Inter-American Convention for the Protection and Conservation of Sea Turtles

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IAC Annual Report General Instructions

Annex IV of the Convention text states that each Contracting Party shall hand in an Annual Report. To complete this Annual Report, Focal Points should consult with several stakeholders involved in sea turtle issues. If you have any questions regarding this Annual Report, please write to the PT Secretariat at secretario@iacseaturtle.org

Please note that the date to submit this Annual Report is **August 12th of 2011.**

Part I (General Information)

Please fill out the following tables. Add additional rows if necessary.

a._ Focal Point

Institution	Galapagos National Park
Name	Eduardo Espinoza
Date Annual Report submitted	September 15, 2011

b._ Agency or Institution responsible for preparing this report

Name of Agency or Institution	Galapagos National Park Office
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c._ Others who participated in the preparation of this report

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Part II (Policy and Management)

a._ General description of activities carried out for the protection and conservation of sea turtles

In accordance with Articles IX and XVIII of the text of the Convention, each Party shall establish monitoring programs, policies and plans for implementation at a national level for the protection and conservation of sea turtles and their habitat.

As a result, the Party shall report on the action plans, management plan or other types of instruments, describing their location, the species considered and the actions implemented by governmental, non-governmental and private institutions related to sea turtles.

In addition to the above, please fill out the following tables and explain the level of progress in the comments column.

	YES/NO/ In Progress	**Comments**
Does your country have a national plan of action in accordance with Article XVIII?	*In Progress*	*An Action Plan has been prepared and is waiting to be signed by the corresponding ministries.*
Does your country have policies and programs at local and regional levels in accordance with Article XVIII?	*Yes*	*The new constitution establishes clear management policies*
Does your country have monitoring programs in accordance with Article IX?	*Yes*	

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Ecuador is known for being a very diverse country and among its many species are sea turtles, of which 4 species have been reported in Ecuador: green, leatherback, Olive Ridley and loggerhead turtle. (Parra.,Márquez R.,Koch, 2011)

Even though Ecuador's legislation protects sea turtles, very little is known about their population but it is known that they are incidentally captured by most fisheries and a high mortality has been registered in beach strandings.

In regards to conservation plans for these species, Metis Foundation and Conservation International with the participation of important public and private institutions, is preparing a communications strategy to protect this animal. (Parra.,Márquez R.,Koch, 2011)

On the other hand, the Charles Darwin Foundation has carried out a green turtle monitoring program since 2001 in four places that have been registered as key sites for this species. And since 2009, it became a bi-institutional project between the Charles Darwin Foundation and the Galapagos National Park. (Parra., Márquez R.,Koch, 2011)

The Government of Ecuador maintains leadership of initiatives for responsible fisheries, with the continuation of the Project for the Transformation and adoption of Better Fishing Practices along the coast.

The Ministry of Agriculture, Livestock, Aquaculture and Fishing, through the Subsecretary of Fishing Resources, the Eastern Pacific Fishing School (EPESPO) and the environmental organization WWF, has changed number 38 and 40 "J" hooks for C16 circle hooks in the Santa Marianita community of Manta District.

Due to the global concern for the current situation of sea turtles, organizations have had to introduce new fishing technologies that, apart from minimizing the environmental impact, allow the fishermen to do a better job in a more responsible, sustainable way without affecting any species. (Viceministry of aquaculture and fishing, subsecretary of fishing resources, 2011). The project has 10 technicians working on the issue and the Government has earmarked resources for the improvement of the fishing gear known as "long-line."

The C16 circle hook reduces incidental capture of turtles by 60% – 90%. One of the advantages of this hook is that the fish remains alive while hooked on and, it equals or exceeds the capturability of objective species like tuna, marlin and swordfish. (Viceministry of aquaculture and fishing, undersecretary of fishing resources, 2011)

The challenge to conserve sea turtles is vital, since they are considered indicators of the oceans' health. This implies not only the survival of the ecosystems, but human beings as well.

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b._ National legislation and international instruments related to sea turtles adopted in the preceding year

Describe any national regulations, international agreements and other legal instruments adopted during the preceding year (April 30, 20XX-April 30, 20XX) related to sea turtles and/or relevant activities. Provide a reference and attach the digital file for the legislation and its corresponding number. The laws adopting the international legislation should be included, when they exist.

National Legislation		
Type and name of legal instrument (No.)	Description (Range of application)	Sanctions(s) Imposed
Turtle Excluder Device (TED) usage regulation	On May 13, 2002, the Turtle Excluder Device (TEDs) Regulation was implemented in the fisheries on the coast of Ecuador, consolidated by Article 2. – Shrimp trawl boats must have turtle excluder devices permanently and correctly installed in their trawl nets and Article 3. – The TEDs used by shrimping trawl boats must be "SUPER SHOOTER" model rather than constructed out of steel, aluminum o fiberglass. A sea turtle conservation communications strategy has also been prepared and is included in the national action plan.	The national fisheries law, the part that establishes sanctions for violations, is currently under review, given that the sanctions were created 60 years ago and the current value of the fines are ridiculous.

International Instruments	
Treaty, Convention, Agreements, Memorandum of Understanding	Year signed and/or ratified

Note: *If this is the first time a country is submitting this information, please include all pertinent national legislation and international instruments currently in force.*

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c._ Actions for compliance with national and international legislation

c.1 IAC Resolutions

Fill in the following tables for each of the IAC Resolutions listed below. In the case that a Resolution does not apply to your country, please mark the box RESOLUTION DOES NOT APPLY, and if a specific question does not apply, please mark the column DOES NOT APPLY. If you need more space to describe these actions, please attach additional pages and note the resolution and question number to which you are responding.

Resolution CIT-COP2-2004 R1: Conservation of leatherback turtles (*Dermochelys coriacea*)

ACCORDING TO RESOLUTION CIT-COP2-2004-R1, REPORT WHETHER YOUR COUNTRY:

			RESOLUTION DOES NOT APPLY	
IS COMPLYING WITH THE FOLLOWING:	**YES**	**NO**	**DESCRIBE ACTION (*)**	**DOES NOT APPLY**
1a) Have you created conservation plans and long-term programs that can reverse the critical situation of the leatherback turtle in the Eastern Pacific?	X		The NationalAction for the Conservation of Sea Turtles has been prepared and includes all sea turtles found in the country.	
1b) Are you implementing these conservation plans and monitoring programs?	X		Even though the National Action Plan has already been prepared, it has not been legally articled. Signatures are still pending from the ministries (MAE and MAGAP) in order to approve the plan. The sea turtle conservation programs continue to be carried out like the circle hook program, gillnets, bycatch reduction (fishing extensionism, use of TEDs, training fishermen to prevent incidental capture, onboard observer programs, IATTC bycatch reduction).	
2a) Have you taken conservation measures to significantly reduce the use of leatherback turtle products and by-products?	X		Control and surveillance programs exist led by MAGAP, MAE, UPMA, and the Navy, that carry out actions to guarantee compliance of current regulations. A sea turtle conservation communication strategy has been prepared that complements the National Action Plan.	
2b) Do you evaluate these conservation measures?	X		NOAA inspections occur ever year that certifies the use of TEDS on board the trawling fleet. The IATTC also has binding resolutions that are evaluated annually by the bycatch committee. National control authorities prepare their control and surveillance reports that monitor activities.	

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3a) If your country has leatherback turtle nesting beaches in the Eastern Pacific: Have you taken conservation measures to protect the nesting sites and their associated habitats?			DOES NOT APPLY	
3b) Do you evaluate the conservation measures taken to protect those nesting sites and their associated habitats?		X		
4. Has your country adopted fishing techniques that reduce incidental capture and mortality of this species?	X		The use of TEDs on the trawling fleet was adopted as being mandatory in 2002 and continues to date. The IATTC has implemented a program to mitigate the effects of sea turtle bycatch.	
5a) Is your country collecting information on incidental capture of leatherbacks in the following fisheries:				
Artisanal fisheries				
i) Long-line	X		WWF,SRP,EQUILIBRIO AZUL,INP	
ii) Gillnets	X		INP	
iii) Other fishing gear (indicate which one(s))	X		deep water longline (INP, SRP)	
Industrial fisheries				
i) Long-line	X		SRP (Probecuador)	
ii) Gillnets			DOES NOT APPLY	
iii) Other fishing gear (indicate which one(s))	X		Seiners. IATTC.	
5b) Have you provided the IAC with information on incidental capture of leatherbacks in the following fisheries:				
Artisanal fishing				
i) Long-line	X		INP, WWF-SRP	
ii) Gillnets	X		INP	
iii) Other fishing gear (indicate which one(s))	X		deep water longline (INP, SRP)	
Industrial fisheries				
i) Long-line		X		
ii) Gillnets			DOES NOT APPLY	
iii) Other fishing gear (indicate which one(s))	X		Trawling nets (SRP)	
6. Have you established agreements and/or understandings with countries fishing within international waters to adopt fishing techniques that reduce incidental capture of leatherback turtles? List which countries:		X		
7. Have you encouraged other non-Party states to the IAC, carrying out activities that affect leatherback turtles, to adopt measures in favor of their conservation, by means of bilateral, multilateral or regional contacts?	X		Memorandum of understanding between sea turtle conservation.	
8. Have any cooperative agreements or alliances been established with pertinent organizations? List:	X		With CPPS, prepared a workshop for the standardization of sea turtle monitoring techniques. The Subsecretary for Fishing Resources, the Eastern Pacific Fishing	

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			School (EPESPO) and WWF are part of a Project for the Transformation and Adoption of Better Fishing Practices throughout the coast.	

(*) Specify actions implemented, name of the project or relevant document, location, objective(s), institutions responsible, contact, financial or other support (optional), results (both positive and negative) and duration.

Resolution CIT-COP3-2006 R-1: Hawksbill turtle conservation *(Eretmochelys imbricata)*

ACCORDING TO RESOLUTION CIT-COP3-2006-R1, REPORT WHETHER YOUR COUNTRY:

				RESOLUTION DOES NOT APPLY	
IS COMPLYING WITH THE FOLLOWING:		**YES**	**NO**	**DESCRIBE ACTION (*)**	**DOES NOT APPLY**
1. Has your country promoted synergies with other Conventions, treaties, international organizations, and/or regional fisheries bodies on the management and conservation of hawksbill turtles and their habitats? Indicate which one(s).		**X**		CMS (Julia Cordero) established a national scientific committee for sea turtles. Equilibrio Azul, with the support of NOAA, CI and MAE, placed satellite tags on nesting turtles (2 satellite tags, 2 continuous tags, 5 acoustic tags). Studies done by INP-CI to determine the incidence of gillnets. Circle hooks SRP-WWF-IATTC.	
2 a) Are you strengthening monitoring of the illegal use and trade of hawksbill turtles and their products?		**X**		Cooperation agreement between the Navy, PNG, ONM and the Environmental Police to carry out actions to control illegal trade. Surveillance in protected areas.	
2 b) Are you enforcing pertinent hawksbill legislation?		**X**		Legislation related to hawksbills includes all turtles. There are also legal instruments to prevent their commercialization. The MAE performed an important confiscation in December 2010 in Guayaquil. However, fiscalization and control are not very strong.	
2 c) Are activities being carried out in order to stop illegal trade of hawksbill products?		**X**		There are legal instruments and fines; however, there is no monitoring.	
3. Does your country support and strengthen the research and monitoring activities required to improve the scientific basis of conservation measures for the hawksbill turtle? Especially in:	Genetics	**X**		Alliance between ICAPO, Equilibrio Azul and MAE to analyze local stock in Machalilla National Park.	
	Migratory behavior	**X**		Satellite and acoustic tags Equilibrio Azul, NOAA, CI, MAE in Machalilla National Park.	
	Location and conservation status of foraging habitats.	**X**		Aquatic monitoring. Only in Machalilla National Park.	
	Location and conservation status of prey species.		**X**		

	Population dynamics at foraging sites	**X**		Only PNM, Abundance and distribution, Abundance sampling was initiated in San Cristóbal USFQ-PNG.	
	Integrity of nesting habitats	**X**		PNM, La playita, a kilometer of beach under absolute protection. Strict control and surveillance is reinforced.	
	Others (specify)				
4. As indicated in the recommendations from FAO's Technical Meeting on the conservation of marine turtles and fisheries that was held in Bangkok in 2004 and adopted by the 26th Session of FAO's Fisheries Committee (COFI), does your country carry out any activities mentioned in a) and/or b)?	a) Evaluate incidental capture of hawksbill turtles in jurisdictional waters.	**X**		However, sporadic efforts have been made by NGOs and government institutions. IATTC, turtle release regulations.	
	b) Actions to mitigate incidental capture of hawksbill turtles in their jurisdictional waters.	**X**		IATTC, turtle release regulations. SRP mandatory use of TEDs (Monthly monitoring)	
5. Does your country apply the precautionary approach when considering proposals for seismic exploration on priority marine habitats of the hawksbill turtle?			**X**		
6. Indicate if your country is strengthening the protection of important nesting and foraging habitats by declaring protected areas and regulating anthropogenic activities that adversely impact these habitats.	a) Protection of nesting habitats	**X**		PNM, REMACOPSE, RVSMCP, GALERA, PNM.	
	b) Protection of feeding habitats	**X**		PNM, PNG, Missing the rest of the areas	
7. Does your country promote exchange of technical capacity and collaborative research on hawksbill habitats among Parties as well as non Parties and other involved organizations in the Area of the Convention?		**X**		During the CPPS scientific committee, information is exchanged between Ecuador and Peru.	

(*) Specify actions implemented, name of the project or relevant document, location, objective(s), institutions responsible, contact, financial or other support (optional), results (both positive and negative) and duration.

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Resolution CIT-COP3-2006-R2: Reduction of the adverse impacts of fisheries on sea turtles

ACCORDING TO RESOLUTION CIT-COP3-2006-R2, REPORT WHETHER YOUR COUNTRY:

IS COMPLYING WITH THE FOLLOWING:	YES	NO	DESCRIBE ACTION (*)	DOES NOT APPLY
1.Adopted the "Guidelines to Reduce Sea Turtle Mortality induced by fisheries operations", of the United Nations Food and Agriculture Organization (FAO), including:				
A.Research and monitoring of adverse impact of fisheries on sea turtles				
• Collect information by fishery	X		SRP, EA, INP, WWF, NAZCA	
• Observer programs	X		EA, SRP, INP	
• Research on sea turtle/fishery interactions	X		EA,SRP, INP, FCD and PNG have systematically monitored green turtle nestings for the past 7 years in 4 key sites of the Galapagos archipelago.	
• Information on non-Party vessels		X		
• Cooperation with non-Party states to obtain information	X		IATTC generates fishing and bycatch information for member and non-member Parties.	
B. Mitigation measures for the following fisheries:				
i) Long-line		X		
ii) Gillnets		X		
iii) Trawling (e.g., 1. TEDs: specify legally approved TEDs, their dimensions, material, and target species for that fishery, 2. time-area closures: specify geographical area, time of closure and target species for that fishery, 3. tow times and/or 4. other measures)	X		Regulation on use of Turtle Devices (TEDs). Article 2. – Shrimp trawl boats must have turtle excluder devices permanently and correctly installed in their trawl nets and Article 3. – The TEDs used by shrimping trawl boats must be "SUPER SHOOTER" model rather than constructed out of steel, aluminum o fiberglass.	
iv) Other fishing gear (indicate which one(s))	X		Tuna seiners (IATTC)	
C.Training, education and dissemination				
• Training, education and dissemination activities	X		SRP, METIS, EA, INP	
D. Harmonization of policies and legislation				
• Modifications to instruments	X		SRP, Project for the Transformation and Adoption of Better Fishing Practices throughout the coast.	
E. Capacity building				
• Creation of a national sea turtle committee/network	X		CMS, CPPS	
F. Financing				
• Financial support obtained to implement guidelines in this resolution	X		State funding and SENESCYT.	
G. Socio-economic considerations				

• Support socio-economic activities that help mitigate adverse impacts of fisheries on sea turtles	X		Free circle hooks, strengthening women groups for the sale of recycled plastic. 150 jobs with MAE as forest rangers.	
H. Other aspects				
• Environmental impact studies for mariculture projects	X		By law, everything must have a study done.	
2. Sent information and documents on sea turtles created by your country to the Secretariat of the Convention? List documents.	X		Informational bulletin, Data, , INP, SRP TED usage manual	
3. Initiated activities that assist the Convention Secretariat in contacting non Party States through established mechanisms, especially in the area of the Convention, so that they may provide, in a cooperative spirit, the Secretariat with available data on incidental sea turtle catches in their fisheries?	X		Representatives of the new Environmental Ministry of Colombia have been contacted so they adhere to the Convention.	
4. Supports the Convention Secretariat, through established mechanisms, to commence discussions with regional fishery management organizations in order to develop Memorandum of Understandings.	X		Memorandum of Understanding between the IATTC and IAC, improvement criteria were emitted.	

(*) Specify actions implemented, name of the project or relevant document, location, objective(s), institutions responsible, contact, financial or other support (optional), results (both positive and negative) and duration.

Resolution CIT-COP4-2009-R5: Adaptation of sea turtle habitats to climate change

ACCORDING TO RESOLUTION CIT-COP4-2009-R5, REPORT WHETHER YOUR COUNTRY:

IS COMPLYING WITH THE FOLLOWING:	YES	NO	DESCRIBE ACTION (*)	DOES NOT APPLY
1 a) Have marine and coastal habitats on which sea turtles depend been included in national plans and programs for adaptation to climate change? Specify habitats and plans		X		
1 b) Are these plans for adaptation to climate change being implemented?		X		
2 a) Are corrective measures and measures on adaptation to climate change included within management plans and/or protection and conservation programs for sea turtles and their habitats?		X		
2 b) Are you evaluating the corrective measures and measures on adaptation to climate change included within management plans and/or protection and conservation programs for sea turtles and their habitats?		X		
3. Have you identified any organizations or pertinent expert groups as possible partners to work on the topic of adaptation by sea turtles to climate change? Please list.	X		Project climate change FCD, PNG, CI,CIIFEN, USFQ, NSCU, WWF; Municipality.	
4. Have you carried out research and monitoring to improve knowledge of the effects on, and vulnerability of sea turtles and their habitats, to			There have been no specific studies on climate change and their effects on sea turtles, but	

climate change?			there are reports by different institutions about the possible effects of these taking into account the results from previous events like El Niño and La Niña.	
5. Has your country hosted capacity building workshops for monitoring techniques and/or adaptation to climate change?	X		Workshop on the vulnerability of climate change, Galápagos, 2009	
6. Has your country implemented mitigation measures for non-climatic threats as a way to improve the resilience of populations to the impacts of climate change? Specify which ones.			DOES NOT APPLY	

(*) Specify actions implemented, name of the project or relevant document, location, objective(s), institutions responsible, contact, financial or other support (optional), results (both positive and negative) and duration.

c.2 National and International Mandates

List actions that are being carried out to comply with national and international mandates (Ex: inspections, confiscations, sanctions, etc.)

Sea turtles are a highly migratory species, reason for which they are considered a "shared resource" in international politics. For this reason, regional and global actions have been considered, globally actions are within:
The Convention on International Trade in Endangered Species of Wild Fauna and Flora, the Interamerican Convention for the Protection and Conservation of Sea Turtles, Appendix 1 of Convention on the Conservation of Migratory Species of Wild Animals and Interamerican Tropical Tuna Commission. On the other hand, at a regional level, is the "Plan of Action for the Protection of the Marine Ecosystem and Coastal Areas of the Southeastern Pacific".

Among national regulations, the Constitution of the Republic of Ecuador was approved in 2008 in which are included several articles that support the protection and conservation of sea turtles and other species, even though they are not mentioned specifically. Some of these are: Article 14.- details as public interest, environmental preservation, ecosystem conservation, biodiversity and integrity of the genetic heritage of the country, prevention of environmental damage y the recovery of deteriorated natural spaces, and Article 73. –states that the state will apply precautionary approach and restrictive measures to activities that may lead to the extinction of species, the destruction of ecosystems or the permanent altering of natural cycles. Along with this, the constitution also recognizes environmental principals that guarantee a sustainable development model, respectful of biodiversity and cultural diversity. (Herrera.,M, Coello.,D)

These measures are possible through inspections and regulations carried out by governmental institutions, like the project to control wildlife trafficking executed by the

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Environmental Ministry along with the Environmental Protection Unit (UPMA), and the Action Plan for the conservation and management of sea turtles that was presented by the Ministry of Environment, Agriculture and Fishing in 2010. (Herrera, M, Coello.,D) Like these, there also exists the codification of the Biodiversity Law, and Wilderness, Wildlife, and Forest Conservation Law, which determines in article 73 that the flora and fauna are under state domain, which specifies that it is the duty of the Environmental Ministry to protect and conserve them, through certain actions:

- Control hunting, harvesting, apprehension, transport and trafficking of animals and other elements of wildlife.
- Prevent and control soil and water contamination as well as environmental degradation.
- Protect and prevent the elimination of endangered wildlife species.
- Comply and enforce national and international agreements for the conservation of wildlife and the environment.

Inspections have been performed in points of sale of Porto Viejo and Manta (malls, craft stores, etc.) of illegal products (artisanal products, accessories, meat, eggs, skin, shell, etc.). Nothing has been found to date. However, crafts and jewelry have been found in malls in Quito as well as Guayaquil, mostly from hawksbills.

d._ Application[submission] of exceptions established in the Convention

Describe in detail the exceptions allowed in accordance with article IV, item 3(a,b,d) and Annex IV of the text of the Convention, in accordance to the procedure established by the COP (Doc. CIT-COP5-2011-R2). Attach management program.

Part III (Research information)

a._ Threats

Describe threats ***(Coastal development, incidental capture, direct use, contamination and pathogens, and climate change)*** *by species, with information on the area and activities taken to control them in the following table.* Lo = *Lepidochelys olivacea*; Lk = *Lepidochelys kempii*; Dc = *Dermochelys coriacea*; Ei = *Eretmochelys imbricata*; Cc = *Caretta caretta*; Cm = *Chelonia mydas*.

Species	Threat(s)	Actions
Lo	*Waste on the beach (pacoche wildlife refuge), Fisheries interactions*	*Beach cleanups, local support (schools) and small entrepreneurs project by the Department of Hygiene of the Manta municipality. Collaboration of the*

		Environmental Ministry.
	Waste in costal areas (Puerto Lopez)	*None*
	Cars on the beach (Pacoche wildlife refuge), Fisheries interactions, waste on beaches	*Sign installation, control of entry, increase in personnel to control entrance to the beach*
Lk		
Dc		
Ei	*Beach erosion (la playita, Machalilla)*	*None at the moment, planning to build a hatchery*
	Waste in costal areas (Puerto Lopez)	*None*
Cm	*Quinta playa, Bahía Barahona, Las bachas, Human threats, boat collisions, fisheries interactions, depredation by domestic or introduced animals, habitat alteration*	*Project to monitor green turtles in 4 key areas in the Galapagos.*
Cc		

b._ Research

Describe scientific research that is being carried out in the country relating to sea turtle population assessments including tagging, migration, and genetic studies, as well as those relating to conservation issues including habitat monitoring, fisheries interactions, disease, etc. Provide a list of references for the information used in this report and note how to obtain them when needed.

A baseline study for *C. mydas* in the archipelago has demonstrated that they are exposed to anthropogenic dangers like boat collisions or fisheries interactions and waste on the beaches. (Zarate, 2009).

Monitoring of nesting green turtles *Chelonia mydas* in Galápagos, summary of results from the 2010-2011 season

Macarena Parra D, Lady Márquez R., Volker Koch
Charles Darwin Foundation

1. Project Background

In the Galapagos archipelago, 4 species of sea turtles have been registered, *Lepidochelys olivacea, Dermochelys coriacea, Eretmochelys imbricata* and *Chelonia mydas* (Hurtado 1984; Green, Ortiz-Crespo 1981; Pritchard 1971) of which only this last one nests in the beaches of the archipelago (Pritchard, 1975) and it is also the most abundant (Zárate and Carrión, 2007).
The green turtle, *Chelonia mydas*, has been a species of global concern for many decades, and the Galapagos is the second most important nesting place for the green turtle in the Eastern

Pacific. A baseline study for *C. mydas* in the archipelago demonstrates that boat collisions and fisheries interactions are the most important threats on these islands (Zarate, 2009).
Since 2001/2002, the Charles Darwin Foundation has systematically monitored green turtle nesting for 7 years in 4 key sites of the archipelago. Since the 2009/10 season, the program has been executed bi-institutionally between the Charles Darwin Foundation and the Galapagos National Park in 3 key nesting sites: Quinta Playa, which is located on the Southwestern side of Isabela Island (1º 0´19,56"S, 91º4´49,36"W), and is approximately 2 km long. The average number of nests and females registered on this beach during the past two seasons is 2,878 and 1,098 respectively. Bahía Barahona is also situated on the southwestern side of Isabela Island (0º 59´20,77"S, 91º 01´52,07"W) and is 1.6 Km. long and the average number of nests and nesting females for the last two season was 2,082 nests and 866 nesting females. Las Bachas is located north of Santa Cruz Island (0º 29´39,91"S, 90º 20´32,19"W) and is divided into 2 small islands approximately 1 km each, separated by a rocky area 150 long. During the last season monitored (2009/2010), 429 nests were recorded and 514 females were tagged (figure 1). The three sites under zoning category 2.3, meaning, it is an area of "Conservation and Extractive and Non-Extractive uses." This means that in Isabela, artisanal fishing is allowed at the sites and their surrounding areas and Las Bachas is used for intensive tourism (Heylings et al, 2002). So, despite protection, many threats continue being important like boat traffic and fishing activities in important foraging, resting and nesting sites, as well as introduced animals on nesting beaches that feed on the eggs and hatchlings. The monitoring of key sites has been carried out with the objective of establishing long term trends and abundance of females and nests laid each season.

2. Preliminary results:

Abundance of females and nests: During the 2009/2010 season, a total of 3,149 nesting turtles were recorded at the 3 sites monitored (Quinta Playa, Bahía Barahona and Santa Cruz), of which 2,784 were turtles tagged during the season and 365 recaptured females that were tagged in previous seasons. Likewise, a total of 6,261 nests were laid during the season at all 3 sites and the average hatching success for the season was 79.8% (table 1).
For the 2010/2011 season, a total of 1,939 nesting turtles were recorded on 2 beaches of Isabela Island, with 1,660 females tagged during the season and 270 recaptured from previous seasons, and a total of 4,090 nests were recorded throughout the season with a hatching success of 86.2%. It is important to note that the season was shorter since it is missing December and part of January.

Table 1: Number of nests, nesting females tagged during the season and recaptured from previous seasons, monitoring days by site and total number of nests laid by study site, during the 2009/2010 and 2010/2011 seasons.

Season	2009 - 2010			2010 - 2011	
Beach	Quinta Playa	Bahía Barahona	Las Bachas	Quinta Playa	Bahía Barahona
Days monitored	177	174	119	124	116
Nº of nests	3418	2414	429	2339	1751
Nº of females tagged	1248	1022	514	949	711
Nº remigrants	200	108	57	134	138

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Total nesting females	1448	1130	571	1083	849
% hatching success	88.4	78.3	72.7	87.5	84.9
% emergence	88.2	77.	71.7	87.2	84.2

Threats: Threats during the reproductive season were identified by analyzing the strandings found at the study sites, observing injuries and wounds on the bodies of nesting females and identifying predators to eggs during developmental stage and emerging hatchlings.

a) Mortality: First of all, it's important to mention that monitoring efforts in terms of number of days as well as sites during the 2010/2011 season were fewer than for the 2009/2010 season (table 1), so the number of strandings recorded between the two seasons cannot be compared. The 2009/2010 season was monitored for a total of 117 days, while during the 2010/2011 season, only Quinta Playa was monitored for beach strandings for 3 days in December, from December 18 to 20 of 2010, and intensive monitoring began afterwards, lasting 124 days from January 31, 2011 to June 4, 2011.
During the 2009/2010 season a total of 53 strandings were recorded, of which 44 were found in Quinta Playa, 8 in Bahía Barahona and 1 in Las Bachas. 53% were attributed to mortality due to anthropogenic impacts (fig. 1). In the 2010/2011 nesting season, 11 strandings were recorded, all in Quinta Playa, of which 7 were turtles found in the lagoon behind the beach, 3 were in an advanced state of decomposition so it was impossible to determine the cause of death and 1 was a male with serious injuries to the shell caused by impact with a boat.

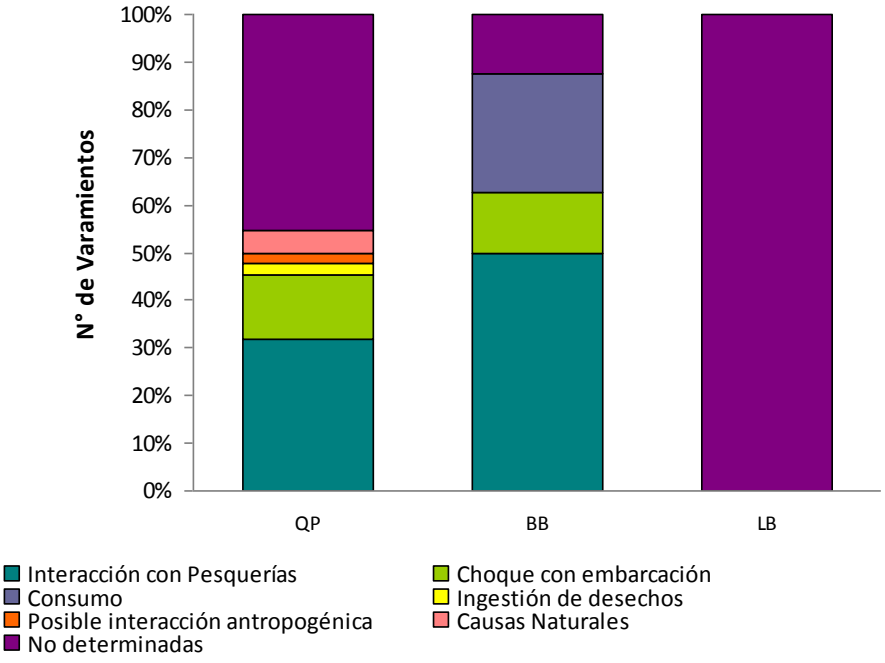

Figure 1. QP= Quinta Playa (n=44); BB= Bahía Barahona (n=8); LB= Las Bachas (n=1) (2009/2010 season).

b) Injuries to nesting females: 2,866 and 1,730 turtles were examined during the 2009/2010 and 2010/2011 seasons respectively. The detection of injuries on the females was carried out though an examination of the turtles' shell, body, head and flippers. The wounds were classified in the following manner: 1) Serious injury to the shell when deep cuts, fractures or holes were found caused by impacts with vessels; 2) Serious injury to the flippers when deep cuts, total or partial mutilation of a flipper and paralysis or atrophy of the flippers which in the majority of the cases hampered their ability to dig a normal and successful nest; 3) Light injury to the shell or flippers when cuts or holes had formed a scar or were in the process of scarring that did not compromise the animal's life or the nesting process and 4) wounds that were signs of shark attacks when mutilations to the extremities were found in the form of tears, missing sections of the shell in the shape of bites, etc. . Table 2 shows the details for each case by category for both seasons:

Table 2. Number of turtles that presented injuries during the 2009/2010 and 2010/2011 seasons

Monitoring season	2009/2010	2010/2011
Number of turtles examined	2866	1739
Number of cases by type of injury		
Serious injury to shell	37	66
Serious injury to flippers	12	8
Light injury to flippers	15	19
Signs of shark attack	18	7
Total cases	157	202

c) Introduced animals: During both seasons monitored, the presence of wild pigs and cats on the beach was observed. In the 2009 season, the presence of cats was detected on three beaches (Quinta Playa, Bahía Barahona y Las Bachas),which were identified by the animal's tracks near the nests when they were searching for eggs in the case of the pigs and near the emerging hatchlings for the cats. 10 cat tracks were observed in Quinta Plata, 11 tracks in Bahía Barahona and 13 in Las Bachas. All of them over or around nests that showed evidence that turtles had hatched. One cat was registered hunting hatchlings in Quinta Playa and 2 were registered in Las Bachas. There was also one nest found whose eggs had been preyed upon by a wild pig. During the 2010/2011 season, only 11 nests were recorded to have been preyed upon by wild pigs in Bahía Barahona and 13 nests where cats had depredated emerging hatchlings

d) Natural Disasters: On March 11, 2011, as a result of a large earthquake in Japan, the Galapagos coasts were touched by tsunami waves that coincided with a high tide of 1.7m reaching a wave height of 0.8m in Baltra and 1.8m in Santa Cruz. At each site, the combination of the ocean floor's topography and coastal morphology either As for the sea turtle nesting sites, some nests were lost at Quinta Playa and Bahía Barahona due to the impact of the initial tsunami that reached the nesting area and possible changes in the beach's incline that allowed more extensive flooding during the following waves. In Quinta Playa, 11 nests were lost due to the initial tsunami and 28 nests were lost during the subsequent waves, and in Bahía Barahona there were no nests lost on the day of the tsunami, but 62 nests were lost with the waves that followed. Together with the direct loss of nests by beach erosion, a decrease in hatching success in some nests was seen (fig.2).

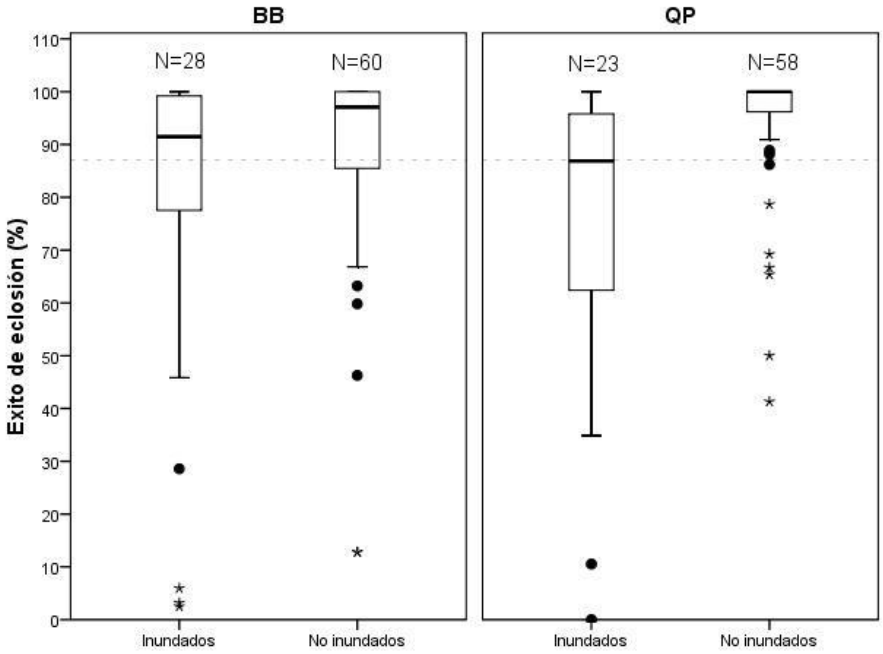

Figure 2.Percentage of hatching success of nests affected by flooding (product of the tsunami and waves) at both monitoring sites QP= Quinta Playa; BB =Bahía Barahona ,the dotted line represents the average hatching success calculated for the season.

c._ Other activities

Include information on: environmental education activities, programs to establish and manage protected areas, and cooperative activities with other Party countries.

The Metis Foundation, with support from Conservation International and the participation of important public and private institutions that specialize on the topic, prepared a communications strategy that seeks to protect this animal. The objective of the program is to reach the authorities and the people who live near the most important nesting sites, local stations and media with national coverage.

The Charles Darwin Foundation and Galapagos National Park's green turtle monitoring project is proposing the establishment of environmental education programs focused on the community with the purpose of creating awareness on the conservation of the Galapagos ecosystem and the species that live in it. (Parra.,Márquez R.,Koch, 2011)

On the other hand, the establishment of expansion of the Machalilla Marine Reserve has identified key sites for the creation of new protected areas, flint hills and other sites, as well as including environmental education, management programs and the establishment of reserves and cooperation activities with other Party countries.

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The National Fisheries Institute with the support of Conservation International has implemented a monitoring program for nesting activities on the beaches near Cabo San Lorenzo of the Pacoche Reserve. As a result, national nesting and stranding maps have been created, workshops have been carried out with the local community, fishermen as well local representatives, in order to train them on how to use the navigation system, which includes the subject of the importance of protecting and identifying sea turtles and their role in the pelagic ecosystem. This motivated the tourism sector to seek alternatives to protect nesting sites with signs prohibiting vehicles on the beach, the installation of camps, building bonfires and removing sand.

Other projects are known to be carried out by different institutions like the Machalilla National Park project led by Equilibrio Azul along with the Environmental Ministry and Conservation International, in which monitoring activities are performed on several beaches in the park like: la playita, Isla de la plata, Salando, Los frailes and tortuguita, as well as in 2009, satellite transmitters were placed on 3 sea turtles that were released in Valdivia.

On the other hand, it must be mentioned that the program to reduce incidental capture of sea turtles on the longline fleet was born as an initiative of the government and the Ecuadorian industry towards the end of 2003. Nowadays, it's implemented by SRP, EPESPO and WWF. Working under a Memorandum of Understanding that the three institutions signed in May 2009, this program is a good example of interinstitutional coordination and cooperation. In the future, this program will most likely come under full control of the Ecuadorian fishing authorities.

There is also a very interesting project being led by the fishing authorities. It is related to the development of a technological innovation that will reduce the entanglements of sea turtles in header lines of longlines. On our longline fleet, the problem with entanglements is greater than the problem with hooks. (Guerrero P. 2011)

HOOK EXCHANGE BY PORT OR FISHING COVES 2010	
PORT OR COVE	**Nº OF CIRCLE HOOKS EXCHANGED**
Manta	**8273**
Santa Marianita	**3439**
Esmeraldas	**1281**
Muisne	**300**
San Mateo	**690**
Jaramijo	**170**
TOTAL	**14153**

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EFFORTS OBSERVED IN 2010	
Vessels transformed	**48**
Training workshops with fishermen	**17**
Dehookers distributed	**212**
Experimental trips	**47**
Nº Longline sets observed	**381**
Nº Hooks observed	**160489**
Nº Sea Turtles hooked	**36**
Nº Sea Turtles entangled	**32**
Nº Turtles released alive	**68**
Nº Dead turtles	**0**

On the other hand, there is the NAZCA marine research institute that carries out a sea turtle research and conservation project in the Galera San Francisco Marine Reserve and among its objectives is the use of local and scientific knowledge to identify nesting sites and foraging areas among the different species of sea turtles, and to incorporate the Marine Reserve's management and zoning plan and involve the local communities in the research and conservation of these species.

Part IV: Annexes

Table 1: Species Present

Place an X in the box when the species listed is present in the oceanographic basins of your country as established in Article III of the text of the Convention. Lo = Lepidochelys olivacea; Lk = Lepidochelys kempii; Dc = Dermochelys coriacea; Ei = Eretmochelys imbricata; Cm = Chelonia mydas; Cc = Caretta caretta.

Species	Pacific Ocean	Atlantic Ocean	Caribbean Sea
Lo			
Lk			
Dc			
Ei			
Cm			
Cc			

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Table 2: Important nesting sites for sea turtle conservation

a. *This table is intended to report information on the priority nesting beaches (for example, sites with greater abundance, endemism, genetic importance, others) for each species. For beaches that have multiple species nesting, enter that beach under the list for the primary nesting species. When entering information on nesting beaches, information is to be entered for each species independently. Indicate the names of nesting sites and the nesting season months for each site.*
b. *Geographic location: Specify latitude and longitude in degrees, minutes and seconds - provide one or two points of reference for nesting sites (if available).*
c. *Extension: Provide the total length (in Kilometers) of the nesting beach.*
d. *Declared protection area: Indicate if the area is declared as some type of protected area.*
e. *Protection measures: Indicate if any type of protection measures are in place at the nesting site (For example, turtle safe lights).*
f. *Annual nesting abundance: Where possible, provide information on the total number of females and/or nests deposited at the nesting beach. If a specific value is not available, please provide a range for annual number of nesting females or nests deposited. If data are unavailable, enter 'unknown' or 'unavailable'. The ranges for annual number of females are: 0-10, 11-100, 101-500, 501-1000, 1001-5000, 5001-10000, 10001-50000, 50001-100000, >100000. The ranges for annual number of nests are: 0-10, 11-100, 101-500, 501-1000, 1001-5000, 5001-10000, 10001-100000, 100001-500000, >500000. On a separate sheet, provide a brief description/justification on why each site that was mentioned is considered important (sites with greater abundance, endemism, genetic, others). Include historical information (graphic and/or tables) showing the population status of each species present at the site.*
g. *Information from tagging program: Indicate if there have been any tagging activities at the nesting beach. This includes flipper tagging, passive integrated transponder (PIT) tagging, and satellite telemetry programs. If possible, on a separate sheet or as attached reference provide greater detail about the type of tagging efforts conducted. Also provide satellite telemetry maps or flipper tag recovery information if available.*
h. *Tissue sampling: Indicate if there has been tissue sampling conducted at this site. This includes skin, blood, and other body tissues. On a separate sheet, or as attached references, describe these tissue sampling programs in greater detail. For example, were samples collected for genetic, contaminant, and/or stable isotope studies?*

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Spp	Name of Priority Nesting Site (Regular nesting)	Season	Geographic Location (Lat/Long) in Degrees, Minutes, and Seconds — Beginning	Ending	Extension (km)	Declared Protection Area	Protection Measures	Annual Nesting Abundance — Females	Annual Nesting Abundance — Clutches	Tagging Program	Tissue Sampling
			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
Lo			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
Lk			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
Dc			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
Ei			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
Cm			° ' " N ° ' " W	to ° ' " N ° ' " W							
			° ' " N ° ' " W	to ° ' " N ° ' " W							
Cc			° ' " N ° ' " W	to ° ' " N ° ' " W							

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Table 3: Important in-water sites for sea turtle conservation

a. *This table is intended to contain information for the priority in-water sites for each species. For marine habitats that have multiple species present, enter the specific site under the heading for the priority species at that site. Indicate whether or not there is in water occurrence and/or foraging sites for that species.*
b. *Geographic location: Describe the in-water site in general, providing the name of the site and points of reference at sea, when available. If possible add the geographic location in Lat/Long coordinates.*
c. *Declared protection area: Indicate if the area is declared as some type of protected area.*
d. *Information from tagging program: Indicate if there have been any tagging activities at the in-water site. This includes flipper tagging, passive integrated transponder (PIT) tagging, and satellite telemetry programs. If possible, on a separate sheet, or as attached reference provide greater detail about the type of tagging efforts conducted. Also provide satellite telemetry maps or flipper tag recovery information if available.*
e. *Tissue sampling: Indicate if there has been tissue sampling conducted at this site. This includes skin, blood, and other body tissues. On a separate sheet, or as attached references describe these tissue sampling programs in greater detail. For example, were samples collected for genetic, contaminant, and/or stable isotope studies?*

Species		Description of geographic location	Declared Protection Area	Tagging Program	Tissue Sampling
Lo	In water Occurrence				
	Foraging Sites				
Lk	In water Occurrence				
	Foraging Sites				
Dc	In water Occurrence				
	Foraging Sites				
Ei	In water Occurrence				
	Foraging Sites				
Cm	In water Occurrence				
	Foraging Sites				
Cc	In water Occurrence				
	Foraging Sites				