

# THE NATIONAL REPORT EL REPORTE NACIONAL

FOR THE COUNTRY OF  
POR EL PAIS DE

## COLOMBIA

PREPARED BY/PREPARADO POR

### LARRY OGREN



Western Atlantic Turtle Symposium  
Simposio de Tortugas del Atlántico Occidental

17-22 July / Julio 1983

San José, Costa Rica

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

**DRAFT NATIONAL REPORT FOR THE COUNTRY OF**

**COLOMBIA**

DRAFT NATIONAL REPORT PRESENTED FOR

**Dr. Jorge Hernández**  
The National Representative

Address:  
JEFE DE División de fauna  
INDERENA  
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DRAFT NATIONAL REPORT PREPARED BY

LARRY OGREN

DATE SUBMITTED: 17 July 1983

Please submit this NATIONAL REPORT no later than 1 December 1982 to:

IOC Assistant Secretary for IOCARIBE  
% UNDP, Apartado 4540  
San José, Costa Rica



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:*

Ogren, L. 1984. Ad Hoc National Report for Colombia, pp.123-130. *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: COLOMBIA

Marine Shoreline Characteristics*		Km of Shoreline		
		Undeveloped	Developed**	Total
1. Sand Beach (Total)	ca. >50% of the shoreline			780
A. High Energy	ca. 75%			
B. Low Energy	ca. 25%			
2. Reef (exposed) ***				
3. Rocks ***				
4. Cliffs ***				
5. Vegetation (Total) ****				
A. Vines				
B. Grasses				
C. Mangroves				
D. Coconut Trees				
E. Other Trees or Shrubs				
F. Marshes				
6. Mouths of Lagoons, Rivers, Canals ****				
7. Total Shoreline				*****1,560

\* Refer to SEA TURTLE MANUAL (Aerial Survey)  
 \*\* Human development or use (See MANUAL)  
 \*\*\* Both types (rocks, cliffs) occur frequently all along coast  
 \*\*\*\* All types are present on or behind beaches  
 \*\*\*\*\* "Coastline Distance" (FAO term)

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

Habitat Bottom Types	Km <sup>2</sup> of Habitat	
	Inside 25m (shoreward)	Outside 25m (shoreward)
1. Sand	3	90.0
2. Mud	0.2	5.0
3. Rocks	0.75	3.0
4. Submerged Vegetation	0.6	90.0
5. Reefs (Total)	0.2	188.0
A. Fringing Reefs		17.0
B. Patch Reefs	0.2	70.0
6. Other: Coral & Rocks, vegetation mixed		101.0

Name of Beach	Length in Km	Species Nesting (use abbreviations)*	Months of Recorded Nesting
1. Playas Acandí	4	D	March-July
2. Río Palomino-Pueblo Dibulla	12	D	March-July
3. Río Piedras-Río Don Diego + 3 km	25	Cc	April-August

<b>TABLE 3. NESTING BEACH INVENTORY</b>			
List beaches in geographic sequence. Provide additional information on following page.			
Name of Beach	Length in Km	Species Nesting (use abbreviations)*	Months of Recorded Nesting
4. Río Palomino-Pueblo Dibulla	28	Cc	April-August
5. Playa Blanca Isla Barú **	3	Ei	---
Species*	Abbreviation		
<i>Caretta caretta</i>	Cc		
<i>Chelonia mydas</i>	Cm		
<i>Dermochelys coriacea</i>	D		
<i>Eretmochelys imbricata</i>	Ei		
<i>Lepidochelys kempfi</i>	Lk		
<i>Lepidochelys olivacea</i>	Lo		
** Fisherman's report, never surveyed			

**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.

Playa Acandí Deltaic sands deposited by river. Fine-grained dark sand. Small town located a few hundred yards behind beach. River bisects beach. Road behind beach. Scattered coconut trees.

La Playona south of above beach separated by a small promontory – high point of land (Punta Tola). Similar beach characteristics.

Beaches No. 3 and No. 4. High energy beaches. Areas of coarse grains/some cobbles mixed with biogenic sediments. Subject to erosion and truncate sculpting during the year with drastic changes in beach width. Typical flora of beach plants common to circum-Caribbean littoral (*Ipomoea*, *Sesuvium*, *Laguncularia*, *Cocoloba*, *Cocos*, *Hibiscus*).

Section of Beach No. 3 between Ríos Buritaca and Don Diego (7.5 km) established as a Sea Turtle Reserve in 1966 by C.V.M (predecessor agency to INDERENA) named the “Buritaca Reserve.”

<b>TABLE 4. NESTING CENSUS FOR BEACH: Buritaca*</b>			
Table summarizes census data for each beach listed in Table 3. Tables numbered sequentially.			
Species	Number of Nests		Dates of collection
	Nest/Night (average)	Nest/Season (estimated)	
<i>Caretta caretta</i>	>2	300	1966, 1967, 1970
<i>Chelonia mydas</i>			
<i>Dermochelys coriacea</i>			
<i>Eretmochelys imbricata</i>			
<i>Lepidochelys kempfi</i>			
<i>Lepidochelys olivacea</i>			
* 7.5 km section of Río Piedras - Río Don Diego + 3 km between Río Buritaca and Río Don Diego			

<b>TABLE 5. AERIAL BEACH SURVEY SUMMARY</b>								
Give any additional information available from aerial surveys. Information should include ground truth observation if conducted.								
Date	Beaches Surveyed	Numbers of Nesting Tracks						
		Cc	Cm	D	Ei	Lk	Lo	No ID
15 June, 1983	Cartagena-Puerto Lopez (east)	?	?	0	0	/	/	1
16 June, 1983	Cartagena-Acandí (west)	0	3	18	0	/	/	/
03 October, 1980	Punta Garita-Punta San Bernardo*	0	0	0	0	/	/	/
Species		Abbreviation						
<i>Caretta caretta</i>		Cc						
<i>Chelonia mydas</i>		Cm						
<i>Dermochelys coriacea</i>		D						
<i>Eretmochelys imbricata</i>		Ei						
<i>Lepidochelys kempí</i>		Lk						
<i>Lepidochelys olivacea</i>		Lo						
* Including Islas del Rosario and Islas San Bernardo								

**TABLE 5A.1. AERIAL BEACH SURVEY SUMMARY (Supplementary page)**

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

Playas Acandí, March, 1982

During one week of beach patrols by TV film producer, 28 nesting emergences of DC were observed on <1 mile section of beach.

**TABLE 5A.2. AERIAL BEACH SURVEY SUMMARY (Supplementary page)**

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

Aerial Survey Flight Plan

Cartagena, Colombia I

3, October, 1980

Airport: Cartagena International Airport  
 Type of Flight: Private charter  
 Aircraft: Piper Warrior (single engine,)  
 Pilot: Fernando Bocanegro M.  
 Observers: Larry Ogren (NMFS), Fernando Duque G. (MDE)  
 Katherine Dunlop (Peace Corps)  
 Air speed: 110 kts  
 Altitude: 100-125 ft  
 Flight Plan: North to Punta Garita (c. 30 miles)  
 South to Punta San Bernardo (c. 50 mile)  
 Circle: Isla Cascajo  
 Islas del Rosario  
 Islas de San Bernardo

**TABLE 5A.2. AERIAL BEACH SURVEY SUMMARY (Supplementary page) *Continued***

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

Aerial Survey Flight Plan

Flight Hrs: 07:09 -10:30 hrs; 1 hr on the ground at Punta San Bernardo  
Flight time: 2 hrs 20 mins

Cartagena, Colombia II  
15 June, 1983

Airport: Cartagena International Airport  
Type of Flight: Naval reserve/ Air Sea Rescue charter flight (Patrulla Aeronaval)  
Aircraft: Aero Commander (Rockwell); twin engine, high wing. 8-place)  
Pilot: Jose Miguel Garcia  
Co-Pilot: Fernando Zapata  
Observers: Larry Ogren (NMFS), Jorge Picon (FWS), Fernando Duque G. (INDERENA)  
Air speed: 140-145 kts  
Altitude: 400-500 ft  
Flight Plan: North to Guajira Peninsula  
East to Venezuelan border along entire coastline. Fly directly back to Cartagena.  
Flight Hrs: 07:00-1300 hrs  
Flight time: 6 hrs

Cartagena, Colombia II  
16 June 1983

(Same as June 15 flight)

Observers: Add, Edward Lasser (Biology teacher)  
Flight plan: South along the coastline, across Golfo Urabá north of Río Atrato Delta, to Panamanian border  
Fly directly back over Isla Fuerte and Isla Tortuguilla  
Flight Hrs: 07:10-11:09  
Flight time: 4 hrs

**TABLE 5A.3. AERIAL BEACH SURVEY SUMMARY. (Supplementary page)**

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

Sea Turtle Aerial survey

Flight page 1 of 1

Ground truth Survey made: No  
Zone Record form on file: No

Observer 1: Ogren  
Observer 2: Picon  
Observer 3: Duque  
Recorder: Ogren  
Pilot: Garcia  
Aircraft: Aero Commander

Country: COLOMBIA STATE: Caribbean coast  
Zones: See Geographical Features  
Date: 6/15- 6/16, 1983 Time: S 07:00; E 13:00 & 11:00

Weather Current: Fair; 24 hrs: Scattered rain; Sea: Calm, no cap; Visibility: Clear  
Temperature: Beach Air ---; Surf ---

**TABLE 5A.3. AERIAL BEACH SURVEY SUMMARY. (Supplementary page) Continued**

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

Zone description	Zone No.	Time	Crawls			Species	Turtles	Flight Data	Shoreline & other	
			Fresh*		Old					Total
			Nest	False						
Laguna de Navio Quebrado		6/15 08:50	1			1	?		Barren beach; strand north of lag	
Punta Caribana-Pueblo Mulatos		6/16 08:53			1	1	?/Cm		Uninhabited beach w/ coral	
Punta Caribana-Punta Arenas		6/16 08:58	2			2	Cm		Remote beach between points	
Playas Acandí		6/16 09:25	18			18	D		Beach at river (x) in front of town of Acandí	

\* Fresh crawls = recent crawls

**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	Year					
	1983 (projected)	1982	1981	1980	1979	1978
<i>Caretta caretta</i>						
<i>Chelonia mydas</i>						
<i>Dermochelys coriacea</i>		100*				
<i>Eretmochelys imbricata</i>						
<i>Lepidochelys kempfi</i>						
<i>Lepidochelys olivacea</i>						

\* Date of publication; data/observations from ca. 1977-1978; Ross, J.P. (1982)  
No information available on how *Dermochelys* estimate was made.

**TABLE 7. FORAGING AREAS INVENTORY**

Name of Area (or give coordinates)	Approx. Area (Km <sup>2</sup> )	Species Foraging (use abbreviations & approx. numbers)	Nature of Evidence (observation, fishery, incidental catch)
1. Punta San Bernardo-Punta de la Garita (approx)		Cm (13 tag returns)	Tag returns of turtles from the Tortuguero (CR) rookery, 1956-1976



2. Río Piedras-Punta Manaure (approx.)		Cm (14 tag returns)	Same as above
3. Alta Guajira Peninsula		Cm (18 tag returns)	Same as above
4. Islas del Rosario		Cm; Cc; Ei	Fishermen's reports
5. Islas San Bernardo		Cm; Cc, Ei	Fishermen's reports
Species	Abbreviation		
<i>Caretta caretta</i>	Cc		
<i>Chelonia mydas</i>	Cm		
<i>Dermochelys coriacea</i>	D		
<i>Eretmochelys imbricata</i>	Ei		
<i>Lepidochelys kempfi</i>	Lk		
<i>Lepidochelys olivacea</i>	Lo		

**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	M	A	M	J	J	A	S	O	N	D	
<i>Caretta caretta</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	August (July)-September*
<i>Chelonia mydas</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
<i>Dermochelys coriacea</i>													
<i>Eretmochelys imbricata</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	All months
<i>Lepidochelys kempfi</i>													N.A. (rare)
<i>Lepidochelys olivacea</i>													N.A. (rare)
* Based on artisanal fishery at Punta Canoas													

**TABLE 9. NON-FORAGING TURTLES AT SEA**

Please provide any information available on the incidence of turtles in offshore areas.

Location (Give Lat. & Long. Coordinates)	Date	Species and Est. Nos. (Abbreviations)	Comments
Punta Canoas, 10°35' N, 75°30' W	14 June 1983	N.A.	Area of turtle fishery (artisanal) where Cm and Cc are frequently caught. Fishermen state that turtles are on a "paseo" or transiting the area. Flat sandy-silt bottom.
Species	Abbreviation		
<i>Caretta caretta</i>	Cc		
<i>Chelonia mydas</i>	Cm		
<i>Dermochelys coriacea</i>	D		
<i>Eretmochelys imbricata</i>	Ei		
<i>Lepidochelys kempfi</i>	Lk		
<i>Lepidochelys olivacea</i>	Lo		

Life Stage Unit	Species (abbrev.)*	Causes**	Extent of Mortality (% of Unit)
Nests/eggs	Cc	Erosion (probably most significant)	
Hatchlings			
Juveniles			
Adults (in water)			
Nesting females			
Species*		Abbreviation	
<i>Caretta caretta</i>		Cc	
<i>Chelonia mydas</i>		Cm	
<i>Dermochelys coriacea</i>		D	
<i>Eretmochelys imbricata</i>		Ei	
<i>Lepidochelys kempfi</i>		Lk	
<i>Lepidochelys olivacea</i>		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.

No quantitative data is available for determining the degree of natural mortality except to say no remarkable losses of turtles or eggs occur where nesting still takes place. A possible exception to this generalization would be due to beach erosion.

Name of Port or Site	Species Landed (use abbrev)	Fishing Gear Used*	Months of Landings	Numbers & Weights (estimate)
Punta Canoas-Boquilla	Cc, Cm, Ei	Set nets (large-mesh, turtle)		
Isla Tierra Bomba-Cartagena	Cc, Cm, Ei	Set nets (large-mesh, turtle)		
Puerto Verruga-Golfo de Morrosquillo	Cc, Cm, Ei	Set nets (large-mesh, turtle)		
Species		Abbreviation		
<i>Caretta caretta</i>		Cc		
<i>Chelonia mydas</i>		Cm		
<i>Dermochelys coriacea</i>		D		
<i>Eretmochelys imbricata</i>		Ei		
<i>Lepidochelys kempfi</i>		Lk		
<i>Lepidochelys olivacea</i>		Lo		
* Offshore reefs; turtles captured by diving				

**TABLE 12. TOTAL ANNUAL TURTLE LANDINGS IN NUMBERS AND WEIGHTS (N/Kg).**

Data not available.

**TABLE 13. ESTIMATED INCIDENTAL TURTLE CATCH.**

Tufts (1972) reports shrimping activity off “Buritaca” Reserve responsible for some unknown level of mortality. Kaufmann (1971) received tag returns from shrimpers fishing offshore “Buritaca” Reserve. Kaufmann (1975) mentions similar captures based on tag returns.

**TABLE 13. ESTIMATED TURTLE CATCH BY FOREIGN FISHERMEN.**

No data available.

**TABLE 15. OFFICIAL STATISTICS OF TURTLE CATCH AND PRODUCTION.**

No data available. No official statistics – turtles protected by law (implemented in 1978).

**TABLE 16. EMPLOYMENT DEPENDENT ON TURTLES.**

No data available.

<b>TABLE 17. TURTLE MARICULTURE OPERATIONS Year: 1972 *</b>								
This table quantifies activities concerned with turtle culture for either conservation, population enhancement experiments, or commercial use. Activities to be included are "headstarting", re-nesting, incubation and release, etc. Prepare separate table for each year of available data.								
Species	Hatchery Operations					Holding Live Turtles		
	Eggs Collect.	Eggs Hatch	No. Release	Age at Release	No. Retain	No. of Juvs.	Adult Females	Adult Males
<i>Caretta caretta</i>								
<i>Chelonia mydas</i>								
<i>Dermochelys coriacea</i>								
<i>Eretmochelys imbricata</i>								
<i>Lepidochelys kempfi</i>								
<i>Lepidochelys olivacea</i>								
* Mention was made of early headstart attempts with Cc from Buritica. Not successful, effort abandoned. No report located.								

Institution or Organization Name And Address	No. of Active Members	Activities in Progress
INDERENA Boca Grande Cartagena Centro Investigaciones Pesqueras	1 temporary, not full time duty	Preliminary efforts to re-implement turtle conservation efforts. Some information on artisanal fisheries. Investigations included comments on turtle nets.
INVEMAR Punta de Betín Santa Marta	1 temporary, not full time duty	Preliminary survey of past sea turtle investigations & reports (Literature survey). Formerly Institution of Significant Sea Turtle Research 1966-ca. 1972 (Reinhard Kaufmann)
INVEMAR's* predecesor: Instituto Colombo-Alemán Punta de Betín Santa Marta	1 full time plus? assistants	
* Historical record; first significant sea turtle research activity		

Name and Location	Area Km <sup>2</sup>	Reason(s) for Protection	Type and effectiveness of Enforcement
Los Corales del Rosario*- Parque Nacional Natural SW Cartagena		U W park, corals, reef fishes, turtle grass, habitats, turtles, extensive, unique.	Insufficient
Salamanca* near Baranquilla, west of Santa Marta		Narrow barrier beach with extensive mangrove forest (extensive) and migratory waterfowl population	Insufficient
Tayrona* east of Santa Marta		Archaeological; geography (unusual), natural flora and fauna, relatively undisturbed	Insufficient
Buritica ** east of Tayrona at Park's eastern boundary		Sea turtle nesting beach, formerly hosted Cc, Cm, Ei, Dc. Nesting infrequent today.	Not patrolled (insufficient nesting activity to continue intensive coverage of previous years)
* Not specifically designated as sea turtle reserves, but do provide nesting and forage habitat for them. ** For the specific purpose to protect nesting turtles.			

<b>TABLE 20. REGULATORY AUTHORITY</b>			
Indicate all entities with statutory responsibilities (e.g., Fisheries Departments and Ministries, Police, Coast Guard, etc.)			
Name and Address of Organization	Budget Allocation to Turtles	No. of Staff Assigned to Turtles	Comments on Levels of Enforcement
INDERENA			Enforcement difficulties exist. Clandestine capture and sale of sea turtles exists, poaching of nesting females/eggs reported to be a common occurrence where turtles still emerge to nest. In general, enforcement effort is not adequate.

**TABLE 20A. REGULATORY AUTHORITY (Supplementary page)**

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

Ministry of Agriculture National Decree No. 1681 of August 4, 1978.

- A total management of all aquatic resources
- Protection and development of all biological resource and their environment
- The management and administration of the above resources including those marine and continental, are conferred to the Instituto Nacional de los Recursos Naturales Renovables y del Ambiente (INDERENA)
- INDERENA will control and will issues permits for the importation and exportation of all species or products from any aquatic biological species

Legislative history:

The above law implements and amends previous Colombian laws dealing with the protection of the aquatic biological resources

- National Decree No. 2811 of 1974
- National Decree No. 23 of 1973
- National Decree No. 376 of 1957

Specific [regulations regarding] sea turtles in the promulgated articles.

<b>TABLE 21. NATIONAL RESEARCH PROJECTS</b>			
List turtle research activities funded within your country.			
Project Title*	Date		Name and Address of Institution & Chief Investigator
	Start	End	
	1966	1967	Corporación Autónoma Regional de los Valles del Magdalena y del Sinú (C.V.M). Dr. Reinhard Kauffmann
	1968	1971	INDERENA Dr. Reinhard Kauffmann (Instituto Colombo-Alemán Punta de Betín Santa Marta)

Operación Tortuga	1972	1972	INDERENA Craig Tufts (Peace Corps Program)
Operación Tortuga	1973	1973	INDERENA
Operacion Tortuga**	1974	1975	INDERENA E. Ramirez (Proyecto Parques Nacionales y Vida Silvestre Barranquilla)
Programa para la Protección y Conservación de la Tortuga <i>Dermochelys coriacea</i> en las Costas de Noreste de Colombia		1980	Corporacion Regional de Desarrollo de Urabá, Centro de Investigaciones Marinas de Urabá (CIMUR)*** Sr. Enrique Negret Córdoba
<p>* Turtle projects implemented by government commissioned (C.V.M.) study. Study by Federico Medem (1962).</p> <p>** Project terminated. Insufficient numbers of turtles nesting to support research goals.</p> <p>*** A proposal to conduct sea turtle investigations in Golfo de Urabá, specifically at the leatherback "rookery" at Acandí was submitted to the IUCN by INDRENA, the supervisory agency. To our knowledge (Ogren), this work was not implemented and no investigation is being conducted at this time.</p>			

## 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).

- Bullis, H., and S. Drummond. 1972. Sea turtle off the southeastern United States by exploratory fishing vessels 1950-1953. Fla. Dept. of Nat. Resources 33: 45-50.
- Carr, A. and L. Ogren. 1960. The ecology and migration of sea turtles 4. The green turtle in the Caribbean Sea. Bulletin of the American Museum of Natural History, Volume 121: Article 1, pp. 1-48.
- Carr, A., M.H. Carr., and A.B. Meylan. 1978. The ecology and migrations of sea turtles. 7. The West Caribbean green turtle colony Bulletin of the American Museum of Natural History, Volume 121: Article 1, pp. 1-46.
- Carr, A.F., A.B. Meylan, J.A. Mortimer, K.A. Bjorndal and T. Carr. 1982. Preliminary survey of marine turtle populations and habitats in the Western Atlantic. NOAA Tech. Memo. NMFS-SEFC-91. 89 pp. (Colombia's outer island possessions (San Andrés, general area; Providencia; Ese Cay; Albuquerque Cay; Serrana Bank; Quitasueño Bank; Roncador Cay) are discussed on pages 67-72. Interviews with turtle fishermen, declines in catches (especially *Eretmochelys*) are discussed.
- Chavez, H. and R. Kaufman. 1974. Información sobre la tortuga marina *Lepidochelys kempfi* (Garman), conferencia a un ejemplar marcado en México y observado en Colombia. Bull. Mar. Sci. 24(2): 372-377.
- Clavijo, G.A. 1973. Operación Tortuga 1972. INDRENA. Santa Marta Info. Técnico (1) 19 pp.
- Dunn, E.R. 1945. Los géneros de anfibios y reptiles de Colombia. IV. Parte: Reptiles, Ordenes Testudíneos y Crocodylineos. Caldasia 3:307-335.
- Medem, F. 1962a. Estudio sobre tortugas marinas. Comisión realizada en la costa Atlántica. Corporación Autón. Reg. de los Valles del Magdalena y del Sinú. Inf. Técnico (1): 1-12.
- ..... 1962b. La distribución geográfica y ecológica de los Crocodylia y Testudinata en el Departamento del Chocó. Revista de la Academia Colombiana de Ciencias Exactas, Físicas y Naturales, Bogotá D.C. 11(44):279-303.

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*Editor's note (2009):* References in the original National Report were not listed in alphabetical order.



DRAFT



**WESTERN ATLANTIC TURTLE SYMPOSIUM**

San Jose, Costa Rica

July 1983

DRAFT NATIONAL REPORT FOR THE COUNTRY OF

COLOMBIA

NATIONAL REPORT PRESENTED FOR

Dr. Jorge Hernandez

The National Representative

Address: Jefe de Division de Fauna

INDERENA

Diagonal 34 N° 5618, Piso 4

Bogota, D.E., COLOMBIA

NATIONAL REPORT PREPARED BY

Larry Ogren

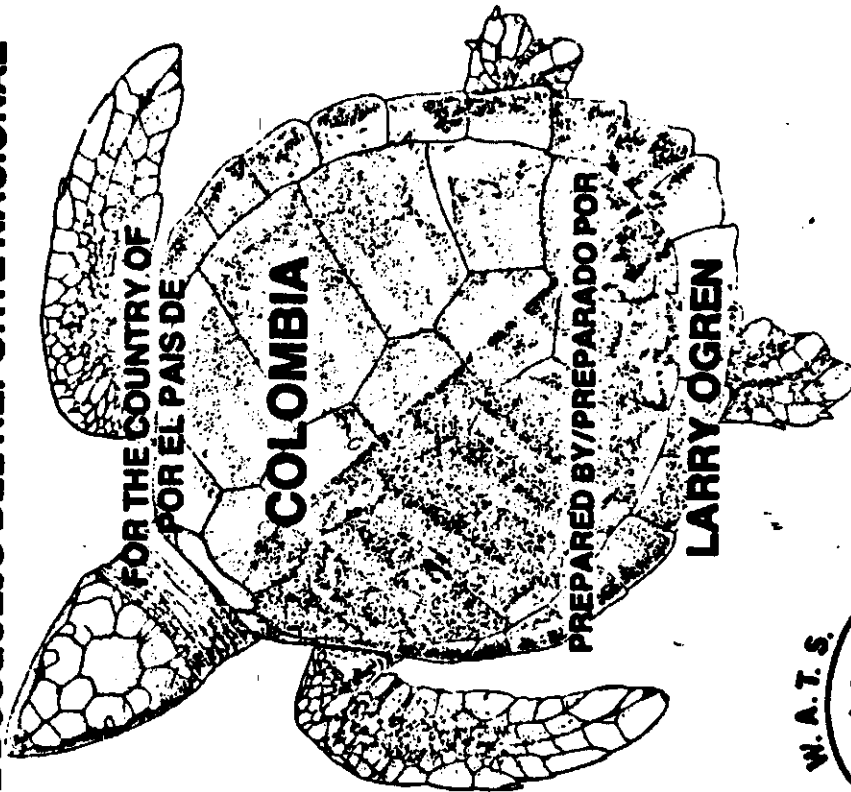
DRAFT

DATE SUBMITTED: July 17, 1983

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



**THE DRAFT NATIONAL REPORT  
EL BOSQUEJO DEL REPORTE NACIONAL**



Western Atlantic Turtle Symposium  
Simposio de Tortugas del Atlantico Occidental

17-22 July/Julio 1983  
San Jose, Costa Rica



NAME OF BEACH	LENGTH IN KM	SPECIES NESTING (Use abbreviations)*	MONTHS OF RECORDED NESTING
1. PLAYAS ACANDI	4	Dc	MARCH - JULY
2. LA PLAYONA	12	Dc	MARCH - JULY
3. RIO PIEDRAS - RIO DON DIEGO + 3 KM	25	Cc	APRIL - AUGUST
4. PUEBLO DIBULLO - RIO VALDOMAR	29	Cc	APRIL - AUGUST
5. PLAYA BLANCA * 5. ISLA BARU	3	E1	—
6.			
7.			
8.			
9.			
10.			

SPECIES ABBREVIATIONS:  
 CC CAROLINA SKUA  
 DC DELTAIC SANDS  
 E1 ESTUARINE BIRD  
 E2 ESTUARINE BIRD  
 E3 ESTUARINE BIRD  
 E4 ESTUARINE BIRD  
 E5 ESTUARINE BIRD  
 E6 ESTUARINE BIRD  
 E7 ESTUARINE BIRD  
 E8 ESTUARINE BIRD  
 E9 ESTUARINE BIRD  
 E10 ESTUARINE BIRD

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

\* FISHERMAN'S BEACH  
 NEVER SURVEYED

SPECIES	NUMBER OF NESTS		DATES OF DATA COLLECTION
	Nests/night (Average)	Nests/Season (Estimated)	
<i>Carolinia carolinia</i>	> 2	300	1966, 1967, 1970
<i>Chelonia mydas</i>			
<i>Boninchoya carolinia</i>			
<i>Eretmochelys imbricata</i>			
<i>Lepidochelys kemelii</i>			
<i>Lepidochelys olivacea</i>			

TABLE 4. NESTING CENSUS FOR BEACH BURITACA (name)  
 Please complete one of these tables to summarize census data for each beach listed in Table 3. Number tables sequentially (4-1, 4-2, 4-3, etc.) as understood in Table 3.

7.5 KM SECTION OF RIO PIEDRAS - RIO DON DIEGO + 3 KM BETWEEN RIO BURITACA AND RIO DON DIEGO.

NAME SHORELINE CHARACTERISTICS*	No. OF SHORELINE DEVELOPMENT**		TOTAL
	UNDEVELOPED	DEVELOPED	
1. Sand Beach (Total) ca. > 50% OF SHORELINE			790
A. High Energy ca. 75%			
B. Low Energy ca. 25%			
2. Reef (Supra)			
3. Beach } SOFT TYPES OCCUR FREQUENTLY ALL ALONG COAST			
4. CLIFFS			
5. Vegetation (Total)			
A. Pine			
B. Grasses			
C. Nonpines			
D. Coconut Trees			
E. Other Trees or Shrubs			
F. Herbs			
6. Number of lagoons, rivers, canals			
7. Total Shoreline			1,560

TABLE 2. COASTAL MEDITERRANEAN INVENTORY OF MARINE SHORELINE \* Refer to SEA TURTLE MANUAL (Aerial Survey) or Human development or use (See Manual) \* COASTLINE DISTANCE (FAO TERM)

TABLE 3. 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, beach vegetation, artificial lighting, etc.

PLAYAS ACANDI. DELTAIC SANDS DEPOSITED BY RIVER. FINE-GRAINED, DARK SAND. SMALL TOWN LOCATED A FEW HUNDRED YARDS BEHIND BEACH. RIVER BISECTS BEACH. ROAD BEHIND BEACH. SCATTERED COCONUT TREES.

LA PLAYONA SOUTH OF ABOVE BEACH. SEPARATED BY SMALL PROMONTORY - HIGH POINT OF LAND (PUNTA TOLA). SIMILAR BEACH CHARACTERISTICS

BEACHES No. 3 & No. 4. HIGH ENERGY BEACHES. AREAS OF COARSE GRAINS/SOME COBBLES MIXED WITH BIOGENIC SEDIMENTS. SUBJECT TO EROSION AND TRUNCATE SCULPTING DURING THE YEAR WITH DRASTIC CHANGES IN BEACH WIDTH. TYPICAL FLORA OF BEACH PLANTS COMMON TO CIRCUM-CARIBBEAN LITTORAL (*IPOMAEA*, *SESUVIUM*, *LAGUNCULARIA*, *COCCOLOBA*, *COCOS HIBISCUS*)

SECTION OF BEACH No. 3 BETWEEN RIOS BURITACA AND DON DIEGO (7.5 KM) ESTABLISHED AS A SEA TURTLE RESERVE IN 1966 BY C.I.M. (PREDECESSOR AGENCY TO INDERENA). NAMED THE "BURITACA RESERVE"

SEA TURTLE AERIAL SURVEY

Flight # 1 of 1

FLIGHT DATA RECORDS

Ground truth survey map No. \_\_\_\_\_  
 Zone Record Form in File \_\_\_\_\_  
 COUNTRY: COLOMBIA STATE: CANTAGENA COUNTY: CAJENA  
 OBSERVER 1: DUCON OBSERVER 2: DUCON  
 RECORDER: DUCON  
 PILOT: GARCIA  
 AIRCRAFT: AERO CHAMPAGNER  
 DATE: 6/15/80 TIME: 0700 E 1300 E 1700 E 1700  
 Weather: Current: Fair Rain: No Wind: 10-15 mph  
 Temperature: Sea: 28 Air: 27 Surf: 1-2  
 Visibility: Clear

ZONE No.	DESCRIPTION	TIME		TOTAL	SPECIALLY MARKED	FLIGHT DATA	SPECIAL DATA
		START	END				
1	LAKE	0700	1300	1	1	1	1
2	LAKE	1300	1700	1	1	1	1
3	LAKE	1700	1700	2	2	2	2
4	LAKE	1700	1700	18	18	18	18

\* FRESH CRANES = RECENT CRANES

CANTAGENA, COLOMBIA II

15 JUNE 1983  
 AIRCRAFT: CANTAGENA INTERNATIONAL AIRPORT  
 TYPE OF FLIGHT: NAVAL RESCUE / AIR SEA RESCUE  
 AIRCRAFT: AERO CHAMPAGNER (CRUISE) (TWIN-ENGINE, HIGH WING, 8-PLACE)  
 PILOT: JOSE ANGEL GARCIA  
 CO-PILOT: FERNANDO ZAPATA  
 OBSERVERS: LARRY OREBU (UMFS), FERRAN ALON (FWS), FERNANDO DUQUE G. (ANDEENA)  
 AIR SPEED: 140-145 KTS  
 ALTITUDE: 400-500 FT  
 FLIGHT PLAN: NORTH TO BAHUJA PENINSULA - EAST TO VENEZUELAN BORDER ALONG ENTIRE COASTLINE. FLY DIRECTLY BACK TO CANTAGENA  
 FLIGHT HRS: 0700 - 1300 HRS  
 FLIGHT TIME: 6 HRS

DATE	BEACHES SURVEYED	NUMBERS OF NESTING TRACKS					
		Cc	B	E	L1	L2	IN
6/15/80	CANTAGENA - PUERTO LOPEZ (EAST)	2	0	0	0	0	1
6/16/80	CANTAGENA - ACANDI (WEST)	0	3	18	0	0	0
10/3/80	PUNTA GARITA - PUNTA SAN BERNARDO (INCLUDING ISLAS DEL ROSARIO AND ISLAS SAN BERNARDO)	0	0	0	0	0	0

TABLE 5. AERIAL SURVEY SUMMARY  
 See any additional information available from aerial survey. Information should include ground truth observation if conducted.  
 Species abbreviations:  
 Cc: CRUISE  
 B: BAHUJA  
 E: ENTIRE  
 L1: LARVAE  
 L2: LARVAE  
 IN: INCOMPLETE

AERIAL SURVEY FLIGHT PLAN

CANTAGENA, COLOMBIA I  
 3 OCTOBER 1980  
 AIRCRAFT: CANTAGENA INTERNATIONAL AIRPORT  
 TYPE OF FLIGHT: PRIVATE CHARACTER  
 AIRCRAFT: PIPER WARRIOR (SINGLE ENGINE, LOW-WING, 4-PL)  
 PILOT: FERNANDO BACHAGANA M.  
 OBSERVERS: LARRY OREBU (UMFS), FERNANDO DUQUE G. (FWS)  
 AIR SPEED: 110 KTS  
 ALTITUDE: 100-125 FT  
 FLIGHT PLAN: NORTH TO PUNTA GARITA (c. 30 miles)  
 SOUTH TO PUNTA SAN BERNARDO (c. 50 miles)  
 ISLA CASCAJO  
 ISLAS DEL ROSARIO  
 ISLAS DE SAN BERNARDO  
 FLIGHT HRS: 0700 - 1030 HRS; 1 HR ON THE GROUND AT PUNTA SAN BERNARDO  
 FLIGHT TIME: 2 HRS. 30 MINS.

CARTAGENA, COLOMBIA II

16 JUNE 1983  
 (SAME AS 15 JUNE FLIGHT)  
 OBSERVERS: ADD, EDUARDO LASER (BIOLOGY TEACHER)  
 FLIGHT PLAN: SOUTH ALONG COASTLINE, ACROSS  
 GULF URABA NORTH OF RIO ATRATO  
 DELTA, TO PANAMANIAN BORDER.  
 FLY DIRECTLY BACK OVER ISLA FIERRE  
 AND ISLA TORTUGUILLA  
 FLIGHT HRS: 0710 - 1109 HRS  
 FLIGHT TIME: 4 HRS

SPECIES	YEAR	1983 PROJECTED	1982	1981	1980	1979	1978
<u>Caretta caretta</u>							
<u>Chelonia mydas</u>							
<u>Bornachelys coriacea</u>			100 ±				
<u>Eretmochelys imbricata</u>							
<u>Lepidochelys kempi</u>							
<u>Lepidochelys olivacea</u>							

TABLE 6. ESTIMATED POPULATIONS OF NESTING FEMALES. Summarize the estimated number of nesting females for the years indicated and describe methods of estimation on the next page.

DATE OF PUBLICATION; DATA/OBSERVATIONS FROM CA. 1977-78  
 ROSS, J.P. (1982)

TABLE 6. AERIAL BEACH SURVEY SUMMARY (Supplementary page)

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

- PLAYAS ACANDI, MARCH 1982
- DURING ONE WEEK OF BEACH PATROLS BY TV FILM PRODUCER, 28 NESTING EMERGENCES OF DC WERE OBSERVED ON < 1 MILE SECTION OF BEACH

NAME OF AREA (or give coordinates)	TURKISH AREA (map)	SPECIES FRAGING (use abbreviations approx. numbers)	NATURE OF EVIDENCE (Observation, fishery, incidental catch)
PUNTA SAN PEDRINHO			
PUNTA DE LA GACITA 1. (APPROXIMATELY)		Cm (13 TAG RETURNS)	TAG RETURNS OF TORTOISES FROM THE TORTUGUERO, C.R. BOOLEY, 1956-76.
RIO PIEDRAS		Cm (14 TAG RETURNS)	SAME AS ABOVE
PUNTA MANAURE 2. (APPROXIMATELY)		Cm (18 TAG RETURNS)	SAME AS ABOVE
ALTA GUAJIRA PENINSULA 3.		Cm, Cc, Ei	FISHERMEN'S REPORTS
ISLAS DEL ROSARIO 4.		Cm, Cc, Ei	FISHERMEN'S REPORTS
ISLAS SAN BERNARDO 5.		Cm, Cc, Ei	FISHERMEN'S REPORTS
6.			

TABLE 7. FRAGING AREAS INVENTORY  
 Species Abbreviations:  
 Cm Caretta caretta  
 Cc Chelonia mydas  
 B Bornachelys coriacea  
 E Eretmochelys imbricata  
 Lk Lepidochelys kempi  
 Lo Lepidochelys olivacea

SPECIES	MONTH												MONTHS OF GREATEST ACTIVITY	
	J	F	M	A	M	J	J	A	S	O	N	D		
<i>Caretta caretta</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	AUGUST - SEPTEMBER* (JULY)
<i>Chelonia mydas</i>	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	ALL MONTHS
<i>Bombachelys coriacea</i>														N.A. (CASE)
<i>Eretmochelys imbricata</i>														N.A. (CASE)
<i>Lepidochelys kempi</i>														
<i>Lepidochelys olivacea</i>														

TABLE 8. - TURTLE SPECIES PRESENT ON FRONING AREAS. Please complete one of these tables for each of the areas identified in Table 7. Number each table as enumerated in Table 7 (1., 2., etc.).

\* BASED ON ACTISANAL FISHERY AT PUNTA CANOAS

LIFE STAGE UNIT	SPECIES (abbrev.)	CAUSES*	EXTENT OF MORTALITY (% of units)
Nests/eggs	Ce	EROSION (POSSIBLY MOST SIGNIFICANT)	—
Natchlings			
Juveniles			
Adults (in water)			
Nesting females			

TABLE 10. - NATURAL MORTALITY. \* Natural mortality causes may include beach erosion of nests; egg and/or nestling predation by crabs, wild animals, sea birds, etc.; disease; sharks and other predators at sea; catastrophic events.

LOCATION (Give Lat. & Long. coordinates)	DATE	SPECIES AND EST. NOS. (Abbreviations)	CASES
PUNTA CANOAS 10°35'N 75°30'W	6/1/53	N.A.	

TABLE 9. - NON-FRONTING TURTLES AT SEA. Please provide any information available on the incidence of turtles in offshore areas.

Species Abbreviations:  
Ce *Caretta caretta*  
Ch *Chelonia mydas*  
Bc *Bombachelys coriacea*  
Ei *Eretmochelys imbricata*  
Lk *Lepidochelys kempi*  
Lo *Lepidochelys olivacea*

TABLE 10. - NATURAL MORTALITY (Supplementary maps for additional biological data)

Please report below, and on additional maps if necessary, additional data obtained or available such as measurements (length, width, weight) of adult females; adult sex ratio; hatchings; numbers of eggs per nest; hours of nesting; hours and conditions of hatching, etc.

• NO QUANTITATIVE DATA IS AVAILABLE FOR DETERMINING THE DEGREE OF NATURAL MORTALITY EXCEPT TO SAY NO REMARKABLE LOSSES OF TURTLES OR EGGS OCCUR WHERE NESTING STILL TAKES PLACE. A POSSIBLE EXCEPTION TO THIS GENERALIZATION WOULD BE DUE TO BEACH EROSION.

NAME OF PORT OR SITE	SPECIES LABELED (Use abbrev)	FISHING GEAR USED *	WEIGHTS & WEIGHTS (Estimate)
PUNTA CANOAS - 1. BOONILLA	Cm, Ei Cc	SET NETS (LARGE-MESHED, TURTLE)	
2. CARPACENA	Cm, Ei Cc	SET NETS (LARGE-MESHED, TURTLE)	
3. FORT DE VEREUGA	Cm, Cc Ei	SET NETS (LARGE-MESHED, TURTLE)	
4.			
5.			
6.			
7.			
8.			

Species Abbreviations:  
 Cm carreta  
 Ei chelonia  
 Cc chelonia  
 Cm, Ei carreta  
 Cc, Ei chelonia  
 Cm, Cc carreta  
 Ei, Cc chelonia  
 Cm, Ei, Cc carreta  
 Ei, Cc chelonia  
 Cm, Ei, Cc carreta

TABLE 11. LAMING SITES FOR TURTLES & TURTLE PRODUCTS  
 \* OFFSHORE REEFES - TURTLES CAPTURED BY DIVING

INSTITUTION OR ORGANIZATION NAME AND ADDRESS	NO. OF ACTIVE MEMBERS	ACTIVITIES IN PROGRESS
INDERENA BEA GRANDE, CARPACENA CENTRO INVESTIGACIONES PESQUERAS	1 TEMP. NOT FULL TIME DAY	PRELIMINARY EFFORTS TO RE- IMPLEMENT TURTLE CONSERVATION EFFORTS. SOME RESEARCH ON RESIDUAL REMAINS INVESTIGATION (MOLLUSC COMPONENT) IN TURTLE NETS.
INVEEMAR PUNTA DE BATAIN SANTA MARTA	1 TEMP. NOT FULL TIME DAY	PRELIMINARY SURVEY OF PAST SEA TURTLE INVESTIGATIONS & REPORTS (LITERATURE SURVEY). FORMERLY INSTITUTION OF SIGNIFICANT SEA
INVEEMAR'S * PROFESSOR'S INSTITUTE COLUMBO-ALEMANN, PUNTA DE BATAIN SANTA MARTA...	1 ALL TIME AUS ? ASSISTANT	TURTLE RESEARCH 1966 - CA 1972 (REINHARD KAUFMANN)

TABLE 10. PUBLIC AND PRIVATE INITIATIVES CONCERNED WITH TURTLE CONSERVATION/RESEARCH/UTILIZATION  
 \* HISTORICAL RECORD; FIRST SIGNIFICANT SEA TURTLE RESEARCH ACTIVITY.

SPECIES	MARKING OPERATIONS					HOLDING LIVE TURTLES	
	EGGS COLLECTED	EGGS HATCHED	NO. RELEASED	AGE AT RELEASE	NO. RETAINED	NO. OF ADULT MALES	NO. OF ADULT FEMALES
Carreta carreta							
Chelonia mydas							
Chelonia mydas							
Chelonia mydas							
Chelonia mydas							
Chelonia mydas							

YEAR 1972 MEASUREMENT WAS MADE OF EARLY HEADSTART ATTEMPTS WITH TURTLES FROM BURETACA. NOT SUCCESSFUL - EFFORTS ABANDONED.  
 TABLE 17 - TURTLE MARKING OPERATIONS  
 This table quantifies activities concerned with turtle capture for other conservation, population enhancement opportunities, or commercial use. Activities to be included are "headstarting", re-nesting, incubation and release, etc.  
 Prepare separate table for each year of available data.

NATIONAL PARKS NAME AND LOCATION	AREA (sq)	REASON (s) FOR PROTECTION	TYPE AND EFFECTIVENESS OF ENFORCEMENT
LOS CORRALES DEL ROSARIO - PARQUE NACIONAL NATURAL S.W. BURETACA		UN PABLO, COCAINS, REEF FISHES, TURTLE GRASS HABITATS, TURTLES EXTENSIVE, UNIQUE	INSUFFICIENT
SALAMANCA * NEAR BURETACA, WEST OF SANTA MARTA		NARROW BARRIER BEACH WITH MANGROVE FOREST (EXTENSIVE) AND MIGRATORY WATERSHED FOR	INSUFFICIENT
TAYRONA * EAST OF SANTA MARTA		ALLEGEDLY, GEOGRAPHY (UNIQUE); NATURAL FLORA AND FAUNA, RELATIVELY UNDEVELOPED	INSUFFICIENT
BURETACA * EAST OF TAYRONA AT BAY EASTERN BOUNDARY		SEA TURTLE NESTING BEACH; FORMERLY NESTED Cm, Cc, Ei, De NESTING INSUFFICIENT TODAY.	NOT NESTED (INSUFFICIENT NESTING ACTIVITY TO MAINTAIN WATERSHED HABITAT AT PREVIOUS LEVEL)

TABLE 19. SCHEDULES AND REVIEWS  
 \* NOT SPECIFICALLY DESIGNATED AS TURTLE RESERVE, BUT DO PROVIDE NESTING AND RAFFLE HAZARD FOR TURTLES.  
 \* \* FOR THE SPECIFIC AREA TO PROTECT NESTING TURTLES.

TABLE 20. REGULATORY AUTHORITY (Supplementary info)

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

MINISTRY OF AGRICULTURE NATIONAL DECREE No. 1691 OF AUGUST 4, 1978.

- A TOTAL MANAGEMENT OF ALL AQUATIC BIOLOGICAL RESOURCES
- PROTECTION AND DEVELOPMENT OF AQUATIC BIOLOGICAL RESURCE AND THEIR ENVIRONMENT
- THE MANAGEMENT AND ADMINISTRATION OF ABOVE RESURCES, INCLUDING THOSE MARINE AND CONTINENTAL, ARE CONFERRED TO THE INSTITUTO NACIONAL DE LOS RECURSOS NATURALES RENOVABLES Y DEL AMBIENTE (INDERENA)
- INDERENA WILL CONTROL AND WILL ISSUE PERMITS FOR IMPORTATION AND EXPORTATION OF ALL SPECIES OR PRODUCTS FROM ANY AQUATIC BIOLOGICAL SPECIES.

\* LEGISLATIVE HISTORY:

THE ABOVE LAW IMPLEMENTS AND AMENDS PREVIOUS COLOMBIAN LAWS DEALING WITH THE PROTECTION OF THE AQUATIC BIOLOGICAL RESOURCES

- NATIONAL DECREE NO. 2811 OF 1974
- NATIONAL DECREE NO. 23 OF 1973
- NATIONAL DECREE NO. 376 OF 1957

\*\* SPECIFIC REFS OF SEA TURTLES IN PROMULGATED ARTICLES

PROGRAMA PARA LA PROTECCION Y CONSERVACION DE LA TORTUGA DERMOCHELYS CORALICA EN LAS COSTAS DEL NOROESTE DE COLOMBIA	1980	COORACION REGIONAL DE DESARROLLO DE URABA, CENTRO DE INVESTIGACIONES MARINAS DE URABA (CIMUR), SR. ENRIQUE NEGRET CORONA
--	------	--

• A PROPOSAL TO CONDUCT SEA TURTLE INVESTIGATIONS IN GOLFO URABA, SPECIFICALLY AT THE LEATHERBACK TURTLE "ROOKERY" AT ACANDI, WAS SUBMITTED TO THE IUCN BY INDERENA, THE SUPERVISORY AGENCY. TO OUR KNOWLEDGE (OGREN) THIS WORK WAS NOT IMPLEMENTED AND NO INVESTIGATION IS BEING CONDUCTED AT THIS TIME.

TABLE 21. NATIONAL RESEARCH PROJECTS (CONT)

NAME AND ADDRESS OF ORGANIZATION	BUDGET ALLOCATION TO TURTLES	NO OF STAFF ASSIGNED TO TURTLES	COMMENTS ON LEVELS OF EMPLOYMENT
INDERENA	---	---	EMPLOYMENT DIFFICULTIES EXIST. CLANDESTINE CAPTURE AND SALE OF SEA TURTLES EXISTS, RACKING OF NESTING REMAINS/EGGS, REDUCED TO BE CARRIED OUTSIDE OF WARE THINGS STILL ENOUGH TO AEST. IN GENERAL, EMPLOYMENT EFFORT IS NOT ADEQUATE.

TABLE 20. REGULATORY AUTHORITY (cont.) Indicate all entities with statutory responsibilities (e.g., Fisheries Departments and Ministries, Police, Coast Guard, etc.)

PROJECT TITLE	DATES		NAME & ADDRESS OF INSTITUTION & CHIEF INVESTIGATOR
	START	END	
---	1966	1967	CORPORACION AUTONOMIA REGIONAL DE LOS VALLES DEL MAGDALENA Y DEL SINU (C.V.M.). DR. REINANDO KAUFMANN
---	1968	1971	INDERENA, DR. REINANDO KAUFMANN (INSTITUTO COLOMBIANO ALEMAN, PUERTO DE BETIN, SANTA ANA)
OPERACION TORTUGA	1972	1972	INDERENA. CRAIG E. TUPPS (MEER COASTS PROGRAM)
OPERACION TORTUGA	1973	1973	INDERENA. ---
OPERACION TORTUGA*	1974	1975	INDERENA, E. RAMIREZ (MUNICIPIO MARQUES ANTONALES Y VIDA SILVESTRE, BARRANQUILLA)

\* PROJECT TERMINATED. INSUFFICIENT NUMBERS OF TURTLES NESTING TO SUPPORT RESEARCH GOALS.

\* TURTLE PROJECTS IMPLEMENTED BY GOVT COMMISSION (C.V.M.) STUDY. STUDY BY FEDERICO MEDEM (1962)

(SEE ATTACHMENT)

## REPORTS AND PUBLICATIONS

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

1. LA TORTUGA CON CAPARAZON DE CUERO (*DERMOCHELYS CORIACEA*). UNPUBLISHED REPORT BY ENRIQUE NEGRET C.,
2. CINUR-CORPOURABA, 1979. 5 p
3. CARR, MEYLAN, MORTIMER, BJORNAL & CARR. 1992. SURVEYS OF SEA TURTLE ABUNDANCE AND HABITATS IN THE WESTERN ATLANTIC. NOAA TECH. MEM. NMFS-SEFC-91. 87 p
4. CALDASIA'S OUTER ISLAND POSSESSIONS (SAN ANDRES, GENERAL AREA; PROVIDENCIA; ESE CAYS; ALBUQUERQUE CAYS; SERRANA BANK; QUITASUEÑO BANK; RONCABOR CAY) ARE DISCUSSED ON PAGES 67-72. INTERVIEWS WITH TURTLE FISHERMEN; DECLINES IN CATCHES (ESPECIALLY E.) ARE DISCUSSED.

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