach	
Energy beach classification of beach	Moderate	
Description of sand characteristics	Medium to fine grain carbonate beach. Moderate profile with vegetation and dune.	
Level of human development and/or impact	Light	
Estimated nesting activity	Regular (< 5)	
General comments	One hawksbill (<i>Eretmochelys imbricata</i>) crawl observed on this beach. Other beaches may also have nesting but development on parts of the island limits this possibility.	

TABLE 3A.2. Supplemental data on beaches	
Name of island	East Cay
Name of beach	East Cay Beach
Energy beach classification of beach	Moderate
Description of sand characteristics	Carbonate, medium to fine grains.
Level of human development and/or impact	None
Estimated nesting activity	Regular (< 5)
General comments	Possible nesting on east end of cay.

TABLE 3A.3. Supplemental data on beaches	
Name of island	Fish Cay
Name of beach	Fish Cay Beach
Energy beach classification of beach	Moderate
Description of sand characteristics	Carbonate, medium to fine, well sorted grains.
Level of human development and/or impact	None
Estimated nesting activity	Major (> 5)
General comments	A minimum of eight hawksbill (<i>Eretmochelys imbricata</i>) crawls were observed and a number of old body pits. Moderate beach profile with vegetation and small sand dune in back. Probably the most important nesting beach in the area.

TABLE 3A.4. Supplemental data on beaches		
Name of island	Big Ambergris Cay	
Name of beach	NW Beach	
Energy beach classification of beach	Low	
Description of sand characteristics	White to tan, fine to medium grain well sorted carbonate.	
Level of human development and/or impact	Light	
Estimated nesting activity	Regular (< 5)	
General comments	Low profile, highly vegetated beach suitable for nesting.	
	One nest and one crawl observed during aerial survey;	
	fishing camp on N.E. side of cay.	

TABLE 3A.5. Supplemental data on beaches	
Big Sand Cay	
Big Sand Cay Beach	
Low	

Description of sand characteristics	Tan, fine to medium grains, well-sorted, polished carbonate material.
Level of human development and/or impact	Light
Estimated nesting activity	Regular (< 5)
General comments	Although nests were not observed during aerial survey, this is an ideal beach for nesting. Moderate profile and well vegetated.

TABLE 3A.6. Supplemental data on beaches	
Name of island	Cotton Cay
Name of beach	Cotton Cay Beach
Energy beach classification of beach	Low
Description of sand characteristics	Carbonate, medium to fine grains.
Level of human development and/or impact	None
Estimated nesting activity	
General comments	Although no crawl observed during aerial survey, the lack of human habitation makes it a suitable beach for nesting. Also, two hawksbills (<i>Eretmochelys imbricata</i>) were observed just offshore.

TABLE 3A.7. Supplemental data on beaches	
Name of island	Long Bay
Name of beach	Sandy Point Beach
Energy beach classification of beach	Moderate
Description of sand characteristics	Unknown
Level of human development and/or impact	None
Estimated nesting activity	Regular (< 5)
General comments	Fishermen report hawksbill (<i>Eretmochelys imbricata</i>) nesting on this beach.

TABLE 3A.8. Supplemental data on beaches	
Name of island	North Caicos Island
Name of beach	Northeast Beach
Energy beach classification of beach	Moderate
Description of sand characteristics	Unknown
Level of human development and/or impact	Light
Estimated nesting activity	?
General comments	Possible nesting beach, but could not be confirmed by aerial survey. Fishermen report hawksbill (<i>Eretmochelys imbricata</i>) nesting.

TABLE 3A.9. Supplemental data on beaches	
Name of island	Parrot Cay
Name of beach	Northeast Beach
Energy beach classification of beach	Moderate.
Description of sand characteristics	Carbonate, medium, well sorted.
Level of human development and/or impact	Light
Estimated nesting activity	Regular (< 5)
General comments	Fishermen report possible hawksbill (<i>Eretmochelys imbricata</i>) nesting.

TABLE 3A.10. Supplemental data on beaches	
Name of island	Grand Caicos Island
Name of beach	Platico Point Beach
Energy beach classification of beach	Low
Description of sand characteristics	Fine grained, carbonate
Level of human development and/or impact	None
Estimated nesting activity	Incidental
General comments	Fishermen report nesting on this beach.

TABLE 3A.11. Supplemental data on beaches	
Name of island	Highas Cay
Name of beach	Highas Cay Beach
Energy beach classification of beach	High
Description of sand characteristics	Medium to coarse grain, carbonate well sorted, white to tan
Level of human development and/or impact	None
Estimated nesting activity	Major (> 5)
General comments	Steep profile, three small pocket beaches. Three body pits and one crawl observed. Fishermen report that Highas Cay is a major nesting beach.

TABLE 3A.12. Supplemental data on beaches	
Name of island	Little Ambergris Cay
Name of beach	East Beach
Energy beach classification of beach	Low
Description of sand characteristics	Carbonate, fine, well sorted grains
Level of human development and/or impact	None. Occasional fishing camp
Estimated nesting activity	Regular (< 5)
General comments	Fishermen report nesting on east side of Little Ambergris Cay. Low profile beach and well vegetated.

TABLE 3A.13. Supplemental data on beaches	
Name of island	Pine Cay
Name of beach	South Beach
Energy beach classification of beach	Moderate
Description of sand characteristics	Carbonate, medium grains, well sorted and well rounded. Tan with some shell fragments.
Level of human development and/or impact	Light
Estimated nesting activity	Incidental
General comments	Observations have been made of an occasional hawksbill (<i>Eretmochelys imbricata</i>) and green sea turtle (<i>Chelonia mydas</i>) nesting on this beach. Last nest observed was during the summer of 1981.

TABLE 3A.14. Supplemental data on beaches	
Name of island	Providenciales
Name of beach	North and West Beaches
Energy beach classification of beach	Moderate; Low
Description of sand characteristics	Carbonate, primarily fine, well-rounded and well-sorted grains.

Level of human development and/or impact	None; light; moderate
Estimated nesting activity	Regular (< 5)
General comments	No nests surveyed from the air, but fishermen report some nesting, species unknown. Long, narrow beaches, low profile, and some vegetation.

TABLE 3A.15. Supplemental data on beaches	
Name of island	Salt Cay
Name of beach	Salt Cay Beach
Energy beach classification of beach	Low
Description of sand characteristics	Unknown
Level of human development and/or impact	Light
Estimated nesting activity	Regular (< 5) ?
General comments	An extensive sand bank is situated in front of the beach.
	Water is brackish to almost fresh in the rainy season.
	Predominantly visited by Chelonia mydas (green turtles).

TABLE 3A.16. Supplemental data on beaches	
Name of island	Shot Cay
Name of beach	West Beach
Energy beach classification of beach	Low
Description of sand characteristics	Carbonate, fine grain sediment
Level of human development and/or impact	None
Estimated nesting activity	Regular (< 5) ?
General comments	Fishermen report hawksbill (Eretmochelys imbricata)
	nesting on this island.

TABLE 3A.17. Supplemental data on beac	hes
Name of island	South Caicos Island
Name of beach	West Side Beach
Energy beach classification of beach	Moderate to low
Description of sand characteristics	Carbonate, light tan, medium to fine grain
Level of human development and/or impact	Light
Estimated nesting activity	Incidental
General comments	Fishermen report some nesting on this island; no reports
	of nesting during 1982 season.

TABLE 3A.18 Supplemental data on beach	TABLE 3A.18 Supplemental data on beaches				
Name of island	Stubs Cay				
Name of beach	Stubs Cay Beach				
Energy beach classification of beach	Moderate				
Description of sand characteristics	Carbonate				
Level of human development and/or impact					
Estimated nesting activity	Incidental				
General comments	Unknown if nesting takes place on this cay.				

TABLE 3A.19. Supplemental data on beaches			
Name of island	Water Cay		
Name of beach	Water Cay Beach, north and south		

Energy beach classification of beach	Moderate to low
Description of sand characteristics	Carbonate, light to medium grain, well sorted
Level of human development and/or impact	Light
Estimated nesting activity	Regular (< 5)
General comments	Ideal nesting beaches on north and south sides of the
	island. Fishermen report nesting.

TABLE 3A.20. Supplemental data on beac	hes
Name of island	West Caicos Island
Name of beach	West and South Beach
Energy beach classification of beach	Moderate
Description of sand characteristics	Carbonate, light tan
Level of human development and/or impact	Light to moderate
Estimated nesting activity	Regular (< 5)
General comments	Fishermen report hawksbill (<i>Eretmochelys imbricata</i>) and possible green (<i>Chelonia mydas</i>) sea turtle nesting.

TABLE 3A.21. Supplemental data on beac	hes
Name of island	White Cay
Name of beach	White Cay Beach
Energy beach classification of beach	Moderate to low
Description of sand characteristics	Tan, light to moderate, well sorted grains
Level of human development and/or impact	None
Estimated nesting activity	Regular (< 5)
General comments	One hawksbill (<i>Eretmochelys imbricata</i>) nest observed. Ideal beach, about 45 m long with moderate profile and some background vegetation.

TABLE 5. AERIAL BEACH SURVEY SUMMARY

Give any additional information available from aerial surveys. Information should include ground truth observation if conducted.

Date	Beaches	Surveyed		Numbers of Nesting Tracks							
			Сс	Cm	D	E	Lk	Lo	No ID		
July 07, 1982	Big Ambergr	is Cay				1					
	Bush Cay					1					
	East Calicos	Island				1-27					
	East Cay					2					
	Fish cay					8					
	Grand Calicos, NW Beach			1							
	Highas Cay					4					
	Water Cay					1?					
	West Calicos North Beach	s Island,				1?					
	White Cay					2					
	•										
Species Abbreviation		n									
Caretta caretta Cc											
Chelonia myda	as	Cm									

TABLE 5. AERIAL BEACH SURVEY SUMMARY

Give any additional information available from aerial surveys. Information should include ground truth observation if conducted.

Date	Beaches	Surveyed			Numbers	of Nestir	ng Tracks		
Date	Beaches Surveyed		Сс	Cm	D	E	Lk	Lo	No ID
Dermochelys d	oriacea	D							
Eretmochelys i	imbricata	E							
Lepidochelys k	æmpi	Lk							
Lepidochelys c	olivacea	Lo							

TABLE 5A. AERIAL BEACH SURVEY SUMMARY (supplementary page)

Give any additional information available from aerial surveys. Information should include ground truth observation if conducted.

Aerial surveys were conducted according to the method described in WATS Sea Turtle Conservation Manual. Whenever possible a beach was surveyed a second time to confirm initial observations of crawls and nests.

TABLE 6. ESTIMATED POPULATION SIZE OF NESTING FEMALES

Summarize the estimated number of nesting females for the years indicated and describe methods of estimation on the next page.

Species			Yea	ar			
	1982	1981	1980	1979	1978	1977	Average Year Estimates
Caretta caretta	50 ± 25						
Chelonia mydas	75 ± 30						
Dermochelys coriacea							
Eretmochelys imbricata	200 ± 75						
Lepidochelys kempi							
Lepidochelys olivacea							

TABLE 6A. ESTIMATED POPULATION OF NESTING FEMALES (supplementary page)

Please give brief details on methods of estimation for Table 6.

Population estimates for *Caretta caretta* and *Chelonia mydas* are not made with a great deal of confidence. Estimates for these two species were based on individual observations made by local divers and fishermen.

Population estimates for *Eretmochelys imbricata* is made at a higher confidence level because aerial surveys confirmed number of nesting females observed by local fishermen and divers.

Estimates for all three species would be more reliable if aerial and "ground truth" surveys could be conducted systematically over the months of May and June.

TABLE 7. FORAGING AREAS INVENTORY

Name of Area	Approx. Area	Species Foraging	Nature of Evidence
(or give coordinates)	(Km ²)	(use abbreviations &	(observation, fishery,
		approx. numbers) *	incidental catch)
1. Big Ambergris Cay,	40	Cm (juveniles and sub-	Aerial observations and
Little Ambergris Cay, & Fish Cay		adults), E (all sizes)	interviews
2. Bottle Creek	12	Cm (juveniles and sub-	Aerial observations, boat
2. Dottle Oreck	12	adults)	observations, local interviews
3. Highas Cay (Fringing reef)	8	Cm, E	Aerial observations, w/w observations, and interviews
4. Grand Turk, Gibbs Cay, Cotton Cay, East Cay, & Salt Cay	50	Cm, E	Aerial observations and interviews
5. Middle (grand) Caicos & North Caicos, South Side	250-300	Cm (juveniles and a few sub-adults), E (few)	Aerial observations, w/w observations, boat observations, interviews
6. Ocean Hole (Grand Caicos)	2	Cm (juveniles-adults)	Aerial observations, w/w observations, interviews, Meylan's Report
Species	Abbreviation		
Caretta caretta	Сс		
Chelonia mydas	Cm		
Dermochelys coriacea	D		
Eretmochelys imbricata	E		
Lepidochelys kempi	Lk		
Lepidochelys olivacea	Lo		

* Data insufficient to make accurate population estimates.

TABLE 7A. Supplemental

Sample of 10 turtles taken from the Bottle Creek foraging habitat during the July 1982 survey.

Turtle	Tag #	Age	Weight	Carapace	Plastron	Total Tail	Tail PI to
Species		_	(lbs.)	(Crv, Cm)	(Crv, Cm)	(Crv,	Col /Col to
				Length/Width	Length/Width	Cm)	tip *
Green	NU980	Juvenile	11.0	26.5 x 32.0	29.5 x 27.0	6.6	4.0/2.3
Green	NU979	Juvenile	23.0	45.0 x 40.0	35.5 x 32.0	6.0	4.0/2.0
Green	KU978	Juvenile	13.0	32.0 x 27.0	26.5 x 24.0	5.2	3.2/2.1
Green		Juvenile	-	47.0 x 40.5	37.5 x 33.0	6.9	4.2/2.5
Green		Juvenile	-	42.0 x 37.5	32.0 x 29.5	5.8	4.1/1.5
Green		Juvenile	18.0	43.0 x 38.0	35.5 x 31.0	6.5	3.9/2.0
Green		Juvenile	16.5	43.0 x 37.5	34.0 x 29.5	6.0	4.0/2.0
Green		Juvenile	17.5	43.5 x 39.0	35.5 x 30.0	5.25	3.25/2.0
Green		Juvenile	11.0	40.5 x 36.0	32.0 x 29.0	6.5	4.0/2.5
Green		Sub-adult	80.0	71.0 x 63.0	56.0 x 48.0	11.0	5.5/4.25

* *Editor's note (2009)*: There is no explanation for this abbreviation ("Tail PI to Col/Col to tip"), nor any definition given for this measurement; it's possible that we mis-interpreted the original text.

TABLE 7B. OBSERVATIONS OF TURTLES IN FORAGING HABITATS MADE DURING THE JULY1982 AERIAL SURVEY (supplemental)

Date	Species	Habitat Type	Size Class	Water Depth (M)	Distance from shore (M)	Location
7/07/1982	Е	Fringe reef	Juvenile	8	50	S.E. side of Salt Cay
7/07/1982	Е	Fringe reef	Juvenile	10	75	S.E. side of Salt Cay
7/07/1982	Cm	Grass flat	Juvenile	4	100	Little Ambergris, S.
7/07/1982	Cm	Shallow reef	Juvenile	5	100	Big Ambergris, S.E.
7/07/1982	Cm	Grass flat	Juvenile	5	75	East Caicos, W
7/07/1982	E	Patch reef	Juvenile	15	200	South Caicos
7/07/1982	?	Clear bottom	Juvenile	15	50	Pine Cay
7/09/1982	E	Fringe reef	Juvenile	10	100	West Caicos
7/09/1982	Cm	Grass flat	Juvenile	4	50	Little Water Cay
7/09/1982	Cm	Grass flat	Juvenile	4	55	Little Water Cay
7/09/1982	Cm	Tidal creek	Juvenile	3	5	North Caicos
7/09/1982	Cm	Tidal creek	Juvenile	3	5	North Caicos
7/09/1982	Cm	Tidal creek	Juvenile	2	4	North Caicos
7/09/1982	Cm	Tidal creek	Juvenile	5	5	North Caicos
7/09/1982	Cm	Tidal creek	Juvenile	5	12	North Caicos
7/09/1982	Cm	Tidal creek	Juvenile	5	10	North Caicos
7/09/1982	Cm	Tidal creek	Juvenile	5	10	North Caicos
7/09/1982	Cm	Tidal creek	Juvenile	2	8	North Caicos
7/09/1982	Cm	Tidal creek	Juvenile	2	5	North Caicos
7/10/1982	Cm	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.
7/10/1982	Cm	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S
7/10/1982	Cm	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S
7/10/1982	Cm	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.
7/10/1982	Cm	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.
7/10/1982	Cm	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.
7/10/1982	E	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.
7/10/1982	?	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.

TABLE 7B. OBSERVATIONS OF TURTLES IN FORAGING HABITATS MADE DURING THE JULY1982 AERIAL SURVEY (supplemental)

Date	Species	Habitat Type	Size Class	Water Depth (M)	Distance from shore (M)	Location
7/10/1982	Cm	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.
7/10/1982	Cm	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.
7/10/1982	Cm	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.
7/10/1982	Cm	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.
7/10/1982	Cm	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.
7/10/1982	Cm	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.
7/10/1982	?	Ocean Blue Hole	Juvenile	10-200+	1,000	Grand Caicos, S.
7/10/1982	Cm	Deep water reef	Adult	100	500	Grand Caicos, N.
7/10/1982	Сс	Deep water reef	Sub-adult	120	600	Grand Caicos, N.
7/10/1982	?	Mid-water reef	Juvenile	50	200	Parroy Cay, N. end
7/10/1982	Cm	Fringing reef	Juvenile	20	100	W. Caicos, S. end
7/10/1982	?	Fringing reef	Juvenile	25	150	W. Caicos, S. end
7/10/1982	?	Fringing reef	Juvenile	20	20	French Cay
7/10/1982	Cm	Grass flat	Juvenile	2	10	Bottle Ck., btw. N. Caicos & Grand Caicos
7/10/1982	Cm	Grass flat	Juvenile	2	10	Bottle Ck., btw. N. Caicos & Grand Caicos
7/10/1982	Cm	Grass flat	Juvenile	2	12	Bottle Ck., btw. N. Caicos & Grand Caicos
7/10/1982	Cm	Grass flat	Juvenile	2	12	Bottle Ck., btw. N. Caicos & Grand Caicos
7/10/1982	Cm	Grass flat	Juvenile	2	12	Bottle Ck., btw. N. Caicos & Grand Caicos
7/10/1982	Cm	Grass flat	Juvenile	2	15	Bottle Ck., btw. N. Caicos & Grand Caicos
7/10/1982	Cm	Grass flat	Juvenile	2	10	Bottle Ck., btw. N. Caicos & Grand Caicos
7/10/1982	Cm	Grass flat	Juvenile	2	10	Bottle Ck., btw. N. Caicos & Grand Caicos
7/10/1982	Cm	Grass flat	Juvenile	2	8	Bottle Ck., btw. N. Caicos & Grand Caicos
7/10/1982	E	Grass flat next to reef	Juvenile	4	12	Highas Cay
7/10/1982	Cm	Fringing reef	Juvenile	5	20	Highas Cay
7/10/1982	Cm	Grass flat	Juvenile	2	12	Bottle Ck

TABLE 7B. OBSERVATIONS OF TURTLES IN FORAGING HABITATS MADE DURING THE JULY1982 AERIAL SURVEY (supplemental)

Date	Species	Habitat Type	Size Class	Water Depth (M)	Distance from shore (M)	Location
7/10/1982	Cm	Grass flat	Juvenile	2	12	Bottle Ck.
7/10/1982	Cm	Grass flat	Juvenile	2	10	Bottle Ck.
7/10/1982	Cm	Grass flat	Juvenile	2	10	Bottle Ck.
7/10/1982	Cm	Grass flat	Juvenile	2	20	Bottle Ck
7/10/1982	Cm	Fringing reef	Juvenile	5	2	Bottle Ck
7/10/1982	Cm	Grass flat	Juvenile	2	8	Bottle Ck
7/10/1982	Cm	Grass flat	Juvenile	2	30	Bottle Ck.
7/10/1982	Cm	Grass flat	Juvenile	2	10	Bottle Ck.
7/10/1982	E	Fringing reef	Juvenile	2	150	Pine Cay, N. end
7/10/1982	Cm	? reef	Adult	40	?	Blue Hills

TABLE 8. TURTLE SPECIES PRESENT ON FORAGING AREAS.

Please complete one of these tables for each of the areas identified in Table 7. Number each table as enumerated in Table 7 (7-1, 7-2, etc.).

Species		Month								Months of Greatest Activity			
	J	F	Μ	Α	Μ	J	J	Α	S	0	Ν	D	
Caretta caretta				Х	Х	Х	Х						April, May
Chelonia mydas				Х	Х	Х	Х	Х					April, May, June
Chelonia mydas	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	· · ·
Dermochelys coriacea													
Eretmochelys imbricata	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	Х	X	April, May, June
Lepidochelys kempi													
Lepidochelys olivacea													

TABLE 10. NATURA	L MOR	TALITY			
Life Stage Unit Species (abbrev.)*			Causes**	Extent of Mortality (% of unit)	
Nests/eggs	Ċc,	Cm, E	Human poaching, crabs, vegetation roots, storm erosion	50	
Hatchlings	Cc, Cm, E		Avian predators (especially frigate birds) & marine predators	?	
Juveniles	Cm, E		Human poaching and marine predators (primarily sharks)	20-40	
Adults (in water) C		sm, E	Human poaching, incidental capture while fishing	?	
Nesting females Cc, C		Cm, E	Human poaching	20-30	
Species* Abbrevia		Abbrevia	ation		
Caretta caretta Cc		Сс			
Chelonia mydas 0		Cm			

Dermochelys coriacea	D
Eretmochelys imbricata	E
Lepidochelys kempi	Lk
Lepidochelys olivacea	Lo

** Natural mortality causes may include: Beach erosion of nests; egg and/or nestling predation by crabs, wild animals, seabirds, etc.; disease; sharks and other predators at sea, etc.

TABLE 10A. NATURAL MORTALITY (supplementary page for additional biological data)

Please report below, and on additional pages, if necessary, additional data obtained or available such as measurements (length, width, weight) of adult females, adult males, hatchlings, numbers of eggs per nest, hours of nesting, hours and conditions of hatchlings, etc.

There is no data available on the subject of natural mortality. During the July survey of the Turks and Caicos Islands no strandings were observed.

Name of Port or Site		Species Landed (use abbrev)	Fishing Gear Used	Months of Landings	Numbers & Weights (estimate)
1. Cockburn Town, Grand Turk		Cm, E	Nets and capture from chasing down by boats	All year	?
2. Bottle Creek, North Cai	cos	Cm, E	Nets and capture from chasing down by boats	All year	?
3. South Caicos		Cm, E	Nets and capture from boats	All year	?
4. Salt Cay		Cm, E	Nets and capture from boats	All year	?
5. Conch Bar		Cm, E	Nets and capture from boats	All year	?
6. Kew		?	Nets and capture from boats	All year	?
7. Whitby		?	Nets and capture from boats	All year	?
8. Lorimers	1	?	Nets and capture from boats	All year	?
Species	Ab	breviation			
Caretta caretta Cc					
Chelonia mydas Cm		า			
Dermochelys coriacea D					
Eretmochelys imbricata E					
Lepidochelys kempi	Lk				
Lepidochelys olivacea	Lo				

TABLE 11. LANDING SITES FOR TURTLES AND TURTLE PRODUCTS

TABLE 12. TOTAL ANNUAL TURTLE LANDINGS IN NUMBERS

Do not include turtles cau	ight incidental to	o other fishin	g operation	s (e.g., shrimp trawling)
Species	1982	1981	1980	Method of Determination
Caretta caretta				
Chelonia mydas	800/4,000 kg			Interviews with native fishermen and observations made of turtle fishing during the 1982 July turtle survey.
Dermochelys coriacea				
Eretmochelys imbricata	50/400 kg			Interviews with native fishermen and observations made of turtle fishing during the 1982 July turtle survey
Lepidochelys kempi				
Lepidochelys olivacea				

TABLE 16. EMPLOYMENT DEPENDENT ON TURTLES

Activity	Total Annual Numbers of Persons	Est. Annual Income From Turtles	Comments
Fishing	80 ± 10	\$US 12,000 - 18,000	Income based on \$1.00 per pound (live weight) obtained for turtles at local markets
Processing			Fishermen process their own catch
Selling			Fishermen sell their own catch

TABLE 16A. EMPLOYMENT DEPENDENT ON TURTLES (supplementary page)

In addition to marketed products, it is estimated that the following are taken annually from beaches or at sea for subsistence use:

A: Subsistence exploitation

- 1. Estimated number of eggs: 8,000-10,000
- 2. Estimated number of nesting females: 20-307
- 3. Number of turtles caught at sea: 200-400

Part-time fishermen usually keep one or two turtles for themselves and sell any excess turtles at local markets.

B: Social aspects

In addition to the described fishery activities, exploitation of turtles may be permitted in some countries according to special rights or privileges extended to certain groups of people. If such specialized turtle exploitation exists, please give details (i.e., beach rights, ethnic traditions, specific seasons of the year, special permits, etc.).

TABLE 18. PUBLIC AND PRIVATE INSTITUTIONS CONCERNED WITH TURTLECONSERVATION/MANAGEMENT/UTILIZATION

Institution or Organization Name And Address		No. of Active Members		Activities in Progress			
PRIDE Foundation		8		Public education, dive surveys, tagging juveniles			
TABLE 20. REGULAT	ORY AUTHO	ORITY					
Indicate all entities with Coast Guard, etc.)	statutory res	sponsibilitie	es (e.g.,	Fisheries Dep	partments and Ministries, Police,		
Name and Address of Organization	Budget Allo to Turt			aff Assigned Furtles	Comments on Levels of Enforcement		
Ministry of Fisheries	0			0	Although there are statutes prohibiting the taking of turtles by size, species, and time of year, there is virtually no legal enforcement. Refer to enforcement regulations on the next pages.		

TABLE 20A. REGULATORY AUTHORITY (supplementary page)

Please list National, regional, and local legislation concerning turtle management and conservation. List title, date, and stated purpose.

Part IV

Enforcement

16. Powers of a Fisheries Officer

Without prejudice to any other powers conferred upon a fishery officer by these Regulations, the Fishery Limits (Turks and Caicos Islands) Ordinance 1969, or any other law for the time being in force, for the purpose of preventing the commission of offences under these Regulations and the apprehension of persons committing any such offences, a fishery officer shall be deemed to have the powers of a police officer.

17. Search Warrants

(1) If a Magistrate or Justice of the Peace is satisfied by information on oath that there are reasonable grounds for suspecting than an offence against these Regulations has been, is being or is about to be committed and that the evidence of the commission or intended commission of such offence is to be found at any premises or in any vessel specified in such information, he may grant a search warrant authorizing a fishery officer, together with any other person named in the warrant, to search premises or vessel at any time within one month from the date of the warrant, using such force as may be reasonably necessary if entry to such premises or vessel is refused or cannot otherwise be obtained.

(2) Any person acting under the authority of a search warrant issued in the pursuance of this regulation may search any person who is found on, or whom he has reasonable grounds for believing has recently left or is about to enter such premises or vessel, as the case may be, and may seize any marine products or apparatus found in such premises or vessel, or upon such person, which he has reasonable grounds for believing to be evidence of the commission or intended commission of any offence against these Regulations:

Provided that a female shall only be searched by a female.

(3) Any person who obstructs the exercise of the powers conferred by a search warrant issued in pursuance of this regulation shall be guilty of an offence.

18. Seizure of Vessel, Gear, Apparatus

(1) Where a fishery officer has reasonable cause to suspect that any vessel, gear, or apparatus (of whatever kind) has been used in connection with the commission of an offence under these Regulations he may seize such vessel, gear or apparatus, as the case may be and hold the same until the determination of the proceedings in respect of that offence, unless the Magistrate on application made by the owner thereof, shall otherwise direct.

Provided that if proceedings in respect of such suspected offence are not brought within one month of such seizure the fishery officer shall forthwith release anything so seized.

(2) Where a fishery officer has reasonable cause to suspect that any marine product has been taken in contravention of these regulations and he proposes to bring proceedings for an offence he may seize and hold the same until such proceedings, but such marine product, if of a perishable nature, may be disposed of or otherwise dealt with prior to the determination of such proceedings in such manner as the Magistrate upon the application of the fishery officer or of the person against whom the proceedings are to be brought, may direct.

(3) Any person who destroys or attempts to destroy anything to prevent its seizure under the foregoing provisions of this regulation shall be guilty of an offence.

19. Forfeiture Upon Conviction

(1) Upon the conviction of any person for an offence under these Regulations the Magistrate's Court may take such order as the court thinks fit as regards the disposal of anything seized under the powers conferred by regulation 19, and may order the forfeiture of any property so seized or any other property used in the commission of the offence of which the accused person is convicted.

(2) Without any prejudice to any other power vested in the issuing authority, upon the conviction of a person who holds a licence, in respect of a third or subsequent offence, the issuing authority may suspend or revoke the licence held by that person.

20. Penalty for Interfering with Fishery Protection Equipment

Any person who damages or interferes in any way except for just and sufficient cause, with any vessel, gear or equipment (of whatsoever kind) used by any fishery officer for the purpose of carrying out his duties in the enforcement of the provisions of these Regulations, shall be guilty of an offence and liable on conviction to a fine of five thousand dollars or to imprisonment of twelve months, or to both such fine and imprisonment.

21. Trial and Punishment of Offenders

(1) All offences under these Regulations shall be triable summarily.

(2) Any person convicted of an offence for which no other penalty is provided under these Regulations shall be liable to a fine of one thousand dollars or to imprisonment of six months, or to both such fine and imprisonment.

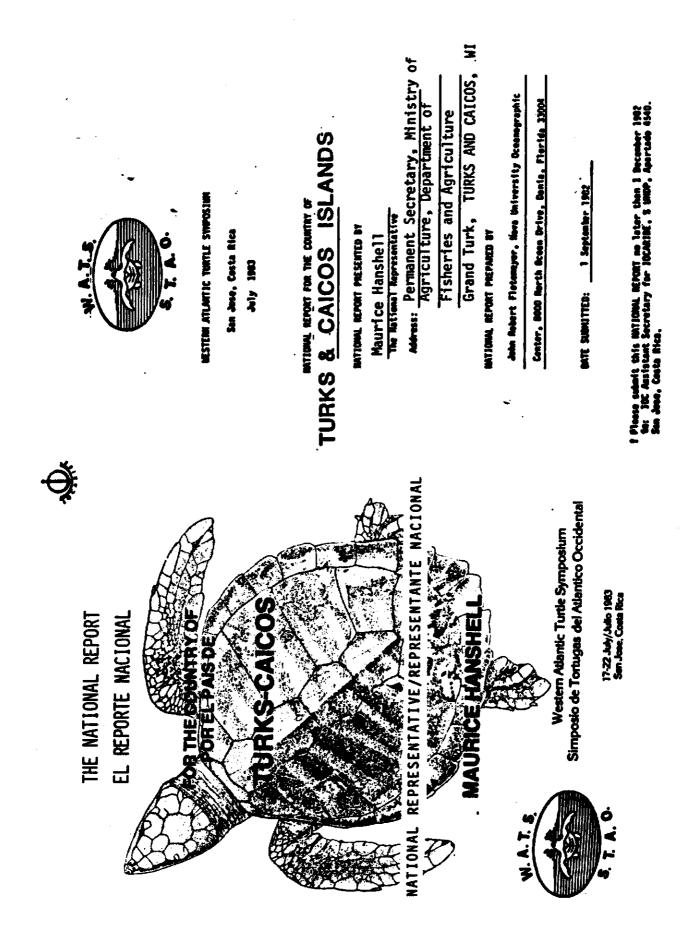
REPORTS AND PUBLICATIONS

The following is a list of the major reports and publications concerned with national turtle resources (list author, date, title, and publisher).

Carr, A., Meylan, A., Mortimer, J., Bjorndal, K., and Carr, T. 1982. Caicos Islands. Preliminary Survey of Marine Turtle Populations and Habitats in the Western Atlantic. NOAA Technical Memorandum NMFS-SIFC, pp 35-36.

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Members of the PRIDE Foundation made a major contribution to this report and to the July 1982 data gathering survey. Special thanks to Mr. Chuck Nesse and Gary Hodgkins, members of this Foundation, for their help and friendship. Also Mr. Dennis Frazle and Brent Mitchel deserve special thanks for assisting in collecting much of the data which appears in the contents of this report. Mr. Fred Berry and Professor Archie Carr were a major stimulus to this project by providing their wisdom and encouragement. Other members of the WATS Steering Committee and technical team also deserve acknowledgement for their devotion and dedication to this project. Finally I wish to thank Jan Kitte for her editorial skills and to all the individuals living in the Turks and Caicos Islands for their hospitality and for taking an active interest in sea turtle conservation and research.



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INTRODUCTION

Beginning 7 July 1987 a seven-day sea turtle socia-economic and reming survey study of the Turbs and Extra latents was conducted. The july is of this study was to collect data to complete a national report of this area for the Mestern Atlantic Turtle Symposium (K.A.T.S.) to be held in July 1953 in San Jose, Costa Rica. The data for the report was collected using the following objectives as a guideline.

 Conduct surveys of all the marine shoreline within the Eritist territory known as the Turks and Caicos Islands.

 a) Record the types of shoreline present -- for the surcisi of recording actual or potential sea turtle mesting teaches (so that subsequent surveys can be more time- and cost-effect vely and to document the kinds and amounts of shoreline throughout the area.

b) Record all signs of sea turtle tracks and mests or mesting braches -- for the purpose of developing a comprehensive incer of the extent of sea turtle mesting activity, including undeted

data on prior known concentrations, determination of ertent of dispersed mesting activity, and determination of any prior unrecorded mesting sites.

 Compile data of all kinds to determine the status of see turtle populations.

3. Review present conservation and management programs related to sea turtles.

4. Determine socio-economic importance of sca turtles.

 Make recommendations to help promote the survival status of see turtle populations inhabiting the territorial waters of the British virgin Islands.

- 1 -

ACKERDUNE

General Geographic Description of the Turks and Calcos Islands

The Turks and Calcos Jalands represent a British Crown Colony. The colony consists of two groups of islands at the southern extremity of the Bohamas chain lying between 21° and 22° North and 71° and 72° liest (refer to Fig. 1).

The Turks and Coicos Islands consist of eight inhabited islands and many uninhabited islands. These islands have a total land area of 165 summe miles: Korth Enicos and Riddle Calcos have the langest land areas.

Population estimates for these islands vary, but the 1970 census reveals that it is 5,657 (Sector 5:2). During the last decade or so the population of these islands has been declining, due to primarily the enigration of people to Preeport and other areas of the Bahama Islands. The breakdown of the 1570 census is as follows:

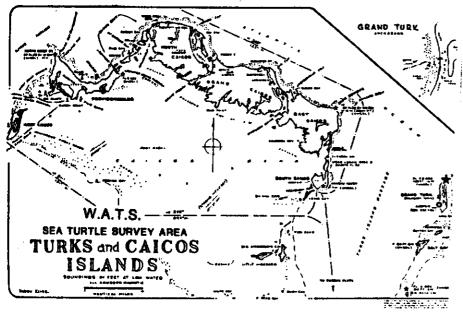
Grand Turk	2,335	Ken	290
Salt Cay	350	Uhitby	52
Conch Ser	155	Sandy Point	64
Bemberra	123	Blue Hills	362
Lorivers	102	The Bight	114
Sottle Creek	601	Five Coys	82
South Calcos	1,032		

The Turks and Calcos Islands may be considered part of the Sahamas. In terms of terrain and vegetation these Islands are comparable to Great Inequa and Mayaguana. The driver Islands of Grand Turk, Salt Cay, South Calcos and East Calcos resemble Great Inequa; Middle Calcos, North Calcos and Providenciales resemble flayaguana. The latter has sufficient rainfall to support a moderate state of coppice vegetation.

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muter tidel flats predominate. In most cases, the water is about one meter deep and grass beds (consisting of <u>Thalassia</u> and <u>Syringodic</u>) occupy the bottom. Grass vegetation is common on the bottom of most of the tidel creeks; however, some of the creek bottom has not been colonized by vegetation because of extensive siltation. Much of this exposed bottom is blanketed by jellyfish.

Further south is the Gaicos bank, which extends 20 to 40 miles south of the island choin. On the windward side of mary islands are spectacular fringing meefs which range between 5 meters and 20 meters in depth. Here there are mich and spectacular populations of meef fish and hard corels. Gocasionally, farther away from shore some "patch" meefs way be found.

One unusual submarine feature worth mentioning is the "Ocean Hole." A dive and two aerial surveys of this feature (conducted during the July 1522 survey) revealed that the hole is about 1 kilocater in diameter. The rim is located in about 4 meters of water and then descends perhaps a hundred meters or more almost straight to the bottom. The water is extremely turbid with visibility of 10 meters at the surface dropping down to almost nil at B0 meters. Although there are large populations of reef and pelagic fish as well as large numbers of green saa turtles (mainly juveniles) in the Ocean Hole, there is a conspicuous absence of hard carals.

A History of Sea Turtles in the Turks and Calcos Islands

Green see turtles were an important factor in the colonization of the American tropics because they were abundant, day to keep alive for months, and represented an important protein source. There are reports from the time of the Spanish exploration until the late mineteenth century of ships stopping to replenish their stores with water and turtles in the Turks and Calcos Jolands. Unfortunately the number of turtles taken and the relative

Coastline and Offshore Areas

The coastline of the Turks and Gaicos Islands varies greatly. On the morth side there are long structes of moderate to high-energy beaches. Typically these beaches have a moderately sloping beach profile which is usually well vegetated about 10 meters above the high tide line. The vegetation consists of see grapes, Baltbush, purslane, beach morning glory, and buttonwood. Similar but much shorter beaches are found or man; of the small, offshore cays located to the east and south.

Laboratory analyses of sand collected from wany of the beaches reveal that the sands are carbonate in origin. The sand is usually redium greined and well-sorted. However, a few beaches have predominately fine-grained sediments. The color, according to Menzel's color scheme, is white to light tan.

In addition to long stretches of sandy beach there are areas of coastline on the windward side of the islands that are extremely rocky. Lellstratified sandstone areas have been exposed by wind and hydrawlic erosional forces.

A completely different description is applied to much of the southern coastline. More wast communities of mangroves are common. Extensive tical swamps with long meandering tical creeks sometimes stretch core than 4 kilometers inland.

Only Hiddleton Cay does not fit the above description. This .5 kiloncter island apparently was built from the gradual accumulation of conch shells which fishermen have laft for countless decades (Nodgkins, personal com-unication).

The offshore areas bordering the Turks and Caicos Islands are quite diverse. On the south sides of many of the islands wast expanses of shallor-

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abundance of turtles is unknown. The earliest record on this subject is from 1906. During that year the Turks exported \$3,538.00 worth of Nanksbill turtle shell (Sadler, 1972:37). In 1907, the local sea turtle industry reached its peak and during the same year the government passed the Turtle Protection Ordinance, which protected turtles from poaching by fishermen from the Bahamas and other nearby islands. In 1909, the Caicos Development Company leased Chalk Sound for raising and canning turtles. Although the sea turtle industry became quite large during the first decade of this century, it gradually declined to nil by 1530. Although the reasons for this decline are unknown, presumably a decline in the population of these animals and a lessening dermu for turtle products were responsible.

Although there has never been a resurgence in the turtle industry, there is still a keen interest in these animals among the local island population. There is a rich oral tradition in which the turtle is frequently sertioned. Today there are only a few "halftime" turtle fishermen on the island and perhaps about seventy fishermen who will take a turtle when the opportunity presents itself. Virtuelly all turtles are consumed locally and can be found in markets only sporadically but on a year-round besis.

Based on the July 1921 survey, it is estimated that about 855 turtles are caught annually. Most of these turtles are juvenile green sea turtles which weigh between two and eight by. Some hawksville, (juvenile to adult-size) are taken incidentally during lobster season and occasionally a loggerhead or an adult green will be taken when encountered by fosternen on deepwater reefs. Based on the results of the survey, fishin; pressure at this level does not seem to pose a serious threat to the survival of the sea turtle population in the waters off the Turks and Coicos Johannis

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Status of the Knowledge of Sea Turtles

Very little is known about the saw turtle populations that inhabit the Turks and Caicas Jalands. This is due to the lack of any government records and to the lack of systematic studies of these animals. What is known cames from two sources: incidental observations of local divers and fishermen and a survey conducted by Anne Meylan in 1979 (NNFS Technical Memorandum, 1979, 35-36).

Information from these two sources indicate that there is no concentrated nesting by BNy Species in the islands. The July 1983 survey confirmed this belief; however, a few beaches were found on which a large number of crawls could be identified. Host of these crawls belonged to hawkshill see turtles but a few belonged to green sea turtles. No crawls belonging to leatherbacks or loggerheads were observed. However, Savid Winn (personal communication), one of the most active turtle fishermen in the area, is certain that loggerhead see turtles do occasionally mest there. He has also observed turtles mosting in the daytime!

There are some reports of "Bastard" and "Mulatto" turtles in the Turks and Caicos Islands, but the reports are conflicting. Neylan also reported mention of "Mulatto" turtles during her 1979 survey. It is probable that these are "folk" mames for loggerheads. However, the possibility that these names might be used to refer to "ridleys" cannot be completely discounted.

Local fisherman also montion a large population of juvenile green sea turtles present in the tidel crocks on the south side of Hiddle Caicos and North Caicos Islands. Both aerial and boat surveys confirmed this belief. During the 1982 observation, a large number of juvenile green sea turtles in the channels were seen in most of these crocks (refer to Table 7A). Some sightings of juvenile groons were mude almost four kilometers inland. A

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METHODS

To obtain the most accurate and comprehensive data on sea turtles and to prepare the national report for the Turks and Esicos Islands, this investigator employed five different strategies: (1) teach and pelagic aerial surveys, (2) visits to many of the beaches for the purpose of "ground truthing", (3) researching governmental records, (4) conducting personal interviews with local fishermen, and (5) participating in turtle fishing with native fishermen.

Aerial Surveys: A total of 9.1 hours were spent conducting aerial surveys. A Cessna 172 was used to conduct these surveys the entire coestline of the Turks and Calcos Islands was flown over at least once. These surveys were conducted according to the method described in the Manual of Sea Turtle Research and Conservation Techniques (pp. 43-64). Before each flight, each large island to be surveyed was divided into zones which were usually defined by a major promorphological coastal feature (i.e., the mouth of an estuary or a large rock easily identified on a chart) or some bind of human architecturs (i.e., an airstrip or marina). In most cases the surveyswere made at an altitude of 100 feet and at an airspeed of \$5 KG. and in all cases flights were made so that the observer could see the coastline on his right. Pelagic surveys were conducted in the same nummer but the elevation was increased to 400 feet and the air speed was increased to 120 KTS. The pilot and the recorder were instructed to watch for turtles over open water. When a mest or turtle was identified, it was plotted on a chart. Using a small hand-held tape recorder, a record was made of the time of the sighting, the location, and the species and size of the turtle. The same in which each nest or turtle was observed also was recorded.

It was possible to record all of this date in the plane breause of the small number of turtles and mests which were observed on each of the survey flights. special collecting survey that involved capturing a representative sample of these animals indicated that they were in the 3 KG to 30 KS size range. Scaller and larger greens were not encountered in the creeks during these surveys. A stomach content analysis made from a selected number of juvenile greens revealed that these maintals were subsisting on turtle gress (<u>Thalassia</u>), although other materials were present but which could not be positively identified.

Larger greens as well as a wide \$120 range of hawlsbills were diserved in deep water. Most sightings of hawksbills were made or fringing and patch reef where coral was abundant. Unly one juvenile hawksbill was encountered on a grass bed. Euring the aerial surveys only one loggerhead sea turtle could be positively identified. This animal was a juvenile swimping over a deep-water reef in about 100 meters of water.

A larger number of green sea turtles and one hawksbill were observed in the Ocean Hole during two aerial surveys. All of these sightings were of juvenile animals. Neylan also reports sighting some large green turtles in the Ocean Hole. Local interviews with native fishermer indicated that a large number of turtles have been attracted to this area.

Information on SLUSONATILY and Rigratory patterns of turtles for this area are monexistent. However, it is possible to say with some degree of confidence that mesting occurs between the months of Rpril and August with the haaviest mesting month being May. Some fishermen report that adult greens are more common in the spring and that hawksbills of all ages and juvenile greens are seen year-round. There have been no observations of hatchings. Reylan reports an interview with a local fisheries officer who has observed a seasonal movement of leatherbacks past Drum Point in East Caicos. No collaborating observations of this neture could be found.

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<u>Ground Truthing:</u> Visits were made to many of the beaches where turtle mests had been observed from the air. Most of the visits were made by boat, and the observers wolked the entire length of the beaches. In addition to recording mesting activity and other features of interest {i.e., vegetation type}, sond samples were collected for later anlaysis and comparison.

Research of Local Records: Dne day was spent on Grand Ealcos talking with government officials about local information on sea turtles (i.e., lexs, local statutes, records of catches).

<u>Interviews with Fishermen</u>: Four local fishermen were interviewed to gain some additional useful information for this report. Interviews were conducted according to the questionnaire found in the <u>Manual of See Turtle</u> <u>Research and Conservation Techniques(pp. C1-91)</u>.

<u>Turtle Fishing</u>: One day was spent turtle fishing. This involved actually participating in a turtle hunt and provided a great deal of useful information on size, numbers, and techniques of turtle fishing in the Turks and Caicos Jalands.

RECORDENDATIONS

Based on the findings of the 1962 survey, the following recommendations would make a significant contribution to the survival of the sea turtle inhabiting the waters of the Turks and Caicos Islands.

- 1. Actively enforce the marine turtle protection act.
- Prohibit the taking of howksbill sea turtles during lobster season.
- 3. Restrict the taking of sea turtles except for local consumption.
- Establish major nosting beaches as natural marine socuaries and restrict pedestrian traffic on the sanctuaries from April through September.

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- 5. Establish an artificial Matchery for relocating endangered nests using the <u>M.A.7.5.</u> See Turtle Conservation Manual as a guideline.
- 6. Establish a "Mead-start" program aimed at revitalizing local sea turtle populations.
- 7. Develop a public education program for the Turks and Caicos Islands invelving the government, local hotels, library, public school system, and the PRIDE Foundation, which stresses the need to manage the sea turtle population so that its continued survival can be guaranteed.
- 8. Continue the sea turtle tagging program initiated in July 1982 and intensify the research effort to learn more about the natural history (by species) of turtles inhabiting the orea.

Country Turks and Calcos In	s1en	đs	_										_		_		_		_		
Length of Goastline*	••	•		•	•	•	•	•	•		•	•	•	•	•	•	•	•	<u>212.</u>	<u>2</u> Ka	
No ² of Continental Shelf Are	14	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•		•		_ Ca	
Samurd Extent of Jurisdict	lons	:																			
Territorial Sea	••	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	<u>200</u>	_ M11	es
Extended Economic Zone	••	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	200	_ ×11	es
Fisheries Jurisdiction	••	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	200	. 111	25
Other (Describe)						_				_	_				-	•	•	• .		K.	

TABLE 1. GEOGRAPHIC INVENTORY

* Coastline length is the measurament of the mational semmard boundary of a country; i.s., the distance from border to border for a coastal country and the distance around an island country.

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RAME OF ISLAND	APPROXIMATE LENGTH OF COASTLINE (RH)	APPROXIMATE LENGTH OF Suitable resting beach (reters)
Big Ambergris Cay	3.9	600
819 Cameron Cay	•8	Q
Big Cay Big Sand Cay		0
Big Southern Bush	1.9 1.2	900
Bush Cay	.4	0 220
Cotton Cay	2.1	100
East Calcus	24.0	8,000
East Cay	1.1	210
Fish Cay		452
French Lay	.9	300
Ft. George Cay	2.8	400
61bb Cay	.3	120
Grand Calcos	29.0	6,000
Grand Turk	11.0	2,500
Highes Cay	2.1	300
Horse Cay Joe Grant's Cay	.2	20
Little Ambergris Cay	4.2 3.6	0
Long Cay (Grand Turk)	2.4	1,200
Long Cay (East Caicos)	2.5	420
Nery Cays	.4	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
Hiddleton Cay	9.8	300
Hiddle Greek Cay	1.0	1
North Calcos	21.0	1,500
Parrot Cay	6.4	1,400
Pear Cay		0
Penniston Cay Pine Cay	5.6	1
Providenciales	17.4	2.000 2.400
Round Cay	.5	2.400
Sail Rock Island	.5	ă
Salt Cay	4,5	900
Sand Bora Cay		400
Seal Cays	.7	Ō
Shot Lay	.2	150
Six Hills Cay	.4	0
South Calcos	9.2	1,600
Stubbs Cay	2.5	900
Whiter Cay West Calcos	5.6	7,600
West Lancos West Sand Soit	12.2	3,000
White Cay	.\$,4	350 50
TUTA	. 212.2 104	52,470 H (52,5 KH)

MARINE SHORELINE CHARACTERISTICS+		OF SHORELIN	E
	MDEVELOPE	DEVELOPED++	TOTAL
. Sand Beach (Total)	42.5	10	52.5
A. High Energy	£2,0		28.0
B. Low Energy	20.5		24,5
Rest (exposed)	10.0	_ 0	10.0
Recta	15.0	2	17.0
<u>C11ffs</u>		- 0	
Yegetation (Total)	. 100 🕀 🔤	0	100,7
. Anna	· · · · · · · · · · · · · · · · · · ·		0
	0 .		0
C. Rangeruss D. Cocsawt Troos	100.2	. •	100.2
	.0	.5	
E. Other Trees or Skrubs		0	_ 0
F. Norshas	0.	_0	0
Mouths of Tageons, rivers, cenels	30,0	125	31.5
Total Shoreline	198.2	14.0	212.2

• Refer to SEA TURTLE MANUAL (Annia) Sworeline ** Human development or use (See MANUAL)

Table 1 A: Summary of total cassiline of islands and cays located in the Turks and Caicos Islands and estimation of total length of backes suitable for tota turtle nestig. Estimates made from aerial surveys conducted between 7 July and 14 July 1982.

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	Num ² OF HAULTAT	AQ11AT
Waith Builds TrPES (Estimated)	(Ouvraudes) =2 Militari	OUTSEDE 25m (SEAMARD)
1. See	201 m2	24.06
2. Mud and Silt (includes tide) creeks)	223 Na ²	*
3. Nech	2 10 2	4
4. Submaryad Veystation	200 B22	300 - 900 tur ²
5. Reats (Tetal)	2 8 82	300 - 400 hu²
A. Frimting Roofs	2	250. tta ²
D. Patch Refs	240 Earl	50 BP ²
6. Other		

TABLE ZN. MARINE MABITAT INVENTION OF BOTTOM TYPES

		I		
		LEMATH In Medicary	species acstima (the advertitions)*	NUMINS OF NECONDED NESTING
	1. Brand Teris Island	2.500	r 91.81	العرب مسمد ماليا والم
	2. Mahas Ga	8	E. D. K!	April 1. Here June, Milly, Aug.
	3. Nerte Cay	R	[.1	
	4. Little Minyris Cay	1,200	E. 1, Da?	
- 16	5. Long Cay (Bast Catoos)	8	L.1	
•	6. Marth Calces Island	1,500	E., Ot, Ct	Aprils May, June, July, Aug
	7. Perrot Car	1,400	E., On', CI	Aurils, Nay, June, July, Aug
	t. Pin Cy	1000'3	E., Du. Cel	April, Nuy, Jone, July, Ang
	9. Providenciales	2,400	E., Ont. Cz)	April, Ruy, Jams, July, Aug
	M. MIC CO	R	E.1 04, Ect	
	r g	surthing on the second s	mistim action investion List buckes in generality expression. Arovide additional information on following page.	Searches Abbreverlations: Cartila carrita Cartila carrita Cartila carrita Cartila carrita Cartila carrita Cartila cartila Cartila cartila cartila Cartila cartila cartila Cartila cartila cartila Cartila cartila cartila Cartila cartila cartila Cartila cartila cartila cartila Cartila cartila cartila cartila Cartila cartila cartila cartila cartila Cartila cartila cartila cartila cartila cartila Cartila cartila cartila cartila cartila cartila cartila Cartila cartila car

TIMULE 3.

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	NWE OF MACH	LE TELetars	SPECIES MESTING (Use abbreviations)*	MUTHS OF ALCONDED MESTING
an 197 27 Labor	Veg Tijađukov Bijej	£00	E. On (2)	Aurtly, Ney-Jone, July, Aug
	Zata Saud Gay	306	-	
	Jaush Cay	8	E.(?)	
-	4.Dettam tay	8	c. (1)	
16 -	SEIST Caters Island	000'8	L. O. S	April a Max Smer Sulta And
•.	flast Car	316		Aprils Hay, June, July, And
	7.5 tsh Cay	8	E., 0. 1	April . Hay . June . July . Ang .
	B. French Cay	Ş	t., tu, tet	April's Nay, June, July, Aug.
	9. GIM Pay	R.	6.7, 01	

NESTIME NEXCH (Internant Lise benches in geographie sequence. Franke saditional information on foilaning page. TABLE 3.

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E. . Cn . Cc ?

9,000

10. Grand Catoos Island

Species (Addreadations) Chelonis medis Dermotejs confaces Estemotejs implicite Lepidochejs implicates Lepidochejs ultraces

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(1) Question Marks represents uncentitred reports.

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NAME OF BEACH	LENGTH Jn Heters	SPECIES HESTING {Use abbreviations}*	MONTHIS OF RECORDED RESTING		
1. Sand Bore Cay	400	E.7, Cm7			
2. Shet Cay	150	E., 007	April, May, June, July, Aug		
3. Smith Cartains Instand	1,600	E., Cm?, Cc?	1		
4. Stuble tay	900	t.	Antile Haye share, belye Hay		
5. Matar Cay	1,600	E., Cot, Cct	Aprila Haya Jum Julya Jup	TABLE 3,	NESTING BEACH INVENTORY (Supplementary page)
Nest Colcos Soland	3,000	E., Ca, Ce?	April, Hay, June, July, Aug April, Hay, June, July, Aug		Place give additional information about each mesting beach identified in Table 3. Include information on color of sond particle size, beach provide, backback meantation emiciated in article size,
7, Hest Sand Spit	350	Estada, Cot			basch profile, backbasch vogetation, artificial lighting, etc.
6, White Cay	60	E,	April, May, June, July, Aug		REFER TO TABLE BA FOR SUPPLEMENTARY DATA ON BEACHES
9		· · · · · · · · · · · · · · · · · · ·			ALL
0	1	······································			

TABLE 3. NESTING BEACH INVENTORY List beaches in geographic sequence. Provide additional information on following page.

TABLE 3A (SUPPLEIENT DATA ON BEACHES)

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Species Abbreviations:	
Carolla corrila	fe
Chrisnis mydas	ŝ
Bermachelys corteces	9
Eretmochelys imbelcata	E
Lep dochelys Lengt	- Ūt
Leuidochelys olivacea	10

TABLE 3A (SUPPLEMENT DATA OF BEADIES)

-

MARE OF BEACH: Long Bay Beach. JSLAD East Caices Island BHENGY BEACH CLASSIFICATION OF BEACH (CIRCLE): <u>HIGI * HODERATE LOW</u> DESCRIPTION OF SAND CHARACTERISTICS: <u>Mad. to fine grain carbonate beach. Mad. profile</u>	NAME OF BLACH: NN Beach JSLAND Big Ambergris Cay DMERG: BEACH CLASSIFICATION OF BEACH (CIRCLE): HIGH HODERATE HLOH DESCRIPTION OF SAND CHARACTERISTICS: Mhite to tan, fine to med. grain well sorted carbonate. LEVEL OF HUMAN DEVELOPIENT AND/OR IMPACT: NONE *LIGHT HODERATE HEAVY ESTRATED NESTING ACTIVITY: MAJOR@HORE Than 5) * REGULAR(Less Than 5) INCIDENTAL CDNERAL CONENTS: Law profile, highly wegetated back suitable for meeting. One nets and one crawl observed during merial survey, fishing damp on N.K. side of corp.
NAME OF BEACH: EAST Cay Booch JSLAND EAST Cay DERG: BEACH CLASSIFICATION OF BEACH (CIRCLE): <u>HIGH #KOERATE LOK</u> DESCRIPTION OF SAND OWRACTERISTICS: <u>Carbonale, mod. to fine grains</u> . LEVEL OF HAMAN DEVELOPMENT AND/JR DHPACT: " <u>HONE LIGHT HODERATE HEAVY</u> ESTDATED RESTING ACTIVITY: <u>MANOR Quore Than 5</u>) " <u>REGULAR (Less Than 5)</u> <u>INCIDENTAL</u> GENERAL COMENTS: <u>Passible mesting on east and of cay</u> .	NAME OF BLACH: Big Sand Cay Beach JSLAND Big Sand Cay EMERCY BEACH CLASSIFICATION OF BEACH (CIRCLE): HIGI HODERATE +LO: EMERCY BEACH CLASSIFICATION OF BEACH (CIRCLE): HIGI HODERATE +LO: SESCRIPTION OF SAMD CHARACTERISTICS: Ten, fime to med, grains. well sorted, polished Carbonate material,
NAME OF REACH:	NAME OF BEACH:

ALL OF NOR. INTER AND. TABLE fait faits himd ALL OF NOR. INTER AND. TABLE fait faits himd ALL OF NOR. INTER AND. TABLE fait faits himd ALL OF NOR. INTER AND. TABLE fait faits himd ALL OF NOR. INTER AND. TABLE fait faits himd ALL OF NOR. INTER AND. TABLE fait faits himd ALL OF NOR. INTER AND. TABLE fait faits himd ALL OF NOR. INTER AND. TABLE fait faits himd ALL OF NOR. INTER AND. TABLE fait faits himd ALL OF NOR. INTER AND. TABLE fait fait faits himd ALL OF NOR. INTER AND. TABLE fait fait fait fait ALL OF NOR. INTER AND. TABLE fait fait fait fait ALL OF NOR. INTER AND. TABLE fait fait fait fait ALL OF NOR. INTER AND. TABLE fait fait fait fait ALL OF NOR. INTER AND. TABLE fait fait fait fait ALL OF NOR. INTER AND. TABLE fait fait fait fait fait fait fait fait	TABLE 3A (SUTPLE) ENT DATA ON BEACHES)	TABLE 3A (SOLL - UNE PAIN ON EDADUS)
Best Red Cashington & Red (RED), Ref. 1080-1162 Best Red Cashington & Ref. 1081, 1081		NAME OF SURVEY - Blackas Bodas Boast - Telater - Pound Andres - Survey
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TABLE 3A (SUPPLETENT DATA ON BEAGIES)

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TABLE 3A (SUPPLEMENT DATA ON BEACHES)

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NAME OF BUACH: Mest Beach ISLAID Shot Cay	NAME OF BUADI: Mater Cay beach (Morth and Sopthand) Mater Cay
EMERGY BEACH CLASSIFICATION OF BEACH (CIRCLE): HIGH HODERATE "LOW	BARROY BEACH CLASSIFICATION OF BEACH (CIRCLE): HIGH HODERATE to LON
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CENERAL CONVENTS: fishermen report havisbill mesting on this island.	GENERAL COMPENTS: Ideal mesting beaches on morth and south side of island. Fishermer
	ruport mesting.
NAME OF BEACH: Most side beach ISLAND South Calcos Island	NAME OF BLACH: Mest and South Beach ISLAND West Calcos Island
ENERGY REACH CLASSIFICATION OF BEACH (CIRCLE): HIGH MODEPATE to LON	BARRY BEACH CLASSIFICATION OF BEACH (CIRCLE): HIGI = HODDRATE LON
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NAME OF BEACH: Stubbs Cay Beach ISLAND Stubs Cay	NAME OF BEACH: White Cay Beach ISLAND White Cay
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DESCRIPTION OF SWO OWWACTERISTICS: Carbonate	DUSCRIPTION OF SAND CHARACTERISTICS: Ten. 11. 10 mod. well sorted grains.
LEVEL OF NERVELOP ENT AND/OR IMPACT: HONE LIGHT HODERATE HEAVY	LEVEL OF HEMAN DEVELOP ENT AND/JR DEPACT: "NONE LIGHT MODERATE HEAVY
ESTENTING REGISTING ACTIVITY: MAJOR (lore Than 5) REGULAR (Less Than 5) + INCIDENTAL BENERAL COMMINYS:	ESTIMATED RESTING ACTIVITY: MAJOR (Fiore Then 5) REGILAR (Less Than b) AUCTIVITAL
Unknown if mosting takes place on this Cay.	GENERAL COMMENTS: One hewishill west observed. Ideal beach, about 45 M. long, with . mod. profile and some background begetation.

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NUMBERS OF NESTING TRACKS DATE BEACHES SURVEYED Ce Cm £ Lk 1. 0. D Le 7/7/82 **Big Ambergris Cay** 1 _ Bush Cay 1 East Colous Island 1-27 East Cay 1 Fish Cay 8. Grand Calicus, Mi Beach 1 Highes Cay 4. Noter Cay 11 Nest Calcos Island, North Beach 17 White Cay 2

TABLE 5. AERIAL BERGH SURVEY SUPPLARY Sive any additional information evaluable from aerial surveys. Information should include ground truth observation if conducted.

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TABLE 5. AFRIAL BEACH SURVEY SUPPLARY (Supplamentary page)

- 27 -

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Give any additional information available from perial surveys, Information should include ground truth observation if conducted.

Aerial surveys were conducted acco-rding to method described in K.A.T.S. Sea Turtle Conservation Manual. "Whenever possible a beach was survey: a second time to confirm initial observations of crawls and mests.

Cc Cm D f Lk Lo

Species Abbroviations: Christia caretta Christia caretta Dermochelys cortacos Eretinnchelys imbricatos Lenidochelys kent Lenidochelys altvatae

PECIFS TEA	201	TRI	1940 1	£ £	F7 61	1161
	M † 25					
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the corette	16 † 25				
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ochelva certecua					
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L 6. ESTEMITE MONEALTIONS OF NESTING FEMILES.	MESTING. FEW] <u>-</u>			
Summerize the estimated number of services feating and the for the restricted and describe estimates of sevices the		stim femile stimic of	t At fau fin		

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FEMES.
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co Populations untary mov)
STIMUTO Supplement
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Please give brief details on mothods of extinution for Table 6.

Population estimates for <u>Caratia caratia end Chelunia moda area</u> with a great deal of confidence. <u>Estimates for these tho species were based</u> on individual deservations much by local divers and fishernen.

Population estimate for <u>Encloching imbricate</u> is mude at a higher confidence level because earlel surveys confirmed number of mesting femiles observed by local fishereen and divers.

Estimates for all three species would be more reliable if serial and "pround-truch"surveys could conducted systematically over the months of May and June.

SPECIES	JAC *	AGE	LIS.	(Crv, Cm) LENGTH/VIETH		(Crv, Cm) LERGTH/N IDTH			41
Er An	086/14	- Mr.	0.N	26.5 × 32.0	e.	29.5 × 27.0	27.0	6.6	4.0/2.3
Green	679 US	Jur.	23.0	45.0 * 40.0	e,	35.5E	35.5 x 32.0	6.0	4.0/2.0
Cree	87910	Juv.	13.0	32.0 x 27.0	e.	26.5 x	26.5 × 24.0	5.2	1.2/2.1
Gren		Juv.	•	47.0 × 40.5	ĿĊ,	37.5 =	37,5 × 33.0	6.9	4.2/2.5
Green		Jur.	•	42.0 x 37.5	ų,	32.0 1	32.0 x 29.5	5.8	5-1/1.4
Green		Juv.	16.0	43.0 × 38.0	0	3C.5 J	35.5 x 31.0	6.5	3.9/2.0
6reen		Juv.	16.5	43.0 x 37.5	ي.	0, M	34.0 x 29.5	6.0	4.0/2.0
Green		. vuC	17.5	43.5 × 39.0	0	35.5	35.5 × 30.0	5.25	3.25/2.0
Green		Juv.	11.0	40.5 x 36.0	0	32.0 1	32.0 × 29.0	6.5	4.0/2.5
Green		Sub-Act 80.0	0.0	71.0 × 53.0	0	56.0 1	56.0 . 48.0	11.0	5.5/4.25

(ar give of MCA (ar give conditions)), Methoday Cay (1994) 2, Methoday (2) (1994) 2, Methoday (2) (1994) 1, Methoday (2) (2) 1, Methoday (2) (2) 2, Methoday (2) (2) 2, Methoday (2) (2) 2, Methoday (2) (2) (2) 2, Methoday (2) (2) (2) (2) 2, Methoday (2) (2) (2) (2) (2) (2) (2) (2) (2) (2)		SPECIES Frankcinn (Toe abbreviations approx. maddens) - 	Martule of Ethiofuce and Interviewal actual Aerial observation and Interviewa Aerial observation, boat abserv- estion, Incal Interviewa,
4, and Salt Cay Matta (grand)Calcan & 5. Marth Calcan, Sauth Side Beam hale (Grand Calcan	8	C and E. C. (Jan. and a fau Librati, J. C. (fau) Cu(Mi-Jar)	Aerial desarration and interviews Merial desarration, and abarvation best desarration, interviews are all dearvation, why desarration interviews, Naylan's, Report
TABLE 7. FUTALINE AREAS INVENTORY Obta insufficient to make an accumite population estimates.	NENTOAY - An occurate	population estimates.	Spectes Abbreviations: Carefords curvella Carefords curvella Carefordery: corriend I retrochety: corriend Lynforchetys; Lampi Lynforchetys; Lampi Linitochetys; Lampi Linitochetys; Lampi Linitochetys; Lampi

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IMME 24	MALE 74 continued	:				
arte	SPECIES	HABITAT TYPE S	SIZE CLASS	WYEN DEPTIN, M	DISTANCE FICH SHORE (H)	LOCATION
1/TG/BE	5	Grass Flat	ş	~	9	10
7/10/42	8	Grass Flat	Ę	~	ē	Carries & Grand Calcor
24/01/6	8	Gress Flat	į	~	21	•
7/10/82	8	Grass Flat	۰. ۲	~	. 21	•
7/10/02	5	Grass Flat	ş	~	12	
7/10/82	\$	Grass Flat	Ę	~	15	•
38/01/5	8	Grass Flat-	L.	*	đ	•
7/10/12	5	Grass Flat	ł	2	ñ	•
28/01/1	5	Gress Plat	ş	~	•	-
7/10/12%	u	Grass Flat ment	ş	•	12	Nighas Cay
20/01/2	5	ta nuer Ertingin g Reef	, Iter	~	8	Highes Cay
38/01/2	8	Grass Flat	Ę	•	12	Bottle Creek
1/10/82	5	Grass Flat	ł	с х	12	Bottle Greek
7/10/62	8	Grass Flat	Ļ	2	0	Battle Creek
7/10/42	5	Grass Flat	ş	~	ę	Bottle Creek
20/01/1	8	Grass Flat	- Per	~	2	Bottle Creek
28/01/2	ð	Grass Flat	4	•	2	Botthe Greek
7/10/82	5	Grass Flat	м	-	•	Buttle Creek
7/10/82	8	Grass Flat		~	R	Bottle Creek
20/01/1	5	Grass Flat	Jur	~	01	Bottle Creek
28/01/2	ш	Fringing Reef	Jur.	9	150	Pine Cay, Worth end
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NNON KEITRE	7	•	π	<	Ŧ	7	-	٩	~	e	=	•	MONTHNS OF CREATEST ACTENTY
<u>Gratis caratia</u> Delonia mydas Juv.	-	i es	· •	* **		* **	-		-	×		=	Abril, Nay Abril, Nay, June
Remoche (rs. cartacea Erstmoche) ys. tmbricata		i m	*	м	H	F 🖬		*	×	ж	×	ĸ	Adrill, Hay, June
Lepiduchelys tempi		;	•										
Lepidochelys eliveces		;	,										
tible 0 - Nume Species Present on Poonsing Arens.	PRES.		١Ē.		Ī	ž	1	1	1	1	1	1	

C 4 - Number Species Present on Population Areas. Planet complete an end there tables for each of the resol than (final in 1610 7, Mander each table an enversited in Table 7 (121, 2-2, etc.).

> Parrat Cay, Marth End Hest Catcos, Sauth End Mest Catcos, South End

French Cay

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Grand Calcos, Marth Grand Calcos, North

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Dean Blue Hole

7/10/42 7/10/42 7/10/42 7/10/42

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S.E. Side of Salt Ca Little Amergris, S. Big Autorgn'is, S.E. Grand Calcon, South Little Water Cay Little Water Cay tast Calcos, N. LOCATION Serth Calcos with Calcos brth Calcos March Calcos with Catcos Mech Calcos Beth Calcos Worth Calcos West Cateos March Calcos Merch Catcos LOCATION Pine Cay TABLE 71: Observations of Turties in Foreging Nubitals Made During the Jury 1942 Aerial Survey. A MATTAL SUTTANCE FROM MATER DISTANCE FROM MARITAT TYPE STEE CLASS. DEPTHA, M SMORE (M) DISTANCE FROM Shore (M) 2 8 8 2 2 8 2 2 8 2 2 - 22 90 # 8 000 8 8 8 1.000 8. 1.000 8 8 g. 000' MALTAT TYPE SIZE CLASS DEPTH.N 10-2004 10-2001 10-20d+ 10-200+ +002-01 10-200+ 10-200 10-200+ 10-2-01 10-200+ 10-2004 +002-01 10-200+ Ň. Ę j Ĭ. ġ. ź ş ś É ź ź j ź ż ś ś hw. į 5 Jw. Ę Į. ġ į Ę į i, į ġ Fring, Red Shalllow Reef **Clear Betton** Fring, Ner Mal Creek Fring, Red iida) Creek lide) Creek fidel Creek Fidal Creek lidal Creek Brass Flat Press Flat lidat Creek Mail Creek [1de] Creek Iráns Flat inss Flat Patch Mer Ocean Blue Hole Desen Blue Hole Desen Blee Hole Down Blee Male Deele Dive Male Doen Dive Hale Ocean Blue Hale Deen Blue Kole been Blue Hole Deen tim Hele Ocean Blue Hole Dean Blue Hele **Cem Dive Hole** MALE 76 centioned SPECIES SPECIES 8 8 8 8 8 8 a 8 8 8 8 3 8 anni 21/1/2 SNN C 3/M/R Three aver. 20/1/12 31/1/12 2N/UL anna BUUL aver. **BVS/E TINK** and a 7/10/12 3/10/12 21/JOVEZ 20/10/10 2/10/12 SINTE. TITRE ann's 2/Jane 20/10/10 STORYS 21/0//2 7/10/25 2/JO/IZ 20/01/2 20/01/1 an th Ĩ

LIFE STARE WITE	94CTES (albrev.)	CAUSES+	EXTERN OF HORTALITY (E. of unit)
thes the / eggs	Buck.E	Numme poeching, crebs, wegetation roots, starm erusion	. 95
E	1.1.1.1 1.1.1.1	Avian produtors (aspecially frigate birds)à Marine	-
a a a a a a a a a a a a a a a a a a a	Ż	Muten posting and aprime predators (primerily sharts)	P 2
Maits (in weter)	ن. ار	Namen poschings, incidental capture while fighting	-
terting famles	C. C.		2 2 2

TABLE TO, MATABUL MORTHLITT

Succies Moneylations: Delratis succians Delratis succians Revenues (succians) Construction Landard Landache Ja altrated Hotomal mortality stands any include: Beest arreston of martis: any and/or mestiling production by crady, and/or metally, see birds, etc.; diseases threst and other predators at sea; sturts and other predators at sea; •

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dengens a velooris (Estimate	•	1	←]	•	•	-		•
MINTHS OF LAUNTHS OF	All Year	All Year	All Year	All Yeer	All ther	All Year	All Year	All Teer
FISHTNG GEAN USED	Mets and capture from chasing down from both	Nets and capture from chasing down by boot	Nets and capture from boats	Note and capting from boots	Nots and capture from boats	Note and capture from boots	Note and capture from basts	Nets and capture from beats
SPECIES LawDCD Via abbrev)	ii 8	5 ⁴ 5	j đ	 1	Qı.E.	*	~	•
NAVE OF PORT ON SITE	1. Coothern Then, area	2. Initia Creat, North	3. South Calcon	A SHE CU	s. Canther	:	y, Mattay	

388223 Searcies Abbreviet Dans: Concilia constitution Difficient in the con-termancies by constants for Lipitation is reacting it. Lipitation is reacting it. Lipitation is reacting it.

TOTAL ANNUAL TURTLE LANDINGS IN NUMERS AND METGATS (4/14) Do not include turtler cuspic incidental to other itaning operations (e.g., sinted traviling). TABLE 12.

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YEAN SMEETES	2861	1961	0 661	METHOD OF DETERMINATION
Gratta contta				
Chelenía mién	1000 1000 1000			interviews with native fishermen and observations made of turtle fishing during the 1982, July turtle survey.
Demochetys cortaces		Ì	1	
Ereboochelys Imbricate	100 E	:		Interviews with local fishermen and observations made of tartle fishing
Leptdochys tempt	 			- Saara ana Kino '2061 ani Gulado
Leptdechelys elivaces				

NATURAL MORTALITY (Supplementary page for additional biological data) TALLE M.

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Please report below, and an additional paper if meessary, additional data abtained or available such as mesuremuis interply, which, wright of analit (mables, adult males, hitchlings, numbers of ages per mest, bours of mesting, hours and conditions of hatchling, etc.

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There is no data available on the subject of natural mortality. During the July survey of the Turks and Caicos Islands no strandings were observed.

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THELE 11. LANDING SITES FOR TAPILES & TURTLE PRODUCTS

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ACTIVITY	TOTAL ANNUAL MUMBERS OF PERSONS	EST, AMMUAL INCOME FREM TUMPLES	SING-SING
Fishing	ac 2 ac	\$12,000- 18,000-00 IT	liceme wased on a \$1.00 per peund (1144 weight) abusiend for turites at 10cal
Processing			Fisherman process their ann catch
Selting			Fishermen sell their an catch

that is. Butweet beforent on thriles

Nuclei: Prices for tartis products in the Terts and Caicas Islands are as follows: Live weight (\$1.00 per pound, Next (\$1.90-22.50 per pound), Shell varies depending of species and quality (10.00-20.00 per pennul), type (\$4 \$1.00).

ACTIVITIES IN MODILES	Public oburition, dive surveys, tagging juvaniles.	
NO. OF ACTIVE MENGENS	•	
INSTITUTION ON ONCANIZATION NAME AND ADDRESS	Milde Foundation	

LALE 18. NULL AD MENTE UNITATIONS CINCERD WITH DUALE CONSIGNATION/NUMBERENT/UTILIZATION

Acculations automairy Indicata all entities with tabutory responsibilities (s.g., Fisheries Depertments and Hinisteries, Palice, Coast Gaard, etc.)

TINUE 20.

Malie W., DPLONGHI DEPENDENT ON TURILLES (Supplementary page)

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Is addition to marketed preducts, it is estimated that the fellowing are taken annually from beaches or at say for subsistance use:

- A: Subsistance exploitation
- 1. Estimated number of eggs: £,000-10,000
- 2. Estimated number of nesting females: 20-30
 - 3. Number of terties caught at sea: 200-400
 - 4. Other:

Part-time turtle fishermen usually hap one or two turtles for them. Selves and sell any excess turtles at local markets.

- B: Social Aspects
- In addition to the Asserbed fishery activities. exploitation of the fact may be permitted in some countries ecconding to gpecial rights or privilenes extended to ertain groups of boole. If such specialized turthe anoiolatation exists, please give details (1.e., bean rights, echnic traditions, specific sessons of the year, boetal mermits, etc.).

COMMENTS ON LEAST & PRAVAL	Although there are statues prohibiting	we will get unries by size, species and then of yes, there is wirkwilly no legal enforcement, regulations an Mafer to anforcement regulations an out pages.			
m. OF STAFF ASSIGNED TO TURTLES	-	į	i T	Ì	1
BUDGET ALLOCATION ID TUNTLES	8		:		
ANNE ANN ADDAESS OF DREAM 24/100	Kinistry of Fis heries				

TURKS - CAICOS

Inforcement

15. Without prejudice to any other powers conferred upon a fishery officer by these Regulations, the Fishery Linits (Turks and Calcos Islands) Ordinance, 1969 or any other law for the time being in force, for the purpose of preventing the contission of offences under these Regulations and the apprehension of persons committing any much offences, a fishery officer shall be deered to have the powers of a police officer.

17. (1) If the Magistrate or a Justice of the Feace is satisfied by information on oath that there are reasonable grounds for suspecting that an offence against these Regulations has been, is being or is shout to be constitued and that evidence of the commission or intended con-mission of such offence is to be found at.any premises or in any vessel specified in such information, he may grant a search warrant, to search such premises or vessel at any time within one conth from the date of the warrant, using such force as may be reasonably neces-sary if entry to such premises or vessel is refused or cannot otherwise be obtained.

(2) Any person acting under the authority of a search warrant issued in pursuance of this regulation may search any person who is found on, or whon he has reasonable grounds for believing has recently left or is about to enter such precises or vessel, as the case may be, and cay selies any marine products or argarstus found in such precises or vessel, or upon such person, which he has reasonable grounds for believing to be evidence of the commission or intended commission of any offence against these Regulations:

Provided that a female shall only be searched by a female.

- (3) Any person who obstructs the exercise of the powers conformed by a search warrant issued in pursuance of this regulation shall be guilty of an offence.
- (1) Where a finhery officer has remsonable cause to suspect that any vessel, genr or apparatus (of whatsoever kind) has been used in connection with the commission of any offence under these Regulations he may seize such vessel, genr or apparetus, as the case may be, and hold the same until the determination of the proceedings in respect of that offence, unless the Magis-trate on application and by the owner thereof, shall otherwise direct: _51_

TURKS - CAILOS

THELE 20. REGULATORY AUTHORITY (Supplementary mage)

Ploase list National, regional, and local legislation concerning turils monsparent and conservation. List tile, date, and stated surpose.

Apfer to mext page

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Torfeiture wiction.

TURKS - CAKOS Provided that if proceedings in respect of such suspected offence are not brought with-in one conth of such seizure the fishery officer shall forthwith release snything so meized.

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(2) Where a fishery officer has reasonable cause to suspect that any marine product has been taken in contravention of these regulations and he proposes to bring proceedings for an offence be may seize and hold the size until such pro-ceedings, but such tarine product, if of a periabable nature, may be disposed of or other-wise dealt with prior to the determination of such proceedings in such taniner is the Hegisteric

upon the application of the fishery officer or of the person against when the proceedings are to be brought, may direct.

(3) Any person who wilfully destroys or attenues to destroy anything to prevent its server under the foregoing provisions of this regula-tion shall be guilty of an offence.

19. (1) Upon the conviction of any person for an difence under these Regultions the Marstrate's Court may make such order as the court thunks fit as regrats the disposal of anything selled under the powers conferred by regulator 19, and may order the forfeiture of any property so selled or any other property used in the cou-nission of the crience of which the accused person is convicted.

(2) Without projudice to any other power vested in the issuing authority, upon the obrviction of a person who holds a licence, in respect of a third or subsequent offeres, the issuing suthority may suppend or revoke the likence held by that person.

20. Any person who domness or interferes in any whi-stept for just and sufficient chuse, with any vessel, may or equiptent (of whotsoever kind) used by any fishery officer for the purpuse of entrying out his duties in the enforcement of the provisions of these Regulations, shall be guilty of an ordence and likits on conviction to a fine of five thousand dollars or to imprisonment for twelve months, or to both such fine and imprisonment.

Trial and punishment of offenders.

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Penalty for interfering with fishery protec-tion equipment.

21. (1) All offences unter these Regulations shall be triable summarily. (2) Any person convicted of an offence for which no other persity is provided under these Regulations shull be liable to a fine of one " thousand dollars or to impresonment for six months, or togoth such fine and imprisonment.

REPORTS AND PUBLICATIONS

The following is a list of the major reports and publications concerned with <u>mational</u> surfle resources (list author, date, title, and publisher).

Corr, A., Nuylan, A., Mortimer, J., Kjørndal, K., and Carr T. 1982 "Calcos Islands". <u>Proliminary Jurysy of Maring Turtle Populations</u> and Mabilats in the Mariner, Allantis. BOLL Technical Membrandum Mariner, 4993-34. ٦. 1962. 2.

ACKNOLL EDGMENT

ers of the PRICE foundation made a major contribution to this report and to the July 1982 data gathering survey. Special thanks to Hr. Chuck Nesse and Gary Modgkins, weeders of this foundation for their help and friendship. Also Mr. Donnis Frazle and Bront Mitchel deserve special thanks for assisting in collecting much of the data which appears in the contents of this report. Mr. Fred Berry and Professor Archie Carr were a major stimulus to this project by providing their wisdom and encouragement. Other wembers of the 2.4.1.5. Steering Counitte and technical team also deserve acknowledgement for their devotion and dedication to this project. Finally I wish to thank Jan Witte for her editorial skills and to all the individuals living in the Turks and Colcos Islands for their hospitality and for taking an active interest in sea turtle conservation and research.

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