

WATS II REPORT / DATA SET

National Report to WATS II for St. Lucia Vaughn Charles 12 October 1987





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:

Charles, V. 1987. <u>National Report to WATS II for Saint Lucia</u>. Prepared for the Second Western Atlantic Turtle Symposium (WATS II), 12-16 October 1987, Mayagüez, Puerto Rico. Doc. 065. 9 pages.

Karen L. Eckert WIDECAST Executive Director June 2009

NATIONAL REPORT ON SEA TURTLES

St. Lucia has continued to give support to the conservation of sea turtles. During the past four years, the Fisheries Management Unit has conducted turtle watches on a beach where it believed that a significant amount of leatherback nesting takes place. The attached is a report on the Fisheries Management Unit's turtle watch programmes.

The Department has also conducted surveys on beaches where there have been reports of sightings, and interviews with fishermen regarding sightings at sea. The beaches are mainly white and grey sandy beaches on the east and west coast of the island. Information is listed in Appendix II on the attached.

Interviews with fishermen on the east coast of the island have revealed an increase in sightings of green and leatherbacks turtles over the last couple of years, most of them within a half mile from the shore. This suggests that they may have been nesting on a beach near the area. Attempts to verify this have proved negative.

National legislation has been upgraded for the protection and conservation of turtles. The "under-sized" weight has been increased from fifteen pounds (15 lbs) to thirty pounds for hawksbill, green and loggerhead turtles, and a hundred and twenty pounds (120 lbs) for leatherback turtles.

REPORT ON THE FISHERIES MANAGEMENT UNIT

TURTLE NESTING PROGRAMMES

The Fisheries Management Unit's turtle watch programmes was initiated circa 1982 as part of the data collection for the Western Atlantic Turtle Symposium (WATS) of July 1983. Initially, the programme took the form of weekly "beach treks" in which staffers of the Fisheries Management Unit (FMU) walked beaches around the island searching for turtle tracks. The tracks were identified using methods described by Pritchard et al. (1983) and Anne Maylan (pers.com.) (c.f. d'Auvergne, 1984). A number of beaches were categorized according to the turtles that appeared to nest there (Murray 1983). Daytime visits were made by land and the observers walked the entire length of the beaches. In addition to recording nesting activity and other signs of turtle presence the observers noted the nature of the sand. A number of "night watches" were staged by members of the FMU and volunteers from the Naturalists Society.

After WATS, it was decided that work should be concentrated on the study of one species at a time until a reasonable data base was produced, before moving onto another species. This was not to preclude the collection of "incidental" data on other species as they came to hand. Bearing in mind the fact that Grande Anse Beach had been identified as having a significant nesting leatherback turtle population, it was decided that this would be the starting point of the Unit's turtle watch programme. The assistance of the St. Lucia Naturalists Society was further solicited to provide volunteers for watches. Infact, as a result of the society's willingness to assist, a fourwheel-drive vehicle was donated to them by the World Wildlife Fund. At that time, the FMU became faced with a logistic problem in making manpower available for the weekly watches. The Society set up a programme in which naturalist-minded tourists would pay US\$15 per person for the privilege of attending a watch and in the hope of seeing a nesting turtle. The money entitled the tourists to sustenance and sleeping facilities on the beach, and was used by the Society to provide same, as well as, fuel for the vehicle. FMU staffers attended the watches as often as their schedules would allow. This activity provided useful data on leatherback nesting on Grande Anse suggesting (a) a 10 day cycle of nesting; (b) peak nesting takes place during May and June; (c) nesting takes place between 21:00 hrs and 03:00 hrs; (d) nesting frequency may be related to tide status; and (e) between 12 and 29 turtles nest annually on Grande Anse Beach (d'Auvergne, Murray and Sparks, in press).

This year however, the Naturalists Society's vehicle has been withdrawn from the programme, consequently hampering the fluidity of the programme. This has resulted in the fact that for this year, to date only seven watches could be attempted, one of which had to be aborted due to inaccesibility of the beach resulting from inclement weather, which also led to the premature termination of two other watches.

Of note this year is the fact that a green turtle was actually tagged on Grande Anse as it was returning to the sea after an aborted nesting. The turtle had "searched" for a nesting area and was returning to the sea without even digging the egg-pit. This occurence gave confirmation to earlier track evidence of green turtle nesting on that beach. It is also in keeping with the FMU's theory that green turtle nesting in St. Lucia takes place from circa July through to early September. To test this theory, members of the Cambridge Windward Islands Expedition (CWIE) spent a minimum of three consecutive nights on Grande Anse Beach to monitor nesting activities of greens there.

It had initially been the feeling that this year would have been the last of the FMUs concerted data collection at Grande Anse, and for leatherbacks. However, in view of the problems which led to most of the season not being given the anticipated coverage, it is suggested that efforts be concentrated at that beach for a further year (at least for leatherbacks) and another species (notably greens) be given major attention as from the 1989 season. Appendices 1 and 2 summarize the data collected to date in the FMU's Turtle Watch Programme.

APPENDIX I.

LEATHERBACK NESTING

Locn	Date	Time	Moon	CL	CW	TW	Eggs
GDA	26 July 1983	09:50 PM	Full	152	91		
GDA	27 July 1983	01:50 AM	Full	152	91	405	
FDO	01 May 1984					185	
FDO	15 May 1984					170	
LVT	03 July 1984					407.0	
GDA	13 July 1984					167.6	
GDA	20 April 1985					94	
GDA	01 May 1985						
GDA	01 May 1985					400	
GDA	01 May 1985					132	
GDA	01 May 1985					177.8	
GDA	01 May 1985					182.9	
GDA	02 May 1985	40.00 414				182.8	
GDA	04 May 1985	12:00 AM					
GDA	04 May 1985	01:00 AM				477.0	
GDA	08 June 1985	00.50 DM		474 45	107.05	177.8	
GDA	09 June 1985	09:53 PM		171.45	107.95	450	00
GDA	09 June 1985	12:22 AM		152.4	83.82	152	80
GDA	09 June 1985	01:04 AM		450	134.6		
GDA	21 July 1985	09:53 PM		150	111.2		
GDA	21 July 1985	11:00 PM	NI-	164	102	400.0	
GDA	13 April 1986	02:20 AM	No	157.48	83.6	193.0	400
GDA	03 May 1986	01:15 AM		156.21	80.518	400.0	122
GDA	31 May 1986	11:45 PM		186.69	79.756	182.8	444
GDA	21 June 1986	11:05 PM		160.02	80.772	190.5	111
GDA	28 June 1986			166.37	83.312	198.1	108
GDA	02 May 1987	40.45 DN4		147.32	82.042	177.8	00
GDA	09 May 1987	10:45 PM		148.59	76.708	149.8	66
GDA	10 May 1987	03:45 AM		154.94	82.296	213.3	
GDA	21 June 1987	10:10 PM		129.54			

Name	Code	East/West			Species *		
			Dc	Cm	Ei	Cc	Uk
Micoud	Mic	E					
Fond	Fnd	E E					
Patience	Pat	E					
Trou Gras	Tgr						
Praslin	Pra	E E					
Dennery	Den	E					
Fond d'Or	Fdo	E	Υ				
Louvet	Lvt	E	Υ	Υ			
Sorciere	Sor	E					
Grand Anse	Gda	E	Υ	Υ			
Grand Anse 2	Gd 2	E					
P. Anse	Pta	E					
Marquis	Mqs	E					
Dauphin	Dau	E E					
Lapins	Lap	E					
Cometette	Com	E E					
Café	Caf	Е					
Cas-en-bas	Cas	E					
Donkey	Dky	Е					

^{*} Cm = Chelonia mydas; Ei = Eretmochelys imbricata; Cc = Caretta caretta; Dc = Dermochelys coriacea; Uk = Unknown

OBSERVED TURTLES 1987

Species	Area	Date	CL	CW
Leatherback	Grand Anse	April	139.7 cm	80.772 cm
Leatherback	Grand Anse	April	139.7 cm	80.77 cm
Leatherback	Grand Anse	July	76.2 cm	80.77 cm
Leatherback	Grand Anse	August	182.88 cm	80.77 cm
Leatherback	Grand Anse	September	152.4 cm	
Leatherback	Grand Anse	September	167.64 cm	

Mortality 1987 (April-September): 7

TURTLE NESTING 1987

Species	Area	Tag#	Tag#	CL	CW	Track	Nest	#	Time
•		Ľ	Ř	(cm)	(cm)	Width	Depth	Eggs	
						(cm)			
Leatherback	Grand Anse	324	323	147.3	82.04	177.8			
Leatherback	Grand Anse	328	327	148.59	76.708	149.86	81.28	66	10:45
Leatherback	Grand Anse	330	329	154.94	82.296	213.36			3:45
Leatherback	Grand Anse	702	701	139.7	80.772	203.20	60.96	73	11:42
Green turtle	Grand Anse	706/71 ?	709	101 09	90.68				

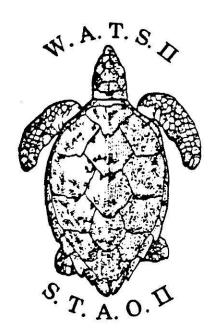
Note: Actually 7 were tagged but data not available on three of the leatherbacks.

OBSERVED TURTLE TRACKS 1987

Species	Area	Age of Track (days)	TW	Distance from H.W.M.	Nest W	Tide
Leatherback	Grand Anse	2-4	198.12	38.5	10	Low
Leatherback	Grand Anse	2-4	175.26	29		Low
Leatherback	Grand Anse	3-5	177.8	38.6	7.5	Low
Leatherback	Grand Anse	4	125.73	33.3		Low
Leatherback	Grand Anse	7	137.16	36		Low
Leatherback	Grand Anse	2	172.72	4.06	4.17	High
Leatherback	Grand Anse	3-4	198.12	24.4	5.75	High

WATS II REPORT/DATA SET

National Report to WATS II for St. Lucia Vaughm Charles 12 October 1987



NATIONAL REPORT ON SEA TURTLES

St. Lucia has continued to give support to the conservation of sea turtles. During the past four years, the Fisheries

Management Unit has conducted turtle watches on a beach where it believed that a significant amount of leatherback nesting takes place. The attached is a report on the Fisheries Management Unit's turtle watch programmes.

The Department has also conducted surveys on beaches where there have been reports of sightings, and interviews with fishermen regarding sightings at sea. The beaches are mainly white and grey sandy beaches on the east and west coast of the island. Information is listed in appendix II on the attached.

Interviews with fishermen on the east coast of the island have revealed an increase in sightings of green and leatherbacks turtles over the last couple of years, most of them within a half mile from the shore. This suggests that they may have been nesting on a beach near the area. Attempts to verify this has proved negative.

National legislation has been upgraded for the protection and conservation of turtles. The "undersized" weight has been increased from fifteen pounds (15 lbs) to thirty pounds for hawksbill, green and loggerhead turtles, and a hundred and twenty pounds (120 lbs) for leatherback turtles.

REPORT ON THE FISHERIES MANAGEMENT UNIT TURTLE NESTING PROGRAMMES

The Fisheries Management Unit's turtle watch programmes was initiated circa 1982 as part of the data collection for the Western Atlantic Turtle Symposium (WATS) of July 1983.

Initially, the programme took the form of weekly "beach treks" in which staffers of the Fisheries Management Unit (FMU) walked beaches around the island searching for turtle tracks. The tracks were identified using methods described by Pritchard et al (1983) and Anne Maylan (pers. com.) (c.f. d'Auvergne, 1984). A number of beaches ewere categorized according to the turtles that appeared to nest there (Murray 1983). Daytime visits were made by land and the observers walked the entire length of the beaches. In addition to recording nesting activity and other signs of turtle presence the observers noted the nature of the sand. A number of 'night watches' were staged by members of the FMU and volunteers from the Naturalists Society.

After WATS, it was decided that work should be concentrated on the study of one species at a time until a reasonable data base was produced, before moving onto another species. This was not to preclude the collection of "incidental" data on other species as they came to hand. Bearing in mind the fact that Grande Anse Beach had been identified as having a significant nesting leatherback turtle population, it was decided that this would be the starting point of the Unit's turtle watch programme. The assistance of the St. Lucia Naturalists Society was further solicited to provide volunteers for watches. Infact, as a result of the society's willingness to assist, a four-wheel-drive vehicle was donated to them by the World Wildlife Fund. At that time, the

FMU became faced with a logistic problem in making manpower available for the weekly watches. The Society set up a programme in which naturalist-minded tourists would pay US\$15 per person for the privilege of attending a watch and in the hope of seeing a nesting turtle. The money entitled the tourists to sustenance and sleeping facilities on the beach, and was used by the Society to provide same, as well as, fuel for the vehicle. FMU staffers attended the watches as often as their schedules would allow. This activity provided useful data on leatherback nesting on Grande Anse suggesting (a) a 10 day cycle of nesting; (b) peak nesting takes place during May and June; (c) nesting takes place between 21:00 hrs and 03:00 hrs; (d) nesting frequency may be related to tide status; and (e) between 12 and 29 turtles nest annually on Grande Anse Beach (d'Auvergne, Murray and Sparks, in press).

This year however, the Naturalists Society's vehicle has been withdrawn from the programme, consequently hampering the fluidity of the programme. This has resulted in the fact that for this year, todate only seven watches could be attempted, one of which had to be aborted due to inaccesibility of the beach resulting from inclement weather, which also led to the premature termination of two other watches.

Of note this year, is the fact that a green turtle was actually tagged on Grande Anse as it was returning to the sea after an aborted nesting. The turtle had "searched" for a nesting area and was returning to the sea without even digging the egg-pit. This occurence gave confirmation to earlier track evidence of green turtle nesting on that beach. It is also in keeping with the FMU's theory that green turtle nesting in St. Lucia takes place from circa July through to early September. To test this theory, members of the Cambridge Windward Islands Expedition (CWIE) spent a minimum of three consecutive nights on

Grande Anse Beach to monitor nesting activities of greens there.

It had initially been the feeling that this year would have been the last of the FMUs concerted data collection at Grande Anse, and for leatherbacks. However, in view of the problems which led to most of the season not being given the anticipated coverage, it is suggested that efforts be concentrated at that beach for a further year (at least for leatherbacks) and another species (notably greens) be given major attention as from the 1989 season.

Appendices 1 and 2 summarize the data collected todate in the FMU's Turtle Watch Programme.

APPENDIX I

DCO. NESTING

						82			
LOCN.	DATI	E	TIME		MOON	CL	CW	TW	EGGS
GDA	Jul	26'83	9:50	n m	Full	152	0.1		0.07 (0.00
GDA			1:50	1999	Full	132	91		
FDO		1 '84			- 411			105	
FDO	-	15'84						185	
LVT	sava vice	3 '84						170	
GDA ·		13'84						167 6	
GDA		20'85						167.6	
GDA	May	1'85						94	
GDA	May	1'85				×			
GDA	May	1'85				9		132	
GDA	May	1'85						177.8	
	May	1'85						182.9	
GDA	May	2'85						182.8	
GDA	May		12:00	a.m.				102.0	
GDA	May	4'85		a.m.					
GDA	Jun	8'85						177.8	
GDA	Jun	9'85	9:53	p.m.		171.45	107.95	177.0	
GDA	Jun	9'85	12:22			152.4	83.82	152	80
GDA	Jun	9'85	1:04	a.m.			134.6	102	00
GDA	Jul	21'85	9:30			150	111.2		
GDA	Jul	21'85	11:00	p.m.		164	102	B BSD X	n a valena v m v
GDA	Apr	13'86	2:20	a.m.	No.	157.48	83.6	193.0	
GDA	May	3'86	1:15	a.m.		156.21			122
GDA	May	31'86	11:45	p.m.		186.69		182.8	
GDA	Jun	21'86	11:05	p.m.		160.02			111
GDA	Jun	28'86				166.37			108
GDA	May	2'87				147.32		177.8	
GDA	May	9'87	10:45	p.m.		148.59	10.7730140V PT 1080 107-108TS	149.8	66
("	May :	10'87	3:45	a.m.		154.94	82.296	213.3	5 (2)
GDA	Jun 2	21'87	10:10	p.m.		129.54	·	on Supercolated (Control	

E	CODE	DE EAST/WEST		СМ
Micoud	Mic	E		
Fond	Fnd	E		
Patience	Pat	E		
Trou Gras	Tgr	E		
Praslin	Pra	E		
Dennery	Den	E		
Fond d'Or	Fdo	E	Y	
Louvet	Lvt	E	Y	Y
Sorciere	Sor	E		
Grand Anse	Gđa	E	Y	Y
Grand Anse 2	Gd 2	E		
P. Anse	Pta	E		
Marquis	Mqs	E		
hin	Dau	E		
Lapins	Lap	E		
Comerette	Com	E		
Cafe	Caf	E		
Cas-en-bas	Cas	E		
Donkey	Dky	E		

FI

CC

UN

CM : Chelonia mydas

EI : Eretmochelys imbricata

CC : Caretta caretta

DC : Dermochelys coriacea

UN : Unknown

OBSERVED TURTLES 1987

SPECIES	AREA	DATE	CL	CW	
Leatherback	Grande Anse	April	139.7 cm	80.772 cm	
•	•		139.7 cm	80.77 cm	
	•	July	76.2 cm		
		August	182.88 cm	w	
	•	September	152.4 cm		
w	b.	m ^v	167.64 cm		

MORTALITY 1987 (APRIL - SEPTEMBER)

NO. OF DEATHS

TURTLE NESTING 1987

SPECIES	AREA	TAG #L	TAG #R	CL	CW	TRACK WGHT	NEST DEPTH	# EGGS	TIME
Leatherback	Grande Anse	324	323	147.3 cm	82.04cr	n 177.8cm			
•		328	327	148.59cm	76.708	149.86	81.28	66	10:45
		330	329	154.94	82.296	213.36			3:45
	₩ .	702	701	139.7	80.772	203.20	60.96	73	11:42
Green Turtle		706/71	709	101.09	90.68	16			

OBSERVED TURTLE TRACKS 1987

SPECIES	AREA	AGE OF TRACK	TW	DISTANCE FROM	и н.w.м.	NEST W	TIDE
Leatherback	Grande	2 4 2	100.10				
	Anse	2 - 4 days	198.12	38.5	58 60±3	10	Low
•			175.26	29			Low
•	•	3-5 days	177.8	38.6		7.5	Low
•		4 days	125.73	33.3			Low
. *	•	7 days	137.16	36		9	Low
		2 days	172.72	4.06		4.17	High
	•	3 - 4 days	198.12	24.24		5.75	High