

WATS II REPORT / DATA SET

National Report to WATS II for St. Kitts/Nevis Ralph Wilkins and Audra Barret 12 October 1987

WATS2 055





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 sizes and trends, 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.

Despite the potential value of this information to agencies responsible for conducting stock assessments, monitoring recovery trends, safeguarding critical habitat, and evaluating conservation successes in the 21st century, the National Reports submitted to WATS II were not included in the published proceedings and, until now, have existed only in the private libraries of a handful of agencies and symposium participants. To help ensure the legacy of these symposia, we have digitized the entire proceedings – including National Reports, plenary presentations and panels, species synopses, and annotated bibliographies from 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 can be cited (with the number of pages based on the layout of the original document) as:

Wilkins, R. and A. Barret. 1987. <u>National Report to WATS II for St. Kitts and Nevis</u>. Prepared for the Second Western Atlantic Turtle Symposium (WATS II), 12-16 October 1987, Mayagüez, Puerto Rico. Doc. 055. 33 pages.

Karen L. Eckert WIDECAST Executive Director June 2009

STATUS OF SEA TURTLES IN ST. KITTS/NEVIS

NATIONAL REPORT FOR W.A.T.S. II

October 11th - 16th, 1987

MAYAGŰEZ, PUERTO RICO

PRESENTED BY NATIONAL REPRESENTATIVES

RALPH WILKINS

and

AUDRA BARRET

October 1987

1. INTRODUCTION

During the last decade, sea turtle fishing in St. Kitts and Nevis has never been more than a subsistence level. Of the approximately 650 fishermen engaged in the fishing industry, only about 40 are engaged in the turtle fishery. Turtles are generally taken by the use of nets specifically designed for this purpose, ranging in length from 50 to 75 feet, 7 to 10 feet deep, and carry a mesh size of about 8 to 10 inches. Some turtles are taken during spear fishing or more traditionally during nesting. Four species of turtles are known to be nesting on beaches in St. Kitts/Nevis. These are: (i) the green turtle (*Chelonia mydas*), (ii) the hawksbill (*Eretmochelys imbricata*), (iii) the leatherback (*Dermochelys coriacea*), and the occasional (iv) loggerhead (*Caretta caretta*).

Since 1948, regulations have been developed and tailored to protect the harvesting of turtles under twenty (20) pounds in weight and the harvesting, interference and possession of any turtle product during the closed season observed 1st June through September 30th annually. New harmonized regulations developed by the O.E.C.S. countries proposes a moratorium on the turtle fishery but have not yet been made law in St. Kitts/Nevis. No trade between the islands has been developed for the turtle products from St. Kitts/Nevis except for the occasional sale of shells to buyers from neighbouring islands. Since WATS I in 1983, turtles have been observed to be relatively low in aboundance around St. Kitts/Nevis.

2. NESTING BEACHES AND ACTIVITY

Situations have changed since tropical storm Clause in 1984. Beaches on the leeward side of the islands have been suffering serious erosion problems. Hence, turtles seem to be attracted to the larger of the remote beaches. Examples can be seen where the once popular Penney Beach in Nevis and the Sandy Point Beach in St. Kitts with a normal 100-150 feet stretch of sand between the shoreline and back beach vegetation are now subjected to emergecy conservation measures. The beaches that are most used by turtles are those beaches on the South East Peninsular. Access to most of those beaches is mainly by boat. Access is expected to be much easier with Government's proposal to develop that area for tourism with the construction of a penetration road proposed to start within the near future. Previous nestings were either taken by humans or ravaged by wild animals.

3. IMPORTANT FORAGING AREAS

Turtles are seen almost everywhere by divers and seine fishermen. The more popular areas, however, are Dieppe Bay to Sandy Point, Old Road to Basseterre, the entire Peninsular, Conaree to Cayon in St. Kitts. In Nevis, Black Bay, Indian Castle, and Charles Town to New Castle. More turtles are observed in foraging areas close to nesting beaches on the Peninsula.

4. RESEARCH CONDUCTED

Through the assistance of WATS II, research has been conducted through this nesting season to determine:

- (1) The number of nesting females by species
- (2) Nest protection and emergence counts
- (3) Harvest mortality and market activities
- (4) Observation of non-nesting females

The research was conducted separately for for both islands. (See report attached for Nevis).

4.1. Strategy

Two of the more active beaches in St. Kitts were selected at Sandy Point (Caribbean site) and Conaree (Atlantic site). Two beach observers were hired to monitor these beaches. The beaches were sectioned and monitored randomly during May 3rd and September 30th, which incorporated the regulated closed season June 1st through September 30th. Observers were provided with the necessary facilities and instructed by the National Representative on procedual matters. Measurements were taken using the curved method. Regular checks were made with observers to straighten out problems that might develop.

4.2. Findings

Surprisingly to date no turtles have nested on the popular Sandy Point beach. No turtles have been caught neither before nor during the nesting season, but juveniles (hawksbill and green) were observed within the foraging areas of Sandy Point. At Conaree, turtles started nesting from late April until the middle of August (see Appendix). Each nesting was recorded and measurements were taken from those that were possible. No false tracks were made and to date over 18 turtles have nested including one hawksbill. Most nests were discovered the next day. Attempts were made to obliterate the area after taking physical marks of the nest. The nests were soon discovered within a day or two and eggs taken by locals. Prior to and during the survey period two turtles (Dc) were taken by locals, but were taken before the closed season.

5. MARKET STUDY

A market study was conducted for St. Kitts for 1986-1987 based on information supplied by the fishermen; over 50 turtles were caught during the period. These include hawksbill, green, loggerhead and leatherback turtles. All the meat was consumed locally and shells from the hawksbill either sold to a buyer from neighbouring islands or sold to a local buyer who sells to an outside buyer.

6. CONCLUSION

This might have been a bad year for nesting females but, from information gathered, turtle stocks in this part of the region are on the decline. Establishing erosion control measures might never bring back beaches for the nesting of turtles. The O.E.C.S. countries should be encouraged to implement the harmonized regulations giving effect to the moratorium on sea turtle fishing. Steps should be taken to encourage this to the wider Caribbean countries.

STATUS OF THE TURTLE FISHERY AND RESEARCH PROJECT

Nevis is basically an agricultural community with farming and fishing providing employment for the majority of its citizens.

According to the 1980 census, the population of Nevis is approximately 9,000; it has dropped drastically due to migration. Out of the present population some four hundred and fifty (450) persons are engaged in the fishing industry. The mode of fishing is somewhat multiple.

Traditional artisanal fishing is still practised amongst the fishermen on the island. An approximate total of twenty (20) fishermen are fully engaged in turtle fishing, while others occasionally catch them, especially when engaged in spear fishing.

The fishermen fish turtles with gill nets locally known as 'Turtle Nets'; a length of 50-75 feet and depth of 10 feet with mesh size of 8-10 inches. During the last season they operated some thirty-six (36) nets in the inshore areas, along the peninsula of St Kitts, and on beaches in Nevis that are known to be frequented by turtles. The total catch for the 1986-87 season (October-May) was about 110 turtles, mainly hawksbill (*Eretmochelys imbricata*) and the green back (*Chelonia mydas*), with an average weight of sixty-five (65) pounds. The leatherback (*Dermochelys coriacea*) is caught occasionally and released because locals do not consume the meat. The most frequent type caught or seen is the hawksbill. The meat of both hawksbill and green back turtle are sold mostly to the hotels. The shells are used for decorations, jewellery and some fishermen swinge it to be used as bait for their fish traps.

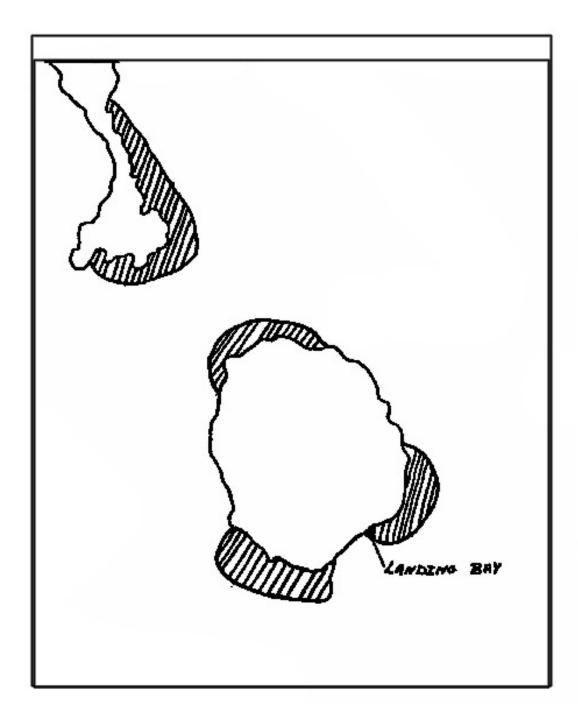
Although the fisherman gave the information from the previous season willingly, it was difficult to convince them to lend their assistance with the monitoring of the Turtle Project, even though they would have been compensated. Only one assisted and I worked with him, for the past three months. In spite of that, I was able to measure some shells of the turtles from last season. Measurement of the shells are attached.

Monitoring of the beaches has been effected from April this year. On the 10th day, a leatherback beached but made a false nest. To date we have found one more track; that too was identified as false. Monitoring is still active and occasionally beach surveys are carried out along the beaches of the St Kitts peninsula.

Sometime during June a fisherman saw turtle shells on one of the beaches. No information was collected as to how many he saw. Another fisherman reported that one evening while fishing on a beach that is not monitored, he saw and estimated well over a hundred juvenile turtles (hatchings as they are called) heading towards the sea. He also informed me that turtles normally beach for nesting during the changing of the moon. My assistant is now in the process of monitoring the beaches two days before and two days after the changing of the moon. This information was passed by one of the older fishermen who, by checking the sky at a certain time, can predict when a turtle would be beaching to nest. It was also said that Landing Bay is the major nesting site on the island. This bay is situated on the south coast well isolated and can only be reached by foot or boat depending on the weather. The fisherman who operate around the reefs and shoals of that area always see a number of small turtles - estimated weight 10-15 lbs.

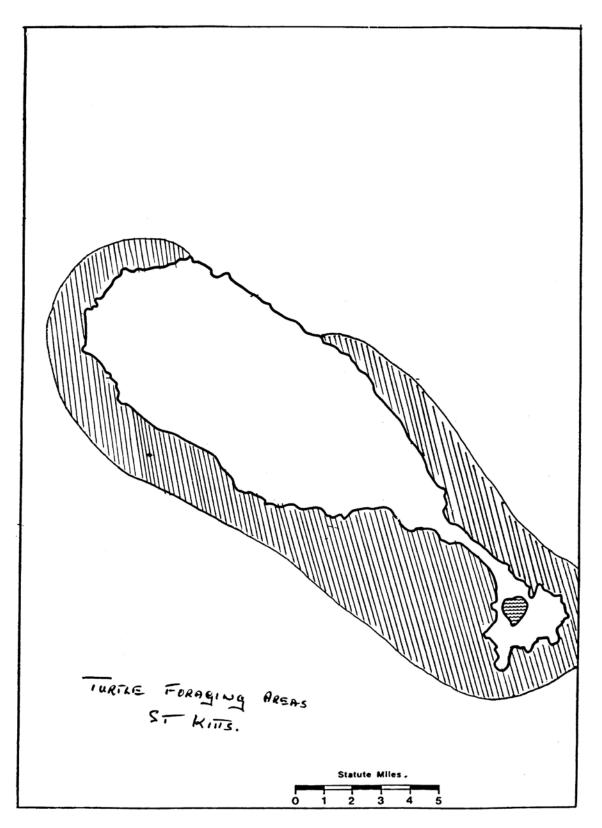
The Research project is still in process and will be continuing even if funds are exhausted. The results will be forwarded to Dr. Robert R. Lankford, Executive Secretary WATS II and copied to Mr. Ralph Wilkins, National Representative of St. Kitts/Nevis.

Audra Barrett Fisheries Assistant September 8, 1987

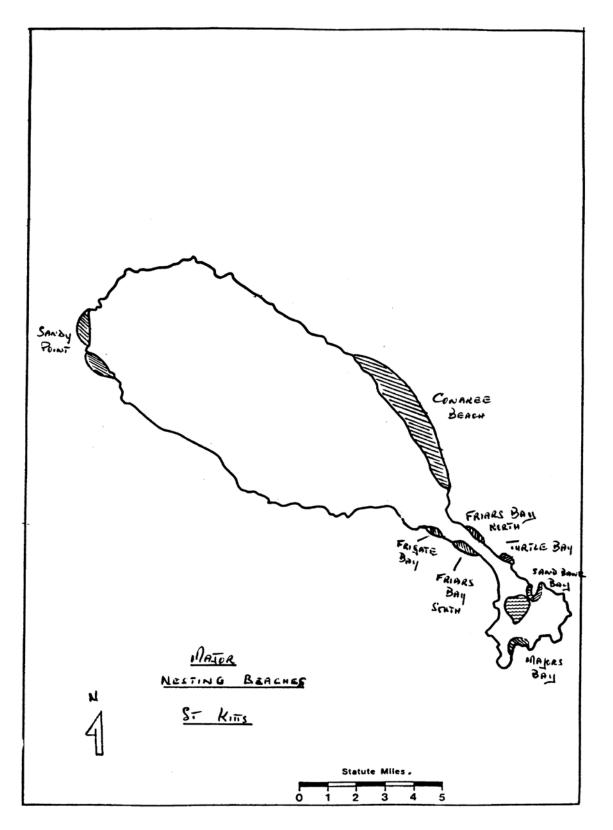


Turtle fishing areas, St. Kitts and Nevis

Editor's note (2009): Maps and figures are reprinted exactly as they appear in the original document; we regret the poor quality exhibited in some cases.



Turtle foraging area, St. Kitts



Major nesting beaches, St. Kitts

MEASUREMENT OF SEA TURTLES

1.	Total carapace length Carapace width Approximate weight	Green turtle (<i>Chelonia my</i> o	das) 72 cm 62 cm 65 lbs
2.	Total carapace length Carapace width Approximate weight		68 cm 55 cm 55 lbs
3.	Total carapace length Carapace width Approximate weight		74cm 60 cm 75 lbs
4.	Total carapace length Carapace width Approximate weight		63 cm 55 cm 50 lbs
5.	Total carapace length Carapace width Approximate weight		67 cm 59 cm 65 lbs
6.	Total carapace length Carapace width Approximate weight		57 cm 47 cm 45 lbs
7.	Total carapace length Carapace width Approximate weight		75 cm 60 cm 85 lbs
	I	Hawksbill (<i>Eretmochelys imb</i>	ricata)
1.	Total carapace length Carapace width Approximate weight		82 cm 60 cm 160 lbs
2.	Total carapace length Carapace width Approximate weight		68 cm 56 cm 60 lbs

TABLE I. NESTING BEACH SURVEY

Country: St. Kitts State:	Nan	ne of Beach: Conare	е
Name of Observer: C. Solous	Date: 28.04.1987	Time Start/Stop:	Distance Surveyed:
Number Nest	1		
1. Time	6:00AM		
2. Species *	Dc		
Tag No. N=New; O=Old	None		
4. Carapace Length (S/C)			
Units in Cm or inches			
5. Number of Eggs	Uk		
6. Emergence date			
7. Number of Hatchlings			
8. Erosion Danger? (Y/N)	Ν		
9. Nest Protected? (Y/N)	Ν		
10. Nest relocated to Another	Ν		
Beach Site? (Y/N)			
11. Number of Eggs to Hatchery?	Ν		
(Y/N)			
12. Number of Eggs Harvested	Uk		
13. Number of Eggs Depredated			
14. Number of Head-started Eggs	;		
15. Females Harvested? (Y/N)	N		
· · · · · · · · · · · · · · · · · · ·			

TABLE I. NESTING BEACH SURVEY

Country: St. Kitts State:	Name of Beach: Conaree
Name of Observer: C. Solous	Date: 29.04.1987 Time Start/Stop: Distance Surveyed:
Number Nest	1
1. Time	6:00AM
2. Species *	Dc
Tag No. N=New; O=Old	
Carapace Length (S/C)	
Units in Cm or inches	
5. Number of Eggs	Uk
6. Emergence date	
Number of Hatchlings	
8. Erosion Danger? (Y/N)	Ν
Nest Protected? (Y/N)	Ν
10. Nest relocated to Another	Ν
Beach Site? (Y/N)	
11. Number of Eggs to Hatchery?	2 N
(Y/N)	
12. Number of Eggs Harvested	Uk
13. Number of Eggs Depredated	
14. Number of Head-started Eggs	3
15. Females Harvested? (Y/N)	Ν

TABLE I. NESTING BEACH SURVEY

Name of Beach: Conaree
Date: 03.05.1987 Time Start/Stop: Distance Surveyed:
_
1
6:00AM
Dc
С
51 ins
·
s
Y

TABLE I. NESTING BEACH SURVEY

Country: St. Kitts State:	Nan	ne of Beach: Conare	е
Name of Observer: C. Solous	Date: 05.05.1987	Time Start/Stop:	Distance Surveyed:
Number Nest	1		
1. Time	6:00AM		
2. Species *	Dc		
Tag No. N=New; O=Old			
Carapace Length (S/C)			
Units in Cm or inches			
5. Number of Eggs	Uk		
Emergence date			
Number of Hatchlings			
Erosion Danger? (Y/N)	Ν		
Nest Protected? (Y/N)	Ν		
10. Nest relocated to Another	Ν		
Beach Site? (Y/N)			
11. Number of Eggs to Hatchery?			
(Y/N)			
12. Number of Eggs Harvested			
13. Number of Eggs Depredated			
14. Number of Head-started Eggs	;		
15. Females Harvested? (Y/N)	Ν		

TABLE I. NESTING BEACH SURVEY

Country: St. Kitts State:	Nam	ne of Beach: Conare	e
Name of Observer: C. Solous	Date: 08.05.1987	Time Start/Stop:	Distance Surveyed:
.			
Number Nest	1		
1. Time	6:00AM		
2. Species *	Dc		
3. Tag No. N=New; O=Old			
Carapace Length (S/C)			
Units in Cm or inches			
5. Number of Eggs			
Emergence date			
7. Number of Hatchlings			
8. Erosion Danger? (Y/N)	Ν		
9. Nest Protected? (Y/N)	Ν		
10. Nest relocated to Another	Ν		
Beach Site? (Y/N)			
11. Number of Eggs to Hatchery?	Ν		
(Y/N)			
12. Number of Eggs Harvested			
13. Number of Eggs Depredated			
14. Number of Head-started Eggs			
15. Females Harvested? (Y/N)	Ν		

TABLE I. NESTING BEACH SURVEY

Country: St. Kitts State:	Nan	ne of Beach: Conare	e
Name of Observer: C. Solous	Date: 10.05.1987	Time Start/Stop:	Distance Surveyed:
Number Nest	1		
1. Time	6:30AM		
2. Species *	Dc		
Tag No. N=New; O=Old			
4. Carapace Length (S/C)	С		
Units in Cm or inches	59 ins		
5. Number of Eggs	Uk		
Emergence date			
7. Number of Hatchlings			
Erosion Danger? (Y/N)	Ν		
Nest Protected? (Y/N)	Ν		
10. Nest relocated to Another	Ν		
Beach Site? (Y/N)			
11. Number of Eggs to Hatchery?	Ν		
(Y/N)			
12. Number of Eggs Harvested	None		
13. Number of Eggs Depredated			
14. Number of Head-started Eggs	;		
15. Females Harvested? (Y/N)	Ν		

TABLE I. NESTING BEACH SURVEY

Country: St. Kitts State:	Nan	ne of Beach: Conare	е
Name of Observer: C. Solous	Date: 16.05.1987	Time Start/Stop:	Distance Surveyed:
Nu wala an Nia at	4		
Number Nest	1		
1. Time	6:00AM		
2. Species *	Dc		
Tag No. N=New; O=Old			
4. Carapace Length (S/C)	С		
Units in Cm or inches	54 ins		
5. Number of Eggs			
Emergence date			
Number of Hatchlings			
Erosion Danger? (Y/N)	Ν		
Nest Protected? (Y/N)	Ν		
10. Nest relocated to Another	Ν		
Beach Site? (Y/N)			
11. Number of Eggs to Hatchery?	Ν		
(Y/N)			
12. Number of Eggs Harvested	Uk		
13. Number of Eggs Depredated			
14. Number of Head-started Eggs	;		
15. Females Harvested? (Y/N)	Y		
(,,,,)	-		

TABLE I. NESTING BEACH SURVEY

Country: St. Kitts State:	Name of Beach: Conaree	
Name of Observer: C. Solous	Date: 23.05.1987 Time Start/Stop: Distance Survey	ed:
Number Nest	1	
1. Time	5:45AM	
2. Species *	Dc	
Tag No. N=New; O=Old		
Carapace Length (S/C)		
Units in Cm or inches		
5. Number of Eggs	Uk	
Emergence date		
7. Number of Hatchlings		
Erosion Danger? (Y/N)	Ν	
9. Nest Protected? (Y/N)	Ν	
10. Nest relocated to Another	Ν	
Beach Site? (Y/N)		
11. Number of Eggs to Hatchery?	Ν	
(Y/N)		
12. Number of Eggs Harvested	Uk	
13. Number of Eggs Depredated		
14. Number of Head-started Eggs		
15. Females Harvested? (Y/N)	Ν	

TABLE I. NESTING BEACH SURVEY

Country: St. Kitts State:	Name of Beach: Conaree
Name of Observer: C. Solous	Date: 24.05.1987 Time Start/Stop: Distance Surveyed:
Number Nest	1
1. Time	6:00AM
2. Species *	Dc
Tag No. N=New; O=Old	
Carapace Length (S/C)	
Units in Cm or inches	
5. Number of Eggs	Uk
6. Emergence date	
Number of Hatchlings	
Erosion Danger? (Y/N)	Ν
Nest Protected? (Y/N)	Ν
10. Nest relocated to Another	Ν
Beach Site? (Y/N)	
11. Number of Eggs to Hatchery?	2 N
(Y/N)	
12. Number of Eggs Harvested	Uk
13. Number of Eggs Depredated	
14. Number of Head-started Eggs	3
15. Females Harvested? (Y/N)	Ν

TABLE I. NESTING BEACH SURVEY

Country: St. Kitts State:	Nam	ne of Beach: Conare	e
Name of Observer: C. Solous	Date: 01.06.1987	Time Start/Stop:	Distance Surveyed:
Number Nest	1		
1. Time	6:00AM		
2. Species *	Dc		
Tag No. N=New; O=Old			
Carapace Length (S/C)			
Units in Cm or inches			
5. Number of Eggs	Uk		
Emergence date			
7. Number of Hatchlings			
Erosion Danger? (Y/N)	Ν		
9. Nest Protected? (Y/N)	Ν		
10. Nest relocated to Another	Ν		
Beach Site? (Y/N)			
11. Number of Eggs to Hatchery?	Ν		
(Y/N)			
12. Number of Eggs Harvested	Uk		
13. Number of Eggs Depredated			
14. Number of Head-started Eggs			
15. Females Harvested? (Y/N)	Ν		

TABLE I. NESTING BEACH SURVEY

Country: St. Kitts State:	Name of Beach: Conaree
Name of Observer: C. Solous	Date: 02.06.1987 Time Start/Stop: Distance Surveyed:
Number Nest	1
1. Time	6:00AM
2. Species *	Dc
Tag No. N=New; O=Old	
Carapace Length (S/C)	
Units in Cm or inches	
5. Number of Eggs	Uk
6. Emergence date	
Number of Hatchlings	
Erosion Danger? (Y/N)	Ν
Nest Protected? (Y/N)	Ν
10. Nest relocated to Another	Ν
Beach Site? (Y/N)	
11. Number of Eggs to Hatchery?	P N
(Y/N)	
12. Number of Eggs Harvested	Uk
13. Number of Eggs Depredated	
14. Number of Head-started Eggs	s
15. Females Harvested? (Y/N)	Ν

TABLE I. NESTING BEACH SURVEY

Country: St. Kitts State: Name of Beach: Conaree					
Name of Observer: C. Solous	Date: 08.0	6.1987	Time Start/Stop:	Distance Surveyed:	
Number Nest	1	2			
· · · · · · · · · · · · · · · · · · ·	• • • •	6:30AN	Л		
	6:00AM		/I		
2. Species *	Dc	Dc			
3. Tag No. N=New; O=Old					
4. Carapace Length (S/C)					
Units in Cm or inches					
5. Number of Eggs	Uk	Uk			
Emergence date					
Number of Hatchlings					
8. Erosion Danger? (Y/N)	N	Ν			
9. Nest Protected? (Y/N)	Ν	Ν			
10. Nest relocated to Another	Ν	Ν			
Beach Site? (Y/N)					
11. Number of Eggs to Hatchery?	N	Ν			
(Y/N)					
12. Number of Eggs Harvested **	Uk	Uk			
13. Number of Eggs Depredated					
14. Number of Head-started Eggs	s				
15. Females Harvested? (Y/N)	N	Ν			

* Cc=Caretta caretta; Cm=Chelonia mydas; Dc=Dermochelys coriacea; Ei=Eretmochelys imbricata; Lk=Lepidochelys kempi; Lo=Lepidochelys olivacea; Uk=Unknown

** Eggs taken by locals

TABLE I. NESTING BEACH SURVEY

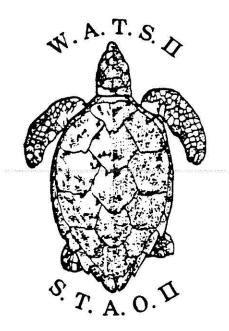
Country: St. Kitts State:	Name of Beach: Conaree						
Name of Observer: C. Solous	Date: 09.06.1987 Time Start/Stop: Distance Surveyed:						
Number Nest	1						
1. Time	6:00AM						
2. Species *	Dc						
Tag No. N=New; O=Old							
4. Carapace Length (S/C)							
Units in Cm or inches							
5. Number of Eggs	Uk						
6. Emergence date							
7. Number of Hatchlings							
Erosion Danger? (Y/N)	Ν						
Nest Protected? (Y/N)	Ν						
10. Nest relocated to Another	Ν						
Beach Site? (Y/N)							
11. Number of Eggs to Hatchery?	2 N						
(Y/N)							
12. Number of Eggs Harvested	Uk						
13. Number of Eggs Depredated							
14. Number of Head-started Eggs	s						
15. Females Harvested? (Y/N)	Ν						

TABLE IV. MORTALITY

Country: St. Kitts State:			Y	Year: 1987 Observer: National representative			
Date July 1987	Species * Cm	Sex F	Length 42 in	Weight 230 lb	# Eggs 	Locality Helden-St. Pauls	Cause Accidentally taken by net set for sharks

* Cc=Caretta caretta; Cm=Chelonia mydas; Dc=Dermochelys coriacea; Ei=Eretmochelys imbricata; Lk=Lepidochelys kempi; Lo=Lepidochelys olivacea; Uk=Unknown

<u>Comments</u>: Turtle was found dead in net; Tag # P1803 from Department of Biology, University of Florida in Gainesville, Florida, USA was found attached. Information sent back.



WATS II REPORT/DATA SET

National Report to WATS II for St. Kitts/Nevis Ralph Wilkins and Audra Barret 12 october 1987

WATS2 055

STATUS OF SEA TURTLES IN ST. KITTS/NEVIS

NATIONAL REPORT FOR W.A.T.S. II.

Oct. 11th - 16th, 1987. MAYAGUEZ, PUERTO RICO.

PRESENTED BY NATIONAL REPRESENTATIVES RALPH WILKINS AND AUDRA BARRET

October 1987

i.

O.1. INTRODUCTION

During the last decade, turtle fishing in St. Kitts and Nevis has never been more than a substance level. Of the approximate 650 fishermen engaged in the fishing industry only about 40 are engaged in the turtle fishery. Turtles are generally taken by the use of nets specifically designed for this purpose, ranging in length of 50 to 75 feet, 7 to 10 feet deep and carry a mesh size of about 8 to 10 inches. Some turtles are taken during spear fishing or more traditionally, during nesting. Four species of turtles are known to be nesting on beaches in St. Kitts/Nevis. These are (i) the Green turtle (Chelonia mydas), (ii) the Hawksbill (Eretmochelys imbricata), (iii) the Leather back (Dermochelys coriacea), and the occasional (iv) Loggerhead (Caretta caretta).

Since 1948 regulations have been developed and tailored to protect the harvesting of turtles under twenty (20) pounds in weight and the harvesting, interference and possession of any turtle product during the closed season observed 1st June through September 30th annually.

New harmonized regulations developed by the O.E.C.S. countries proposes a moratorium on the turtle fishery but have not yet been made law in St. Kitts/Nevis. No trade between the island has been developed for the turtle products from St. Kitts/Nevis except for the occasional sale of shells to buyers from neighbouring islands. Since W.A.T.S. 1 in 1983 turtles have been observed to be relatively low in aboundance around St. Kitts/Nevis.

0.2 NESTING BEACHES AND ACTIVITY

Situations have changed since tropical storm Clause in 1984. Beaches on the leeward side of the islands have been suffering serious erosion problems. Hence, turtles seem to be attracted to the larger of the remote beaches. Examples can be seen where the once popular Penney Beach in Nevis and the Sandy Point Beach in St. Kitts with a normal 100 - 150 feet stretch of sand between the shoreline and back beach vegetation are now subjected to emergecy conservation measures. The beaches that are most used by turtles are those beaches on the South East Peninsular. Access to most of those beaches is mainly by boat. Access is expected to be much easier with Government's propasal to develop that area for Tourism with the construction of a penetration road proposed to start within the near future. Previous nestings were either taken by human or ravaged by wild animals.

0.3. IMPORTANT FORAGING AREAS

Turtles are seen almost everywhere by divers and seine fishermen. The more popular areas however are Dieppe Bay to Sandy Point, Old Road to Basseterre, the entire Peninsular, Conaree to Cayon in St. Kitts. In Nevis; Black Bay, and Indian Castle, Charles Town to New Castle. More turtles are observed in foraging areas close to nesting beaches on the Peninsular.

0.4. RESEARCH CONDUCTED

Through the assistance of W.A.T.S. II research have been conducted through this nesting season to determine:

- (1) The number of nesting females by species
- (2) Nest protection and emergence counts
- (3) Harvest mortality and market activities
- (4) Observation of non-nesting females.

The research was conducted separately for for both islands. (See report attached for Nevis).

0.4.1. STRATEGY

Two of the more active beaches in St. Kitts were selected at Sandy Point (Caribbean Site) and Conaree (Atlantic Site). Two beach observers were hired to monitor these beaches. The beaches were sectioned and monitored randomly during May 3rd and September 30th, which incorporated the regulated closed season June 1st through September 30th. Observers were provided with the necessary facilities and instructed by the National Representative on procedual matters. Measurements were taken using the curved method. Regular checks were made with observers to straighten out problems that might develop.

0.4.2. FINDINGS

Surprisingly to date no turtles have nested on the popular Sandy Point beach. No turtles have been caught neither before nor during the nesting season but juveniles (hawksbill and green) were observed within the foraging areas of Sandy Point. At Conaree turtles started nesting from late April until the middle of August. (See Appendix). Each nesting was recorded and measurements were taken from those that were possible. No false tracks were made and to date over 18 turtles have nested including one hawksbill. Most nests were discovered the next day. Attempts were made to obliterate the area after taking physical mark of the nest. The nests were soon discovered within a day or two and eggs taken by locals. Prior to and during the survey period two turtles (D.C) were taken by locals but were taken before the closed season.

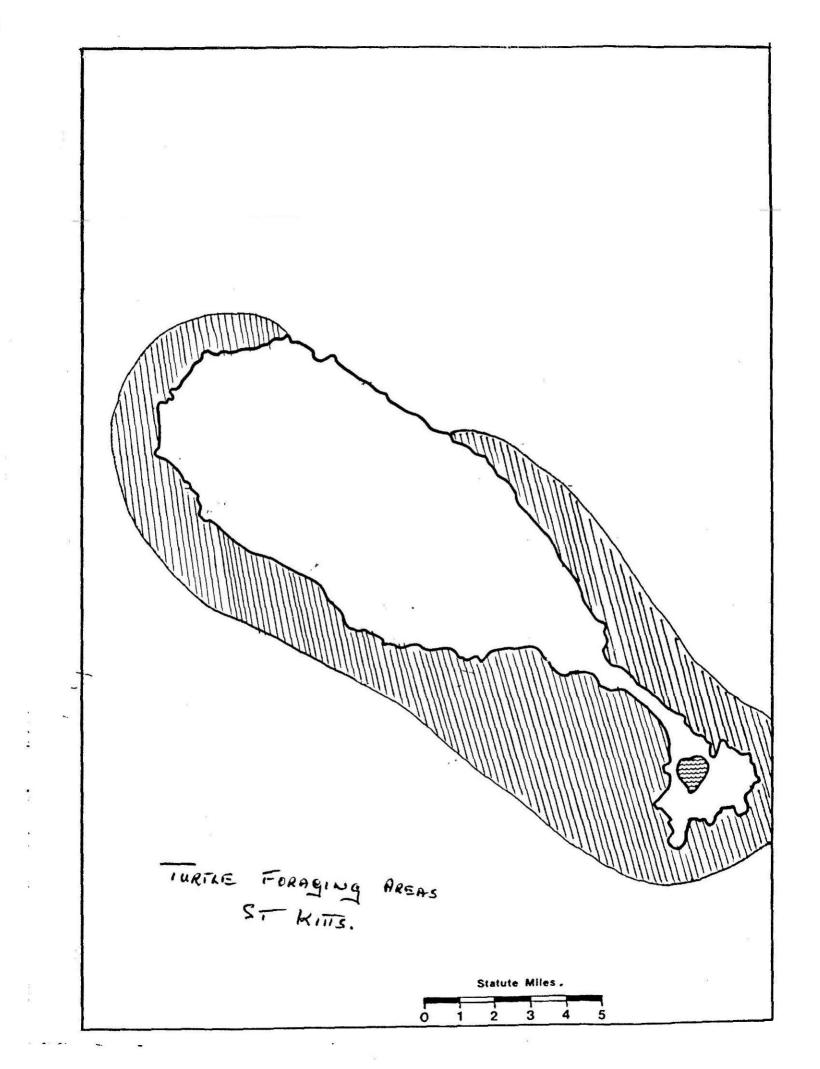
0.5. MARKET STUDY

A market study was conducted for St. Kitts for 1986 - 1987 based on information supplied by the fishermen, over 50 turtles were caught during the period. These include hawksbill, green, loggerhead and leather back turtles. All the meat was consumed locally and shells from the hawksbill either sold to a buyer from neighbouring islands or sold to a local buyer who sells to outside buyer.

0.6. CONCLUSION

This might have been a bad year for nesting females but from information gathered turtle stocks in this part of the region is on the decline. Establishing erosion control measures might never bring back beaches for the nesting of turtles. The O.E.C.S. countries should be encouraged to implement the harmonized regulations giving effect to the moratorium on sea turtle fishing. Steps should be taken to encourage this to the wider Caribbean countries.

.



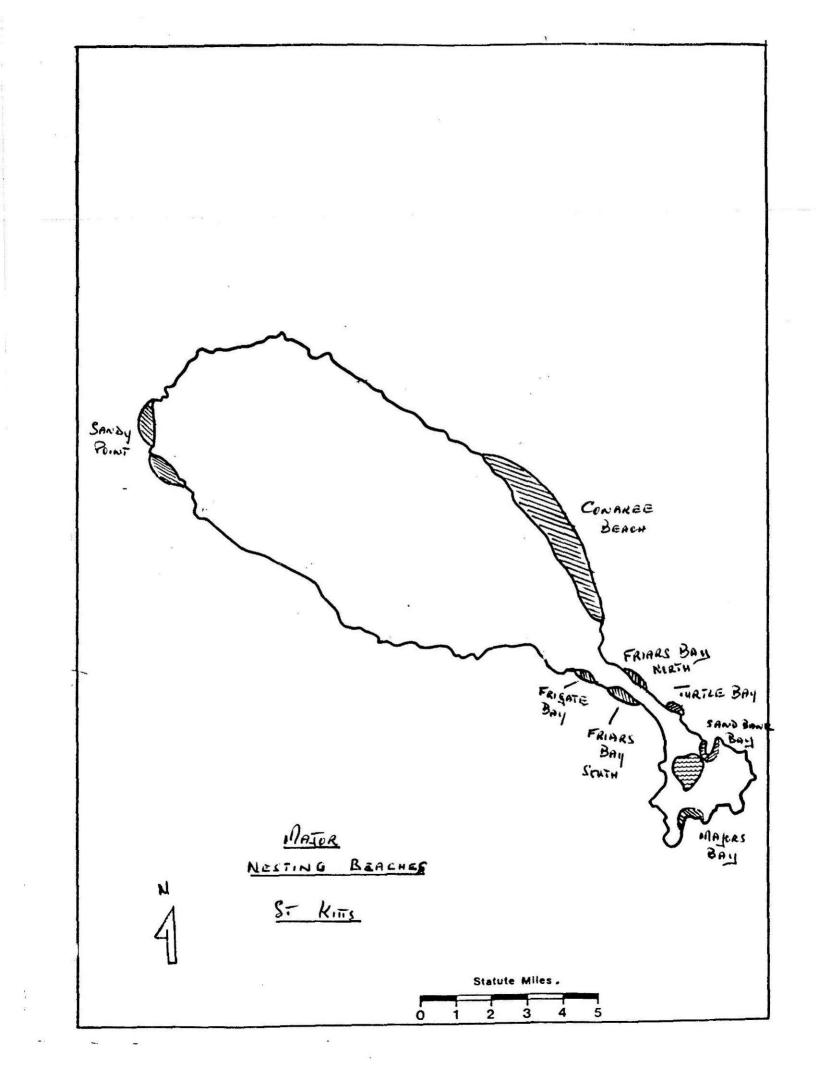


TABLE I. NESTING BEACH SURVEY: COUNTRY_ <u>ST_kitis</u> _STATE		_ NAME OF BEA	ACH	CONAR	ee		
NAME OF OBSERVER C. SOLULIS DA	TE_28/4/	87 TIME STAR	r/SIOP	DI	STANCE SUF	RVEYED	
Nest Number	Ċ						
1. Time	6 ALA						
2. Species*	Jc						<u></u>
3. Tag Number N = New O = Old	NONE						
4. Carapace Length (S/C) Units cm or inches			×				
5. Number of Eggs	uk						
f ergence Date	_						
7. Number of Hatchlings							<u> </u>
8. Erosion Danger?(Y/N)	N.			20 			
9. Nest Protected?(Y/N)	N.	<u> </u>			a - 14		
10. Nest Relocated to another beach site (Y/N)	No	Ę					
11. Number of Eggs to Hatchery? (Y/N)	N						
12. Number of Eggs Harvested	uK						
13. Number of Eggs Depredated							
14. Number of Head-start Eggs							
15. Females Harvested?(Y/N)	N			<u> </u>	<u> </u>		

*Cc = Caretta caretta; Cm = Chelonia mydas; Dc = Dermochelys coriacea; Ei = Eretmochelys imbricata; Lk = Lepidochelys kempi; Lo = Lepidochelys olivavea; UK = Unknown

Page 3

TABLE I. NESTING BEACH SURVEY:			100	C	2 194 —	3	
COUNTRY ST KITTS STATE		NAME OF	BEACH	LONO-A	REE	an a	
NAME OF OBSERVER C Solous DA	 TE 29/4/	12 TIME SI	ART/STOP_	D	ISTANCE SU	RVEYED	
			×			•	
-	: D						
Nest Number							
1. Time	6 AM						
2. Species*	Bc.						
3. Tag Number N = New O = Old					-		
4. Carapace Length (S/C) Units on or inches							
5. Number of Eggs	UK						-
6 ergence Date				ļ			
7. Number of Hatchlings							
8. Erosion Danger?(Y/N)	N						\vdash
9. Nest Protected?(Y/N)	N						$\left \right $
10. Nest Relocated to another beach site (Y/N)	2						-
11. Number of Eggs to Hatchery? (Y/N)	N						+
12. Number of Eggs Harvested	uk						+
13. Number of Eggs Depredated			ļ			<u> </u>	+
14. Number of Head-start Eggs		<u> </u>					+
15. Females Harvested?(Y/N)	N		<u> </u>	<u> </u>	1	<u> </u>	1

*Cc = <u>Caretta caretta;</u> Cm = <u>Chelonia mydas;</u> Dc = <u>Dermochelys coriacea;</u> Ei = <u>Eretmochelys</u> <u>imbricata;</u> Lk = <u>Lepidochelys kempi;</u> Lo = <u>Lepidochelys olivavea;</u> UK = Unknown

Page 3

•

TABLE I. NESTING BEACH SURVEY: COUNTRY S_{7} K_{1175} STATE		NAME OF BEACH	CONAREE			
NAME OF OBSERVER C Selous	DATE 3/5/87	TIME START/STOP	DISTANCE :	SURVEYED		
Nest Number	0					
1. Time	6 A17					
2. Species*	De					
3. Tag Number N = New O = Old						
4. Carapace Length (S/C) Units cm or inches	c 51,05					
5. Number of Eggs				+		
f ergence Date	_					
7. Number of Hatchlings						
8. Erosion Danger?(Y/N)				+		
9. Nest Protected?(Y/N)						
10. Nest Relocated to another beach site (Y/N)	-					
11. Number of Eggs to Hatchery? (Y/N)						
12. Number of Eggs Harvested						
13. Number of Eggs Depredated			+			
14. Number of Head-start Eggs				_		
15. Females Harvested?(Y/N)	<u> </u>			,		

#Cc = Caretta caretta; Cm = Chelonia mydas; Dc = Dermochelys coriacea; Ei = Eretmochelys imbricata; Lk = Lepidochelys kempi; Lo = Lepidochelys olivavea; UK = Unknown

Page 3

TABLE I. NESTING BEACH SURVEY:				Co	VAREE		
COUNTRY ST KITS STATE		_ NAME OF	BEACH	<u></u>			
NAME OF OBSERVER C FOLOUS	DATE 5/5/87	TIME SI	CART/STOP	DI	STANCE SU	RVEYED	
Nest Number	\bigcirc						
1. Time	6 AND						
2. Species#	de						
3. Tag Number N = New O = Old							
4. Carapace Length (S/C) Units on or inches	—						
5. Number of Eggs	uk						
6. Thergence Date							
7mber of Hatchlings							
8. Erosion Danger?(Y/N)	N.						
9. Nest Protected?(Y/N)	N						
10. Nest Relocated to another beach site (Y/N)	\sim						
11. Number of Eggs to Hatchery? (Y/N)							
12. Number of Eggs Harvested							
13. Number of Eggs Depredated							
14. Number of Head-start Eggs							
15. Females Harvested?(Y/N)	N						

*Cc = <u>Caretta</u> <u>caretta</u>; Cm = <u>Chelonia</u> <u>mydas</u>; Dc = <u>Dermochelys</u> <u>coriacea</u>; E1 = <u>Eretmochelys</u> <u>imbricata</u>; <u>Lk = Lepidochelys kempi</u>; <u>Lo = Lepidochelys olivavea</u>; <u>UK = Unknown</u>

TABLE I. NESTING BEACH SURVEY:				0			
COUNTRY ST KINS STATE		NAME OF	BEACH	CON	PREE		
NAME OF OBSERVER C. SOLOUS 1					STANCE SU	RVEYED	
Nest Number	0						
1. Time	6 AM			<u>.</u>			
2. Species*	de						
3. Tag Number N = New O = Old							
4. Carapace Length (S/C) Units cm or inches	-						
5. Number of Eggs							
6. Thergence Date							
7umber of Hatchlings							
8. Erosion Danger?(Y/N)	N						
9. Nest Protected?(Y/N)	N						
10. Nest Relocated to another beach site (Y/N)	N						
11. Number of Eggs to Hatchery? (Y/N)	N						
12. Number of Eggs Harvested							
13. Number of Eggs Depredated	-	1					
14. Number of Head-start Eggs	-			And Anna and			
15. Females Harvested?(Y/N)	N				ļ	<u> </u>	

#Cc = Caretta caretta; Cm = Chelonia mydas; Dc = Dermochelys coriacea; Ei = Eretmochelys imbricata; Lk = Lepidochelys kempi; Lo = Lepidochelys olivavea; UK = Unknown

.

.

TABLE I. NESTING BEACH SURVEY:			R			
COUNTRY ST KITTS STATE		NAME OF BEACH	Con	SAREE		
NAME OF OBSERVER C STROUG I				DISTANCE SUF	VEYED	3 8 N 0
Nest Number	Ø					
1. Time	6:30 AM					
2. Species*	Dc.					
3. Tag Number N = New O = Old						
4. Carapace Length (S/C) Units on or inches	C 59,NS			1		
5. Number of Eggs	UK.					
6 Vergence Date						<u></u>
7. number of Hatchlings			and the second s			
8. Erosion Danger?(Y/N)	N					
9. Nest Protected?(Y/N)	N	<u> </u>				<u></u>
10. Nest Relocated to another beach site (Y/N)	2					
11. Number of Eggs to Hatchery? (Y/N)	2					
12. Number of Eggs Harvested	NENE					
13. Number of Eggs Depredated						
14. Number of Head-start Eggs						
15. Females Harvested?(Y/N)	N.					l

*Cc = Caretta caretta; Cm = Chelonia mydas; Dc = Dermochelys coriacea; El = Eretmochelys imbricata; Lk = Lepidochelys kemp1; Lo = Lepidochelys olivavea; UK = Unknown

TABLE I. NESTING BEACH SURVEY:							
COUNTRY STATE STATE		NAME OF B	EACH	CONARI			
C. Solous NAME OF OBSERVER ST KINS D.	ATE_11/5/	/ <u>17 </u> TIME STA	RT/STOP	DIS	TANCE SUI	RVEYED	
Nest Number	0						
1. Time	6 A.M.						
2. Species*	De						
3. Tag Number N = New 0 = Old							
4. Carapace Length (S/C) Units cm or inches	54"C						
5. Number of Eggs							
6 ergence Date							
7. Number of Hatchlings							
8. Erosion Danger?(Y/N)	N						
9. Nest Protected?(Y/N)	N						
10. Nest Relocated to another beach site (Y/N)	N						
11. Number of Eggs to Hatchery? (Y/N)	N						
12. Number of Eggs Harvested	uk						
13. Number of Eggs Depredated							
14. Number of Head-start Eggs							
15. Females Harvested?(Y/N)	Y_			ļ			ļ

*Cc = Caretta caretta; Cm = Chelonia mydas; Dc = Dermochelys coriacea; Ei = Eretmochelys Imbricata; Ik = Lepidochelys kemp1; Lo = Lepidochelys olivavea; UK = Unknown

ABLE I. NESTING BEACH SURVEY:	-	NAME OF BEACH	CONARGE		
VAME OF OBSERVER C. SOLOUS I	DATE 23/5/	19 TIME START/STOP	DISTANCE SURVEYED		
Nest Number	0				
1. Time	5:45 AM				
2. Species#	de				
3. Tag Number N = New O = Old					
4. Carapace Length (S/C) Units on or inches					
5. Number of Eggs	UK				
6 ergence Date					
7. Number of Hatchlings	<u> </u>				
8. Erosion Danger?(Y/N)	N				
9. Nest Protected?(Y/N)	N				
10. Nest Relocated to another beach site (Y/N)	N				
11. Number of Eggs to Hatchery? (Y/N)	N				
12. Number of Eggs Harvested	uK				
13. Number of Eggs Depredated					
14. Number of Head-start Eggs			<u> </u>		
15. Females Harvested?(Y/N)	N				

*Cc = Caretta caretta; Cm = Chelonia mydas; Dc = Dermochelys coriacea; Ei = Eretmochelys imbricata; Lk = Lepidochelys kempi; Lo = Lepidochelys olivavea; UK = Unknown

TABLE I. NESTING BEACH SURVEY: COUNTRY St Kins STATE		NAME OF BE	EACH	CONA	266	a se successo		
NAME OF OBSERVER C SOLONS 1	DATE_24/5/	E 24/5/87 TIME START/STOP DISTANCE SURVEYED						
Nest Number	0	 						
1. Time	6 AM							
2. Species*)c							
3. Tag Number N = New O = Old								
4. Carapace Length (S/C) Units cm or inches								
5. Number of Eggs	uĸ							
6 ergence Date								
7. Number of Hatchlings								
8. Erosion Danger?(Y/N)	N							
9. Nest Protected?(Y/N)	N				~			
10. Nest Relocated to another beach site (Y/N)	N							
11. Number of Eggs to Hatchery? (Y/N)	N							
12. Number of Eggs Harvested	UK							
13. Number of Eggs Depredated								
13. Number of Head-start Eggs								
15. Females Harvested?(Y/N)	N							

#Cc = Caretta caretta; Cm = Chelonia mydas; Dc = Dermochelys coriacea; E1 = Eretmochelys imbricata; Lk = Lepidochelys kempi; Lo = Lepidochelys olivavea; UK = Unknown

TABLE I. NESTING BEACH SURVEY: COUNTRY $S = k_1 \pi s$ STATE		NAME OF	BEACH	Cont	FREE		
NAME OF OBSERVER C. JOLOUS DI				DI	STANCE SUI	RVEYED	
Nest Number	©						<u></u>
1. Time	6 AND						
2. Species*	De						
3. Tag Number N = New O = Old							
4. Carapace Length (S/C) Units cm or inches			20				
5. Number of Eggs	uk						
6 orgence Date							
7. Number of Hatchlings							
8. Erosion Danger?(Y/N)	N						
9. Nest Protected?(Y/N)	N						
10. Nest Relocated to another beach site (Y/N)	2						
11. Number of Eggs to Hatchery? (Y/N)	2						
12. Number of Eggs Harvested	UK						
13. Number of Eggs Depredated	_						ļ
14. Number of Head-start Eggs							ļ
15. Females Harvested?(Y/N)	N						

*Cc = Caretta caretta; Cm = Chelonia mydas; Dc = Dermochelys coriacea; Ei = Eretmochelys imbricata; Lk = Lepidochelys kempi; Lo = Lepidochelys olivavea; UK = Unknown

Page 3

TABLE I. NESTING BEACH SURVEY: COUNTRY $S_{\tau} = k_{\tau} \pi s$ STATE		NAME OF BEACH	Con	AREE		
NAME OF OBSERVER C FOLOUS D.			DIST	NCE SUF	(VEYED	
Nest Number	6		 			
1. Time	6 AM		 			
2. Species*	de.		 			
3. Tag Number N = New 0 = 01d			 	 -		
4. Carapace Length (S/C) Units cm or inches			 			
5. Number of Eggs	uk		 			
6 ergence Date			 			
7. Number of Hatchlings	-		 		2	
8. Erosion Danger?(Y/N)	N		 			
9. Nest Protected?(Y/N)	N		 			
10. Nest Relocated to another beach site (Y/N)	N	3)				
11. Number of Eggs to Hatchery? (Y/N)	2		 			
12. Number of Eggs Harvested	uk		 			
13. Number of Eggs Depredated	-					<u> </u>
14. Number of Head-start Eggs	-		 			
15. Females Harvested?(Y/N)	N					<u> </u>

*Cc = Caretta caretta; Cm = Chelonia mydas; Dc = Dermochelys coriacea; Ei = Eretmochelys imbricata; Lk = Lepidochelys kempi; Lo = Lepidochelys olivavea; UK = Unknown

TABLE I. NESTING BEACH SURVEY: COUNTRY <u>S= Kins</u> STATE NAME OF OBSERVER <u>C</u> SOLOUS D	- old	NAME OF BEACH			CONAREE DISTANCE SURVEYED			
NAME OF OBSERVER C JOLOUS D	ATE 4/ 0/C					1		
Nest Number	,	2						
1. Time	6 4.00	6:30 AM						
2. Species*	de	de						
3. Tag Number N = New O = Old		-						
4. Carapace Length (S/C) Units cm or inches	-	-						
5. Number of Eggs	UK	ик					<u></u>	
6. rgence Date		-						
7. Number of Hatchlings	_	-						
8. Erosion Danger?(Y/N)	N	N) }				
9. Nest Protected?(Y/N)	\sim	N						
10. Nest Relocated to another beach site (Y/N)	2	2			,			
11. Number of Eggs to Hatchery? (Y/N)	N	N						
12. Number of Eggs Harvested	UK	UK						
13. Number of Eggs Depredated	-	_						
14. Number of Head-start Eggs	_							
15. Females Harvested?(Y/N)	N	2			<u> </u>			
	No. of Concession, Name of							

*Cc = Caretta caretta; Cm = Chelonia mydas; Dc = Dermochelys coriacea; Ei = Eretmochelys imbricata; Lk = Lepidochelys kemp1; Lo = Lepidochelys olivavea; UK = Unknown

TABLE I. NESTING BEACH SURVEY: COUNTRY <u>F- KITT</u> STATE NAME OF OBSERVER <u>C</u> STATE						
NAME OF OBSERVER C GOAD AS .	1	<u> </u>	 	1	1	
Nest Number	<u> </u>	-	 			
1. Time	· 6 A.M.		 			
2. Species*	de		 			
3. Tag Number N = New O = Old			 			
4. Carapace Length (S/C) Units on or inches			 			
5. Number of Eggs	un		 			
6. Emergence Date						
7. aber of Hatchlings	-		 			
8. Erosion Danger?(Y/N)	N					
9. Nest Protected?(Y/N)	N		 			
10. Nest Relocated to another beach site (Y/N)	N					
11. Number of Eggs to Hatchery? (Y/N)	2					
12. Number of Eggs Harvested	uk		 			\vdash
13. Number of Eggs Depredated	_					╞
14. Number of Head-start Eggs	_					-
15. Females Harvested?(Y/N)	~					1

*Cc = <u>Caretta caretta;</u> Cm = <u>Chelonia mydas;</u> Dc = <u>Dermochelys coriacea;</u> Ei = <u>Eretmochelys</u> <u>imbricata;</u> Lk = <u>Lepidochelys kempi;</u> Lo = <u>Lepidochelys olivavea;</u> UK = Unknown

TABLE IV. MORTALITY

COUNTRY ST KITS STATE

YEAR 87 OBSERVER RATIONAL REP.

	L Scanies	Sex	Length	Weight	# Eggs	Locality	Cause		
Date- 7/87	•Species C+A	F	42 "C			HELDEN - ST PAUS	ACCIDENTALLY TAKEN BY NET. SET FOR SHARKS		
						2			
Commen Dept.	Comments: TURTLE WAS FOUND DEAD IN NET - TAG # PIBO3 FROM DEPT. OF BIOLOGICAL U.F. IN GIAINEVILLE, FLORIDA U.S.H. WAS FOUND ATTACHE								
F NF	ORMATION	SENT	BACK.				acea: Ei = Eretmochelys		

*Cc = Caretta caretta; Cm = Chelonia mydas; Dc = Dermochelys coriacea; Ei = Eretmochelys imbricata; Lk = Lepidochelys kempi; Lo = Lepidochelys olivacea; Uk = Unknown

STATUS OF THE TURTLE FISHERY AND RESEARCH PROJECT

Nevis is basically and agricultural community with farming and fishing providing employment for the majority of its citizens.

According to the 1980 census the population of Nevis is approximately 9,000; it has dropped drastically due to migration. Out of the present population some four hundred and fifty (450) persons are engaged in the fighing industry. The mode of fishing is somewhat multiple.

Traditional artisanal fishing is still practised amongst the fishermen on the island. An approximate total of twenty (20) fisherman are fully engaged in turtle fishing, while others occasionally catches them, aspecially when engaged in spear fishing.

The fishermen fishes turtle with gill nets locally known as 'Turtle Nets'; a length of 50 - 75 feet and depth of 10 feet with mesh size of 8 - 10 inches. During the last season they operated some thirtysix (36) nets in the inshore areas, along the peninsula of St Kitts, and on beaches in Nevis that are known to be frequented by turtles. The total catch for the 1986 - 87 season October - May was about 110 turtles, mainly Hawksbill (Eretmochelys Imbrata) and the Green Back (Chelomia Mydas) an average weight of sixty-five (65) pounds. The Leather Back (Dermochelys Coriacea) are caught occasionally and released because locals do not consume the meat. The most frequent type caught or seen is the Hawksbill. The meat of both Hawksbill and Green-back turtle are sold mostly to the hotels. The shells are used for decorations, jewelry and some fishermen swinge it to be used as bait for their fish traps.

Although the fishermen gave the information from the previous season willingly, it was difficult to convince them to lend their assistance with the monitoring of the Turtle Project, even though they would have been compensated. Only one assisted and I worked with him for the past three months. Inspite of that I was able to measure some shells of the turtles from last season. Measurement of the shells are attached.

Monitoring of the beaches has effected from April this year. On the 10th day a Leather Back beached but made a false nest. To date we have found one more track; that too was identified as false. Monitoring is still active and occasionally beach surveys are carried out along the beaches of the St Kitts peninsula.

Sometime during June a fisherman saw turtle shalls on one of the beaches. No information was collected as to how many he saw. Another fisherman reported that one evening while fishing on a beach that is not monitored, he saw and estimated well over a hundred juvenile turtles (hatchings as they are called) heading towards the sea. He also informed me that turtles normally beach for nesting during the changing of the moon. My assistant is now in the process of monitoring the beaches two days before and two days after the changing of the moon. This information was passed by one of the older fishermen who, by checking the sky at a certain time, can predict when a turtle would be beaching to nest. It was also said that Landing Bay is the major nesting site on the island. This bay is situated on the south coast well isblated and can only be reached by foot or boat depending on the weather. The fishermen who operate around the reefs and shoals of that area always see a number of small turtles - estimated weight 10 - 15 lbs.

The Research Project is still in process and will be continuing even if funds are exhausted. The results will be forwarded to Dr Robert R Lankford, Executive Secretary Watt II and copied to Mr Relph Wilkin, National Representative of St. Kitts/Nevis.

A.L. Farth

1

Audra Barrett Fisheries Assistant September 8, 1987 2.

MEASUREMENT OF SEA TURTLES

GREEN TURTLE (CHELOMIA MYDAS)

1

- 1.Total Carapace length72 cmCarapace width62 cmApproximate weight65 lbs
- 2. Total Carapace length68 cmCarapace width55 cmApproximate weight55 lbs
- 3. Total Carapace length74 cmCaparace width60 cmApproximate weight75 lbs
- 4. Total Carapace length63 cmCayapace width55 cmApproximate weight50 lbs

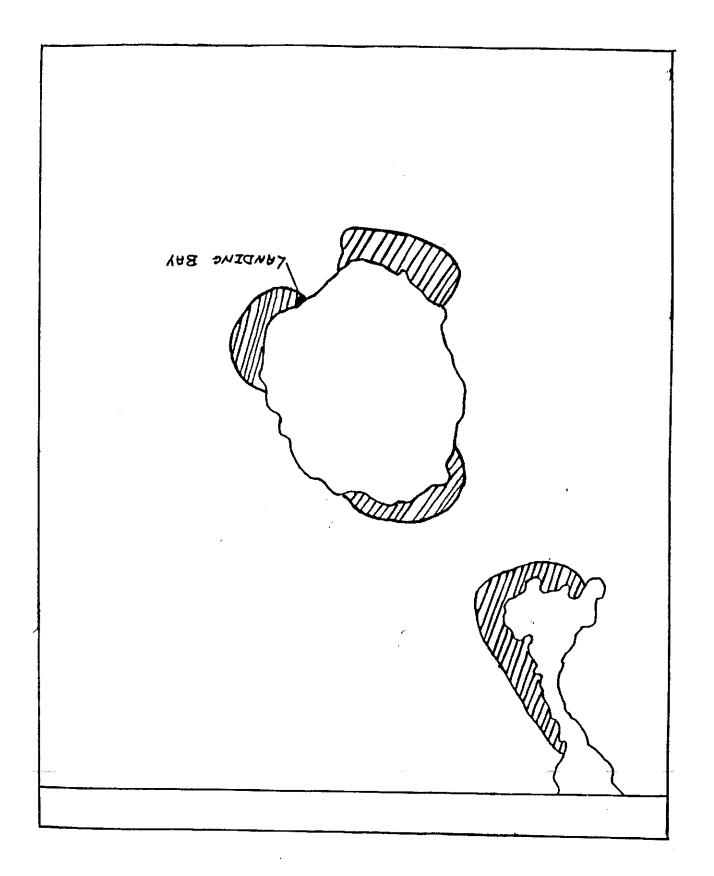
5.	Total Carapace length	67	CI
 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	Carapace width	59	Cem
	Approximate wéight	65	168
6.	Total Carapace length	57	CER
	Carapace width	47	C III
	Approximate weight	45	168

7. Total Carapace length75 cmCarapace width60 cmApproximate weight85 lbs

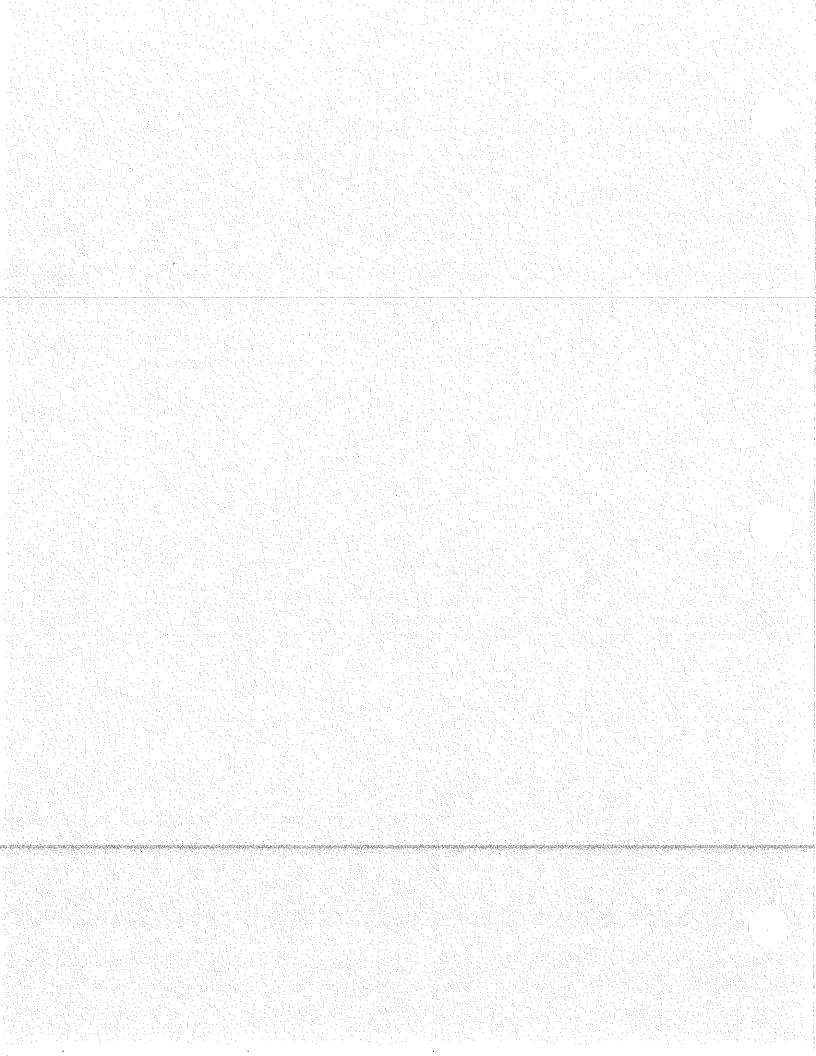
HAWKSBILL (BRETMOCHELYS IMBRATA)

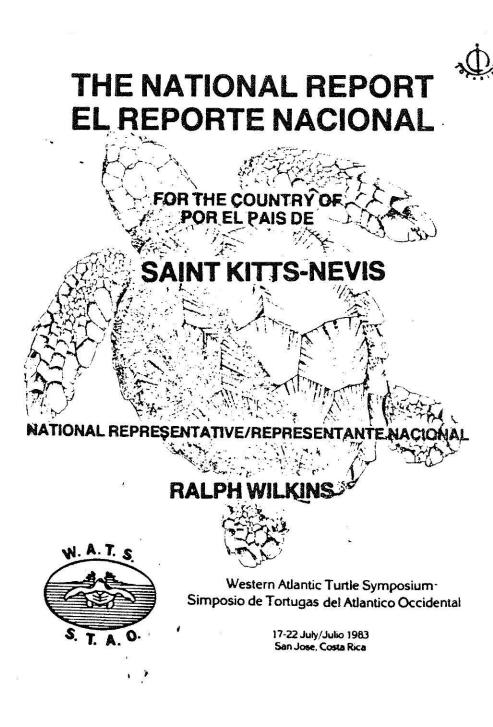
1.	Total Carapace length		82 cm
	Carapace width	ł	60 cm
	Approximate weight		160 lbs
2.	Total Carapace length		68 cm

2. Total Garapace length 68 cm Garapace width . 56 cm Approximate weight . 60 lbs



TURTLE FISHING ARCAS.







MESTERN ATLANTIC TURTLE SYMPOSIUM San Jose, Costa Rica July 1983

NATIONAL REPORT FOR THE COUNTRY OF

ST KITS Aci's

NATIONAL REPORT PRESENTED BY

Rite PM Linking

Address: Fisnidens Devenen

Minister LE PORICULINES 2. C. Box 186 PASSITERA ST Kits 2.2

NATIONAL REPORT PREPARED BY

WILFING AND ANNE APEN

DATE SUBHITTED: hin: 1993

I Please submit this NATIONAL REPORT no later than 1 December 1982 to: IOC Assistant Secretary for IOCARIBE, 3 UNOP, Apartado 4540. San Jose, Costa Rica.

TRULE 1. GEDANGHUE INVENTORY

- Constitue longth is the measurement or use mational ______ and boundary of a country; i.e., the distance from border ' border for a constal emetry and the distance around an falent country.
- 1. So kies and news and devided by a Stratt could the hindows
- AND IS TWO MALES with at THE WARKEST PRINTS
- 2. Deta an Tole ALLA DE THE CONTENSANTAL SAGLE IS NOT AVAILABLE. HEWERER IT IS BULLETED TO BE FORMADD TO BEEFET THERE AMALES FROM THE CONSTLUME.

	Re ² OF MALITAT			
PARTAT BOTTOM TYPES	IRSIDE 25m (SHOREMARD)	OUTSIDE 25m (SEAWARD		
1. lett				
2. Rod		1		
1. Aprils				
4. Submorgad Togetation				
S. Roofs (Total)				
A, fringing Roofs				
8. Patch Roofs				
5. Other				

TABLE SA. MARTHE MADITAT INVENTORY OF DOTTOR TWPES

O BETAILAD EVENING OF THE BOTTOM OF NOT YET BOOM FARMED ONT, NOWVIR Sound Entermotions also be obtomos Faces the Restract, NADIT and Stock offer Toma By ever Padawing OWIT. Subar or which I are Hoping to Presson AT THE Signado Signad

MARTINE SHORELINE CHARACTERISTICS			Ray OF SHORELINE			
			HOEVELOPED	DEVELOPED	TOTAL	
1. Sand Beach (Total)		S. Kirri			21.1	
A. High Energy					-R.C.	
S. Les Energy	2	****				
L, Apet (superad)		S. Rine			- 9.4	
), Nacks		ST RIAS		· · ·	15.0	
I. Clims	4	ST RIES			- 19.1	
5. Pepetation (Total)		Maxia			<u></u>	
A. Vince	R.		i charachara an			
. Irana						
C. Rangersvas	1. 2					
9. Cecenat Trees	ē G		·			
E. Other Trees or Skrubs	5 5				,	
F. Harston	13 3					
. Rouths of lagoons, rivers, canals			•			
. Total Shoreline		55 4189			19.9	

THELE 2. CONSTAL WHEITAT INVENTORY OF MUNICIES SMORELINE ON Human development or use (See HANNAL)

TABLE 3. MESTING SEACH INVENTORY (Sepplementary page)

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

Nevis

- 1. ALL DIALMAS EALING THE FALL KAT OF FRANCY'S BODY AND NOW CASING SAAR AND STRATTS AND AND NEWTADROS
- 2 ALL CONCASS PRES POR LANDS CORPE SANS
- 3. BROWDSHEN TOPETATION She werenes and on service Semanas and in the case of clanicy's and interm Chethis Coconnect These doministic

1990)101/001/001 001/001 1990)101/001/001 1990/101/001/001 1990/101/001/001 1990/101/001/001 1990/101/001/001 1990/101/001/001 1990/101/001/001 1990/101/001/001 1990/101/001/001 1990/101/001/001 1990/101/001/001 1990/101/001/001 1990/101/001/001 1990/101/001/001 1990/101/001/001 1990/1000/1000/1000 1990/1000/1000 1990/100000 1990/1000/10000000000000000000000000000	. oper paraglist no m	es sinteres Intomotel f	MELLONG BUILSON "E 310VL d uj socoog 3517 subj31ppe opjacuj subj31ppe opjacuj subj32ppe opjacuj subj32p
2000 - 1400	·67 2 · 31	9.	10, Crewie twice day
-ins - hour	(H) J	1.	App refere .
_1855 - holin -		- <u>-</u>	the statestor day
ANNO - ANNO 43 3 -	. E. C.M	9.	- Jans dame dag
SODS - WAR W - 3005 - MARIN &	M17 9 (<u> </u>	B. Posta Filia +
- 2005 - Vool wer 2 -	2 6 11	9.6	8. Condess
-20 - hour	5 647	3.	- 400 years .0
122 - hous -	¢ 14 ° C'	- <u>h.</u>	4. Jidowa Bay
	3-612	<u>h</u>	ILLEN CON B
	3 .613 . (3.2	Twing provides
MITTER OF RECEASED RETTING	(BUDIFFLADLIGE DEG) BEILERE STELLE	IN IN TEMENN	HONE OF BEJOH

WOWN THE A BEAS SCALAPSING

Town is

bring proves bo

N= 25 to make the throughouts PLAN THE WE NOW THINKS YPALS

.

STATISTICS STATISTICS

الموجه ومساوره مده هر فلجه فنها مع فه مسعوده محموم هاد الحد محمل المعدة الالعده فنهاه كل المستحد لدفامة دودرد ستاداً! (1-1, 4-2, 4-2, 4-2, عند.) عد مستعبيدتما الم آدها ع (1-2). 17.7 (100004)

TVON/ 27184)

	SF #5513		
INULARTED FUR & SUME	(201001313) 20100(5/5353)	(4444946) (4444946)	SILLING
			Para Barante
			<u>Bringe Oferloc</u>
E8 - 0 - 82	. <u>.</u>	DANS 744	100001325 EE10034846
			District Mercenter
			Jens Rischelse
			seperito priscostra

the same such as as an issue as the second the
1 south constant for bos subiry constant home it
E Economica and the part of development of the entering
נייע נו אייואנורים (איילעו י בכני באבירי צעיים שיייוע איים
ע יות זייא ניייי פרייננ שייז בינום פרינייי ניי
פאנורא בין אינארייבאוייבנר ארייינייז פע ברייביי
התה שבעים השלטיונות שר גביא תיאיבי לינונים שליבני ו היינ שישניתני אשוע ערבות ביי ביי ליעוני אווינים
27 Kitty -22
BOOCH BLACKING STORED AND AND AND AND AND AND AND AND AND AN

(adeal Altransmithing) Lighter Haves Selling 'S 37888.

Plassa give additional information, short each unsting basch identified to tuble 3. Include information on color of sand, particle size, beach profile, bockboach vegetation, artificial lighting, atc.

TABLE 3. HESTING SEACH INVENTORY List backes in geographic sequence. Provide additionel information on following page.

			9,
haven - assure &	(. 41) 3	2	9 Whan Corre
Judger - WANNER	6 . 613. 3	τ.	3. (BARK 444) 448 CLIFF
* *	.ڪ.	8.	7. NO.2 CARLE
· · · ·	<u>تو</u> `	2.1	AUDION PHOTOS PHOTOS
	(m) · 5	5.4	- CINNED SYPERE
			6. (NEXIS)
	E 649	ð ·	1. Cuarte ugait
	10-2 3	5.	(KEANES 18
eres - hour	4r3 · 3	<u> </u>	1.1 Barns- 644
BULLEN CORPORE AS SALING	.(DWD1321ABJAGE BER) DMLLER E213365	MA MI Mumbi	HOW36 40 2000
Summer Street St	CON CONTRACTOR OF A CONTRACTOR		

BREAL IS TRIMINATION TARK TRANSFORM Not Kwazza Hor KNOWN HENTARY INTERNAT 53-3-31 9 1-0 Banading Carlenge Mar Kanne were know Phone Party Party BILLARD BILLARD NOTES OF SATA COLLECTION (pe)-ma(253) mbceus/1358g (Meres) 80345 NOODEL OL HERE

heres

100.01 ANALE 4 . T MELLING CENERAL LOS BENCH

(10000) NIELE

CONTRACTOR OF

	the each beech listed in Table 3. Manber the factor the formation tables (4-1, 4-2, 4-3, 01c.) as enumerated in Table 3.
et ek insettes	

e carcer dite	elestel al	, E aldal m bajanomuna e	a (*35a	(
---------------	------------	-----------------------------	---------	---

	tanna an	
--	---	--

NAME ANY TO THE MARK MARKS

ter each beach listed in Table 3. Namber (2010) (4-1, 4-2, 4-3, 95c.) 23 enterveted in Table 3.
anti-anti-anti il parte al parte in parte in anti-

Pice sequencially bits cances data					-1" 4-5" 4-3"	
---------------------------------------	--	--	--	--	---------------	--

Wrence despises one of these tables to manualize the manual tables in tables $\frac{1}{2}$,
 the second of the fact and the own contracto support

			101 000 000 000 000 000 000 000 000 000
--	--	--	---

The cost beach its test in these the cost beach its test is the cost is the c
 an improved and the fact against the past surgery workers

	The costs been listed in Table 3. Ranker tables to the second second to the second sec
and the prostants	

the each beach listed in Table 3. Handor the fatter is tables to (4-1, 4-2, 4-3, 01c.) as enumerated in Table 3.

	ter ester beert listed in table ?. Names ter tebies ' tel, 4-2, 4-3, 85c.) 25 manue te (c) 236 (c) 4 (c) (c) (c) (c) (c) (c) (c) (c) (c) (c)
area deter	extraction of solid and and sit there as the solid states

(istances)	miter tester.	al testerente	-	(*358	•

	0.0420 100.014
Plaste camplets and of the formation of the formation for the formation of	

TABLE 4 - E RESTRA CERES FRA BEACH

Palito alinetes

· Ideal IT I PARTIE

ELECTRONIAL SALESSALE

DELENCERSINE COLLECON

TOPAS PLUE (ME)

1136.183 1136.183

2010345

איישאיבטורד מאז לעפרא ושעודרו אייע שלפא אאייאא גם אספג פא ישי שקים

(0000)

couses and

1 2029

27

(hetentist)

and the second the basines descended and not the product and 7

CUARES

SISSI JO KIGHTM

1-0

100mg

(Average)

×

×

1

100 = trin

TOT A & HITEM

.

80-5-6/21

BULLET OF DATA COLLECTING

1

. *

 $\label{eq:rescaled} \begin{array}{c} \text{DRTAGING MEOSUM 2011} & \text{DRTAGING MEOS} \\ \text{There consists an end of the set of$

-

à.

* 4

*

2002/04/14/14/14/14/14/14/14/14/14/14/14/14/14	·42. 3		THRE T. FOWERS MENS IN
טעניעועינייז ב, ביזאפעל	W) 3		1. Alla 1621 221
Coracion de la contraction	612. 3		AND STATES ALTON
- Cardennine -	Э · б		" Kays formande
DALALOTON . F.SWERL		· · · ·	-hore-sure -
Costantion of Eisward	(07 3		ined -2 2 2: Rund J
א איז איז איז איז איז איז איז איז איז אי	1 . C. C.		- Saugy Paris .!
(deservetion, fiedary, lectoactel cetch) Anter of Evidence (cetch)	SPECIES FORMEING (Use subrovietions a f	V3RV (2004.0	(at give centeringtes) more at wey

3-367

- · · · ·

- 8 378/1 FebigochejAl BijAscad 1. ----Lepidochelys hangi 1 .

Demoche 1/1 cor 19 cos

Eretmochelys Intertesta

TABLE 10. MATURAL MORTALITY (Supplementary page for additional biological data)

> Please report below, and on additional pages if mecassary, additional data obtained or available such as measurements (langth, witch, weight) of adult females, adult tales, hatchlings, members of eggs per mest, because of meating, bears and conditions of Batchling, etc.

- . I. Touse are developy treations of durancings by arougests, Jags and survey at sea
- 2. In part cases wasts and names by and the The Eggs - very with county the Hatchungs
- 3. Several Tags Frend Birds Island NANE BIEL Recorded OFF Turines by Frendrich Fr Navis Semie Werd Fent Given to The Hospiter

NAME OF PORT OR SITE	SPECIES LANDED Use abbrev)	FISHING GEAR USED	NUMBERS	ENTRES & VEIGHT
1. Bassana) e en	Fair Ners From News	e esta her. Sei aite	
2. Sandy it int).e.con	Sat Nets, SMAR, Assing	•	
3. S. Pours	G (14	Ser NATS, SPEAK	•	
4. Dierre day	5 Cop	Ser Nate Sman		ě.
5. JNJ.AN LASTLE	by car	te: Neir, Sasaa		3
6.		50) 50)	and s	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~
<u>. </u>		2 		· · ·
8.				

TABLE 11. LANDING SITES FOR TURTLES & TURTLE PRODUCTS

Species Abbreviations Caretta caretta	Ce
Chalonte mydas	Ca.
Dermochelys certages Erstmochelys imbricate	8c
Erstmochelys imbricate	Ef
Lepidochelys Lampi	LA
coldochelys ellvaces	La

INSTITUTION OR GRGANIZATION NAME AND ADDRESS	NO, OF ACTIVE MEMBERS	ACTIVITIES IN PROGRESS
Neisz Алуанан Ать Сал Заладын бесныгу Сманскэгссан Nedis Envinomasatan Rissenen Pagnets 202. Б. Сымылару (Язеу) - Nisun JTANН. 19002	todu Ito	· Noivestania die Die Conservation · Noivestania die Die Conservation · Norvidering To Strictwoodent TO Sudone. · Norvide degundtions. · Postings das Littgeniums odertade · Postings das Littgeniums odertade · Postings das Littgeniums odertade · Postings das Littgeniums odertade
		· 1.

TABLE 18. PUBLIC AND PRIVATE INSTITUTIONS CONCERNED WITH TURTLE CONSERVATION/HAWAGENERT/WITLIZATION

3-368

	ALLOCATION TO TURTLES	ASSIGNED TO TURTLES	CONSIGNTS ON LEVELS OF ENPONCEMENT
batan para - bay agan Ky Katalo	м/ <i>д</i> .	2.	Search is much in the light
Poura disert Cayow Stranger ST Kuis		TOTAL	CARCAL CONTRATATION MEASURALS SAMP LAPOL OF ENFORCEMEN DARLY CLOCK STATEN.
			· · ·

TABLE 20. REBRATORY RETRORTTY

Release all entities with statutory responsibilities (e.g., Fisheries Departments and Himistories, Police, Coest Board, etc.)

THALE 20. REBLATORY ANTHONY Y (Supplamentary sage)

Plaese list Satismal, regional, and heral logislation concurring turtle management and concurration. List title, date, and stated purpose.

See Cory of TURKE BADINANCE

ATTACKAD.

MEPORTS AND PURLICATIONS

The following is a list of the major reports and publications concerned with metione) metion the researces (list anthor, date, title, and publisher).

- 1. E. C.N.AMP. DATA ATLASSIC STRUTS /NEWS 1940 2. Cadesee . J. K. And Rotajen W. S. 1969 UNKICERSON WEST JUDION NESTING Site; For. D. E. Mattacks; Onin 3 Hundes
 - THEFT (012. 99 272

C21772 99. TOTALS.

(1ot James, 1000) L. Sto Sating ness may be sited as the Partio Shert Ettl.

2. In this Ortinano, the ward "turtle" means and or river

5. Say passes the -

•,

(a) antukas ar tains, or attaryte to mind or tain, or anome to he marks or takes, any turkle between the first dry of Ame and the bigright of September, both days

(b) of my time artshos or trime, or erases to be another telese, my tartle which is under iteraty pounds in weight;

(a) charghtere my barls or hors, solls, ergenne far ands or has in personance the their or any pertise of the fort of man burls, brinners the first day of how only the Ministein do, of Brytanker, both days insistiv; or

(A) of any time between the first days inclusive; or the this thread of the between the first days of Jana and the this thread days of Devicence, have been device, or attanyou to take or concess to be taken, day terrile

(a) at any time between the first day of June and the thirthey day of Geytamber, both days implustice, hope, while, suppose for sals, or hem in his presention may builts says.

shell to putity of an effence optimat this Britington, and H seminary meristion shall be liable to i fine not meaning teach-four follows.

6. If my constrible shall have presential grounds for Power or ball star, that are parrown to constitute or attompting to somelt acrust, on afform spiritut this Ordinanae he my arriver such preven without a moreart.

5, any constable my makes my burble of puri thereof or my Parinithers farthe ages front is the presentes of my person between the of fertiles, etc. Flort day of Anna tot the Mirtleth day of Reytenhor is cay your not open the experietion of the persons the articles as missed shall be fortified.

6. Any not, instrument or thing which may annutable has performable grounds for builtering in builty or bus been used for or is connection with the secondard of Bud controller, and any Bugheston may syme the secondard of Bud controller, and any Bugheston may syme the secondard of Bud controller, and affines against the field residence is a managering the an affines against the field residence is a managering with only and, however, or think or a column and any main makes and, instrument or thing as be furthering.

8/1947

Inter extetion

Partaiture at mits, ote,

3-369