

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES  
OF WILD FAUNA AND FLORA



Fifteenth meeting of the Conference of the Parties  
Doha (Qatar), 13-25 March 2010

Interpretation and implementation of the Convention

Species trade and conservation

HAWKSBILL TURTLE

The attached report has been submitted by the Inter-American Convention for the protection and conservation of sea turtles (IAC) in compliance with Decision 14.86.\*

COMMENTS FROM THE SECRETARIAT

- A. The Secretariat welcomes the executive summary report submitted by IAC on the outcome of the regional workshop about hawksbill turtle in the wider Caribbean and western Atlantic region.
- B. The Secretariat notes that the workshop concluded that the regional trade in hawksbill products was not considered to have a negative effect on the survival of the species by itself, but it was regarded as an important motivation for directed offtake of hawksbill turtles. It was indicated in the report that monitoring of harvest and trade should be improved in the wider Caribbean, taking into consideration that widespread illegal domestic consumption and trade still exist in the region.
- C. The Secretariat welcomes the two action items that were recommended at the workshop and supports the initiative to continue collaboration with IAC and Convention for the Protection and Development of the Marine Environment of the Wider Caribbean region (Cartagena Convention).
- D. The Secretariat recommends that the Conference adopt the following draft decision:

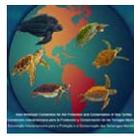
DRAFT DECISION OF THE CONFERENCE OF THE PARTIES

***Directed to the Secretariat***

- 15.XX The Secretariat shall collaborate with the Inter-American Convention for the Protection and Conservation of Sea Turtles (IAC) and the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean region (Cartagena Convention) and its Protocol Concerning Specially Protected Areas and Wildlife (SPAW Protocol) to develop a joint proposal for the Global Environment Facility (GEF), considering the outcome of the regional workshop on the hawksbill turtle in the wider Caribbean and western Atlantic region.

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\* *The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat or the United Nations Environment Programme concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.*



## EXECUTIVE SUMMARY REPORT

### REGIONAL WORKSHOP FOR THE HAWKSBILL TURTLE IN THE WIDER CARIBBEAN AND WESTERN ATLANTIC

### DEVELOPING A REGIONAL COOPERATION FRAMEWORK FOR THE CONSERVATION OF THE HAWKSBILL TURTLE *Eretmochelys imbricata* IN THE WIDER CARIBBEAN AND WESTERN ATLANTIC

PUERTO MORELOS, QUINTANA ROO, MEXICO

September 23 – 25, 2009

This document is in fulfillment of the funding requirements for the Regional Workshop for the Hawksbill Turtle in the Wider Caribbean and Western Atlantic. It contains a summary of the discussions and results of the working groups and plenary sessions.

*Steering Committee:*

Mexico:	Laura Sarti (DEPC-CONANP), Dámaso Luna (SRE)
USA:	Earl Possardt (USFWS)
Peru:	Jorge Zuzunaga
Netherlands Antilles:	Paul Hoetjes (MINA- VSO)
IAC:	Verónica Cáceres
SPAW Protocol:	Alessandra Vanzella-Khoury
CITES Secretariat:	Robert Boljesic

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IAC:	Belinda Dick
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CONANP:	Christiane Aguilar Girón
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**October, 2009**

The Regional Workshop for the Hawksbill Turtle in the Wider Caribbean and Western Atlantic was convened from September 23<sup>rd</sup> to 25<sup>th</sup>, 2009 in Puerto Morelos, Quintana Roo, Mexico.

The workshop objectives were to evaluate the current status of the hawksbill turtles in the Wider Caribbean and Western Atlantic, taking special note of the concerns about the Mexican nesting population as a sign of what may be happening to hawksbill populations in the region, as well as address the threats to the population integrity and the habitat in the area (including capture, overharvesting and illegal trade); to prepare a draft regional conservation strategy to identify gaps and priorities; and to encourage regional collaboration among governments.

## Background

The hawksbill turtle is listed as Critically Endangered in International Union for Conservation of Nature - IUCN's Red List, which reflects that the world's population has been reduced at least in 80% in its last three generations. The Mexican Atlantic population was considered the largest in that ocean basin; to the degree that prior to 2000 two out of every five nests recorded in the Wider Caribbean were laid by Mexican hawksbills. After that year, contrasting with the rest of the region, a drastic decline was recorded that reached 37% of the nesting numbers observed in 1999. Several causes have been suggested, but none have been proven.

In November of 2004 concerns were raised about the decline in the nesting numbers of the hawksbill in Mexico during the XII Regional Workshop on Sea Turtle Conservation Programs in the Yucatan Peninsula. A group of specialists and environmental authorities gathered in March of 2005, in order to analyze the nesting trends of the species in the region. The results were published in the Proceedings of the Workshop heading to COP3: diagnosis of the status of the hawksbill turtle (*Eretmochelys imbricata*) in the Yucatan Peninsula and strategic actions. In September of 2007 Mexican specialists met for the Preliminary Meeting for the Diagnosis of the Hawksbill Turtle in the Gulf of Mexico and Caribbean, where they integrated historical data of hawksbill nesting in the region and set prioritized problems and threats. A follow-up yielded a document entitled Results of the Working Group Meeting for the Hawksbill Turtle in the Mexican Atlantic, which compiled and updated on an interdisciplinary context large part of the information about the species and its habitat in Mexico.

During the Third Conference of Parties of the IAC, resolution COP3/2006/R1 Conservation of the Hawksbill Turtle <http://www.iacseaturtle.org/English/download/COP3-2006-R1%20Hawksbill%20Res.pdf> was adopted, which exhorts the Parties to promote synergies between the Inter-American Convention for the protection and conservation of sea turtles (IAC) and the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), the SPAW Protocol, Convention on Migratory Species (CMS), the Western Hemisphere Migratory Species Initiative (WHMSI), Food and Agriculture Organization (FAO), other pertinent treaties and international organizations, and regional fisheries bodies in order to facilitate regional dialogue on management and conservation of the hawksbill turtle and its habitats. It also supports the organization of a workshop with recognized experts to evaluate the current condition of hawksbill populations in the Greater Caribbean and Western Atlantic, and present the best available methods of research and conservation for the species in its marine habitats.

At its 14<sup>th</sup> meeting, the Conference of Parties to CITES (CoP14, The Hague, 2007) adopted the Decision 14.86, which instructs the CITES Secretariat to provide support to, and collaborate with, the IAC and the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean region (Cartagena Convention) and its Protocol Concerning Specially Protected Areas and Wildlife (SPAW Protocol), in raising funds to conduct, before the 15th meeting of the Conference of the Parties, a meeting about hawksbill turtles for the Wider Caribbean region and Western Atlantic with the purpose of promoting collaboration, planning and information sharing within the region, and to cooperate with other organizations and multilateral agreements that have a mandate concerning the conservation, management and sustainable use of this species in the region. The Decision requests these organizations to include issues related to illegal trade in hawksbill turtles in the regional meeting's agenda and to assure the participation of the CITES Secretariat in the regional meeting as an observer, as well as the participation of CITES Parties of the Wider Caribbean region. The Decision also request these organizations to provide the report including the results of the regional meeting, as well as, if available, information about the progress made regarding the implementation of the national management plans of the Parties of the wider Caribbean region and to submit this report at the 15th meeting of the Conference of the Parties.

In addition, a Memorandum of Cooperation was signed between the SPAW Protocol and the IAC, which requested both Secretariats to collaborate in actions in order to cope with the decline in the abundance of the hawksbill turtle in Mexico.

The Secretariats of the IAC, SPAW, CITES, the Government of Mexico on behalf of the Secretary of the Environment and Natural Resources and the World Wildlife Fund (WWF) provided the necessary finances for the meeting.

### Workshop Development

The meeting was attended by 57 participants, including representatives from 21 range States and Territories, the *Pro Tempore* Secretary and members of the Inter-American Convention for the Protection and Conservation of Sea Turtles (IAC), representatives of CITES parties, representatives of the Specially Protected Areas and Wildlife (SPAW) Protocol of the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean Region, 12 invited experts and five observers from non-governmental organizations (see Annex I: List of Participants).

The workshop was divided in two sections:

- 1) **Diagnosis of the hawksbill turtle in the Wider Caribbean and Western Atlantic.**- Experts in hawksbill biology and conservation in the region gave the following presentations (Annex 2: Workshop Agenda)
  
- 2) **Working Groups Session.**-

One group performed a Viability analysis of hawksbill turtle populations in the Wider Caribbean Region and Western Atlantic (WCR&WA), in which the participants established which key attributes, including ecological processes, should be maintained to ensure the integrity and health (viability) of the hawksbill turtle in the long term. They used three categories for evaluation of the ecological integrity:

1. **Size.**- Abundance of the species
2. **Condition.**- Composition, structure and biotic interactions
3. **Landscape context.**- Ecological processes on a landscape scale and connectivity (migration)

This group ranked these attributes as *very good, good, fair or poor*.

The rest of the participants were split in 5 working groups, based on a general assessment of global threats faced by the hawksbill turtle in the region and agreed in Plenary discussion:

- Group 1: Directed take: targeted fisheries, opportunistic fisheries
- Group 2: Gillnet bycatch and entanglement in lost gear
- Group 3: Habitat deterioration: infrastructure, lights, vegetation removal
- Group 4: Habitat deterioration: pollution and non-natural predation
- Group 5: Threats related to inadequate regional policies and climate change

For each threat the mortality and reduced fitness were evaluated for each stage of the hawksbill turtle life cycle (when they applied). In this context, "fitness" was defined as the probability of individuals from each lifecycle stage to reach the next stage.

Each working group conducted a more detailed analysis of threats for the hawksbill turtle in the region, using the Conservation Action Planning (CAP) methodology, which takes documental information, statistics and anecdotal knowledge of groups and organizes it in a systematic and orderly way, in order to develop strategies and actions for the conservation of ecosystems or populations of interest.

The groups identified and ranked stresses and sources of stress for the species, according to their *severity* (the level of damage that can be expected for the subject of conservation over the next 10 years under the current circumstances) and *scope* (the geographic range of pressure over the conservation subject that can be expected over the next 10 years under current circumstances). For the top ranked threats, each group performed an analysis of situation, in which for each threat the participants identified direct actors, actions by which the pressure is produced and the motivations of actors.

## Results

According to the available information on the hawksbill turtle populations in the WCR&WA, the viability analysis yielded the following evaluation of the ecological integrity for the species:

Conservation Targets		Landscape Context	Condition	Size	Viability Rank
Current Rating					
1	Hawksbill turtle in the WCR&WA	Fair	Poor	Fair	<b>Fair</b>
<b>Project Biodiversity Health Rank</b>					<b>Fair</b>

During the discussion of viability, the group commented that there are gaps in knowledge that is important for evaluation of the ecological integrity of hawksbill populations and standardized monitoring protocols must be developed for key parameters to monitor population trends and status.

The results of the ranking for each threat on each life cycle stage causing mortality or reduced fitness are shown in the table below. According to this analysis, the participants regarded the mortality of adult turtles at sea and the reduced “fitness” of nesting females as key factors for the survival of the populations.

Stresses		Stress Rank
1	Mortality of eggs	Medium
2	Mortality of hatchlings	Medium
3	Mortality of juveniles	Medium
4	Mortality of adults at sea	<b>Very High</b>
5	Mortality of nesting females	<b>High</b>
6	Reduced “fitness” of eggs	Medium
7	Reduced “fitness” of hatchlings	Low
8	Reduced “fitness” of juveniles	Medium
9	Reduced “fitness” of adults at sea	Medium
10	Reduced “fitness” of nesting females	<b>Very High</b>

During the threat analysis based on simple analysis of the CAP tool, the participants identified 40 sources of threat, with 10 priority ones:

THREATS	SOURCE OF THREAT	RANKING
Directed take: targeted fisheries, opportunistic fisheries ( <i>Group 1</i> )	(1) Turtle fishing	Medium
	(2) Other fisheries (opportunistic and combined take)	Medium
Gillnet bycatch and entanglement in lost gear	(3) Gill Net	<b>High</b>

(Group 2)	(4) Lost fishing gear	High
Habitat deterioration: infrastructure, lights, vegetation removal (Group 3)	(5) Beach Infrastructure	High
	(6) Lights	Medium
Habitat deterioration: pollution and non-natural predation (Group 4)	(7) Non-native mammals (raccoons, dogs, cats, mongoose, pigs)	High
	(8) Oil spills and response	High
Threats related to inadequate regional policies and climate change (Group 5)	(9) Lack of community collaboration incentives for conservation	Very High
	(10) Change in open ocean conditions (temperature, currents, etc)	Very High

Although there was not complete consensus on the prioritization process, these top sources of threat were analyzed per group to produce a list of 15 objectives for a regional conservation program for the hawksbill turtle, which includes more than 32 strategies and more than 96 action steps intended to enhance viability of populations and minimizing the effects of threats.

Two highlights of the group discussions were the regional policies regarding the conservation of the hawksbill and the trade of the hawksbill products in the region.

Different hawksbill turtle management policies in the WCR&WA should be reviewed to assess their conservation impacts and relative benefits for hawksbill turtle populations. Emphasis was made on the importance of the harmonization of conservation actions for the hawksbill turtle in the region.

Regional trade on hawksbill products and subproducts was not detected as a threat by itself during the analysis, but it was regarded as one of the important motivation for directed take (both intentional and opportunistic) which is among the top 10 sources of threat detected. It was discussed within Group 1 that the elimination of trade as a motivation would cause a significant reduction of the directed and opportunistic fisheries of the species.

During general discussion it was noted that trade is an important issue to be addressed in the region. It was mentioned that monitoring of harvest and trade (legal and illegal, domestic and international) and their impacts on hawksbill populations should be improved in the Wider Caribbean Region, taking into consideration that widespread illegal domestic consumption and trade still exists in the region. The representative from Nicaragua commented that illegal trade is still a problem in the Caribbean of Nicaragua since there is no lack of laws and regulations but rather lack of monitoring control and surveillance of trade activities, and that this is an ongoing practice that it is necessary to address as soon as possible. The participants from Dominican Republic recognized that the recent regulations for trade in the country were due to the political will of the present environment authorities who decided to put a stop on this trade and to take action.

## Recommendations

Two actions items were recommended in plenary discussion:

- To structure a joint IAC-CITES-SPAW regional proposal for Global Environmental Fund (GEF) 5 for June 2010, considering some of the actions identified during this workshop, with emphasis on habitat protection and with climate change as transversal line.
- SPAW Secretariat can foster a proposal to Integrated Coastal Zone Management (ICZM).

The objectives, strategies, actions and indicators obtained during the workshop will be further refined based on subsequent review by the participants and consultation within the steering committee. The final document will be presented to the COPs of the International Conventions involved in the organization of the workshop (IAC, CITES, SPAW), and will serve to guide the regional conservation actions for the recovery of the Caribbean hawksbill turtle.

**Acknowledgements**

The Steering Committee would like to thank CONANP's *Dirección Regional Península de Yucatán y Caribe Mexicano*, specially the Director Alfredo Arellano for the logistic support to the workshop. We are sincerely grateful to all the participants for their passion, commitment and patience to bring this workshop to a fruitful port, on behalf of the recovery of the hawksbill turtle.

**ANNEX 1: WORKSHOP AGENDA**

Tuesday, **September 22**

16:00	Registration of Participants – Salon Mallorca
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Wednesday, **September 23**

<b>Opening Ceremony – Salón Mallorca</b>		
09:00 – 09:20	Welcoming words	Gregorio Sánchez Martínez Municipality President
	Regional Context of the Workshop. Meeting objectives, purpose and scope	Verónica Cáceres – IAC
	Opening Message	Alfredo Arellano – CONANP
<b>PRESIDIUM</b>		
Verónica Cáceres.	Secretaria <i>Pro Tempore</i> IAC	
Robert Boljesic.	Senior Scientific Officer CITES	
Alessandra Vanzella.	Secretary SPAW Protocol	
Gregorio Sánchez.	Municipality President H. Aytto. Benito Juárez. Quintana Roo	
Javier Díaz Carvajal	Secretary of Urban Development and Environment, Government Q. Roo	
Alfredo Arellano	Regional Director for Yucatán Peninsula and Mexican Caribbean. CONANP	
Laura Sarti	Technical Coordinator of the National Sea Turtle Conservation Program. Mexico CONANP.	
Gabriela Lima Laurent.	Delegate of SEMARNAT in Quintana Roo.	

9:20 – 9:40	General Information, Acknowledgements.	
<b>PRESENTATIONS SESSION: Current State of Knowledge</b>		
9:40 – 10:05	Overview of the Biology of the Hawksbill turtle in the Wider Caribbean and Western Atlantic.	Robert Van Dam
10:05 – 10:30	Current status of the hawksbill turtle in the Wider Caribbean and Western Atlantic: population sizes and trends.	Didiher Chacon
10:30 – 10:55	Case Study: Current Status of the hawksbill turtle in the Mexican Caribbean.	Vicente Guzmán
10:55 – 11:10	<i>Break</i>	
<b>Current factors causing loss or decline</b>		
11:10– 11:35	An overview of regional threats: state & trends	Cathi Campbell
11:35 – 12:00	Comparative observations on the hawksbill product trade in Dominican Republic.	Paola Mosig
<b>Current Management &amp; Conservation Action</b>		
12:00 – 12:25	Overview of regional conventions related to hawksbill turtle conservation: SPAW and IAC	Alessandra Vanzella
12:25 – 12:50	Results of the CITES Dialogue Meetings.	Robert Boljesic

12:50 – 13:15	Map and overview of current strategies, projects, actions, and actors taking place in the region for the conservation of the Hawksbill	Karen Eckert
13:15 – 13:40	Lessons Learned from international regulatory framework on the conservation of sea turtles	Jack Frazier
<b>13:40 – 14:40</b>	<b>Lunch</b>	
<b>Designing the Cooperation Framework</b>		
14:40 – 15:10	Plenary 1) Explaining the methodology, terminology and process: a) Consensus of goals of the Cooperation Framework : goal clarification items b) Defining the objectives c) Criteria for actions of the Cooperation Framework d) Explaining the working matrix and its parameters	Nestor Windevoxhel
<b>Defining the why: A list of priority threats to the Hawksbill turtle and its habitat</b>		
15:10 - 18:00	Break out groups: Identification and prioritization of threats: Threats to habitat & Threats to populations  Habitat (deterioration or change in quality) 1. Threats to habitat in the Water Column 2. Threats to habitat substrate (e.g., coral reef) 3. Threats to nesting habitat  Populations (extraction) 4. Incidental bycatch 5. Targeted fishing 6. Poaching	
	Each break out session group will:  1. Identify specific threats related to theme 2. Assess and qualify the impact (on the distribution range, biological cycle, abundance and reproductive success; according to the following values: high, medium and low) 3. Define the scale of impact of the threat (local, national or regional) 4. Determine the trend of the threat (increasing, decreasing or stable)	
18:00-18:30	Rapporteurs will meet to compile a priority list of threats	Breakout session rapporteurs and Chairs.
18:30	End of Day	
20:00	<b>Welcoming Cocktail event</b> <i>Terraza Tequila</i>	

Thursday, **September 24**

8:30 – 8:50	Socialize and adopt the list of priority threats	Plenary
<b>Defining the what: Identify cooperative actions to prevent/reduce/eliminate priority threats</b>		

8:50-13:00	Break out groups: Identification of cooperative actions: <ol style="list-style-type: none"> <li>1. Research, monitoring, evaluation and reporting</li> <li>2. Illegal Use and Enforcement</li> <li>3. Innovative enabling approaches (new technologies and practices, market and economic incentives)</li> <li>4. Increasing awareness (education and outreach)</li> </ol>	
	Each break out group will: <ul style="list-style-type: none"> <li>• Discuss their assigned theme for the region</li> <li>• Identify voids, deficiencies, successes, strengths.</li> <li>• Identify principal stakeholders</li> <li>• Develop Actions for each theme (actions on prevention, control and mitigation for threats, actions for filling research and management gaps and possible proposals for scientific research)</li> </ul> <p>Actions to be identified need to meet the following:</p> <ul style="list-style-type: none"> <li>• Be oriented towards specific results</li> <li>• Be measurable</li> <li>• Have clear deliverables</li> <li>• Have a defined time frame</li> <li>• Of significant impact</li> </ul>	
13:00 – 14:00	<b>Lunch</b>	
14:00 – 17:30	<b>Setting priorities:</b> The working groups will prioritize among the resulting actions of previous session. Criteria to set priorities: <ul style="list-style-type: none"> <li>• Urgency of the action</li> <li>• Explicit regional priority</li> <li>• Possibility to take advantage of unique opportunities</li> <li>• Feasibility: Ensure concrete action, and Produce results within a time set</li> </ul>	
17:30 – 18:00	Plenary Session: Summary presentation of Priorities, Session wrap-up	Group Chairs
18:00	End of Day	

Friday, **September 25**

8:30 – 8:45	Revision of previous day work, questions	Nestor W.
8:45 – 13:00	<b>Defining time and key actors.</b> The working groups will define how the actions will be carried out according to the priorities set on the previous session. Each group will produce a time table with short, medium and long term actions.	
13:00 – 14:00	<b>Lunch</b>	
14:00 – 16:00	Continuation of time frame assignment by the working groups	
16:00 – 17:00	Working groups final presentations, discussion of results, wrap-up and next steps	
17:00 – 17:15	<i>Coffee Break</i>	

17:15 – 17:45	Presentation of structure and funding for a Regional Program for Hawksbill Turtle Conservation	
17:45 – 18:00	Final comments, agreements and conclusions. Closing Ceremony.	
<b>18:30</b>	<b>Farewell dinner</b>	

## ANNEX 2: OBJECTIVES AND STRATEGIES DEVELOPED IN WORKING GROUPS

### GROUP 1: DIRECTED TAKE: TARGETED FISHERIES, OPPORTUNISTIC FISHERIES

Chair: Rene Marquez

**Objective 1:** By the year 2014, reduce in 50% the directed take of hawksbill turtles in the Wider Caribbean Region and Western Atlantic WCR &WA

- *Strategy 1: To enforce the laws regarding effective protection to the hawksbill turtle in the region*
- *Strategy 2: Strengthening of a legal structure for the effective protection of the hawksbill turtle in the region*
- *Strategy 3: Create awareness of the status, threats and conservation of the hawksbill turtle in the region*
- *Strategy 4: Significant reduction of the directed and opportunistic fisheries of the hawksbill turtle*

### GROUP 2: GILLNET BYCATCH and ENTANGLEMENT IN LOST GEAR

Chair: Cynthia Lagueux

**Objective 1:** Over the course of 3 years, reduce by 25% the bycatch of hawksbills in Caribbean gillnets

- *Strategy 1: Reduce interaction between hawksbills and gillnet fisheries*
- *Strategy 2: Increase public awareness of the bycatch issue*
- *Strategy 3: Create market reforms*
- *Strategy 4: Improve care and rehabilitation*

**Objective 2:** Over the course of 3 years, reduce by 50% the volume of lost fishing gear found in coastal (marine) habitat throughout the WCR&WA

- *Strategy 1: Adopt a national policy regarding lost fishing gear*
- *Strategy 2: Build capacity for ocean clean-up*
- *Strategy 3: Increase public awareness of the lost gear issue*

### GROUP 3: HABITAT DETERIORATION: INFRASTRUCTURE, LIGHTS, and VEGETATION REMOVAL

Chair: Carlos Diez

**Objective 1:** 70% of stakeholders in the WCR&WA have an improved awareness of the threat to hawksbill posed by infrastructure and lights over the next 10 years.

- *Strategy 1: Design targeted awareness programs for stakeholders*

**Objective 2:** Change by year 2019 the use of regular lights to “turtle-friendly” lights on 70% of development near or at turtle nesting beaches in the Wider Caribbean Region through the use of incentive measures.

- *Strategy 1: Develop a program for light system substitution for buildings that impact hawksbill turtle nesting beaches in the WCR&WA*

**Objective 3:** By year 2014, decrease the impact of coastal development over key sea turtle nesting habitat of the Wider Caribbean Region

- *Strategy 1: Establish guidelines for harmonizing development standards in the coastal environment of the WCR&WA within five years, including measures for coastal realignment and setbacks.*

**GROUP 4: HABITAT DETERIORATION: POLLUTION AND NON-NATURAL PREDATION****Chair: Robert van Dam**

**Objective 1:** Reduce solid waste trash on critical hawksbill nesting beaches by 25 % within 5 years to improve fitness, reproductive success and habitat condition.

- *Strategy 1: Develop regional policy that encourages proper disposal and recycling through incentives, education and enforcement*

**Objective 2:** Protect critical hawksbill's habitat (nesting and foraging) by reducing impact from oil and chemical spills in the Wider Caribbean Region over the next 10 years

- *Strategy 1: Compile updated information for the last 10 years on impact of oil and chemical spill incidents in the WCR&WA*
- *Strategy 2: Establish a regional strategy for the reduction of impacts from oil and chemical spills on critical hawksbill habitat*
- *Strategy 3: Implement the designation of the Wider Caribbean Region as a 'special area' for navigation as identified by Annexes I and II of the MARPOL Convention.*
- *Strategy 1: Research information on nest predation on hawksbill beaches and review existing laws and policies regarding non native predators in Caribbean region.*
- *Strategy 2: Develop a regional strategy for the control of non native predator populations in the Wider Caribbean Region*

**GROUP 5: THREATS RELATED TO INADEQUATE REGIONAL POLICIES AND CLIMATE CHANGE****Chair: Eduardo Cuevas**

**Objective 1:** By 2012, have an ongoing process for the harmonization of conservation and protection efforts for the hawksbill turtle in the Wider Caribbean Region

- *Strategy 1: Implement outreach strategies in order to fill the gaps related to laws and regulations of existing management policies for the hawksbill turtle in all WCR&WA countries.*
- *Strategy 2: Regional harmonization of turtle conservation policies, including addressing the key strategies to address the main threats, through a Regional Marine Turtle Conservation Program.*

**Objective 2:** By 2014, have a regional strategy for increased community incentives for conservation

- *Strategy 1: IAC recognition of communities that conserve their turtles through grants for health & education.*
- *Strategy 2: Lobby for the allocation of government funds for the conservation of turtles*
- *Strategy 3: Education of policy-makers and key stakeholders by NGOs*

**Objective 3:** By 2020, national climate change adaptation plans are under implementation in all hawksbill range countries of the Wider Caribbean Region

- *Strategy 1: By 2015, diagnosis of potential nesting sites for hawksbills under future climatic conditions for the WCR&WA*
- *Strategy 2: Structuring of national climate change adaptations plans for each country in the WCR&WA*

**Objective 4:** By 2020, 20% of identified climate-resilient reef patches/areas at key regional hawksbill foraging grounds are protected in MPA networks

- *Strategy 1: Identification and protection of climate-resilient patches of coral and sponges at key hawksbill foraging grounds*

**Objective 5:** By 2020, each of the key regional hawksbill foraging grounds has a management and conservation plan, including mitigation of non-climate stressors

- *Strategy 1: Revision or creation of management plans for key regional hawksbill foraging areas, to include mitigation measures for non-climate stressors*

**Objective 6:** By 2020, an adequate sex ratio is produced in each genetic stock in the Wider Caribbean Region to ensure population viability and recovery

- *Strategy 1: Establish a regional management strategy for the conservation of key nesting habitat in conditions suitable for the production of natural sex ratios for hawksbill populations*

**Objective 7:** By 2020, Research community understands the impacts of changes in open ocean conditions on the population viability of hawksbills

- *Strategy 1: Research institutions coordinate efforts to understand the relative contribution of impacts of open ocean conditions on hawksbill populations in the WCR&WA*

During the threat analysis and discussion, it was evident that some important issues could and should be immediately addressed in order to provide prompt and effective conservation actions. The Steering Committee decided to ask some participants to work on 4 project profiles to be submitted for funding, these are the project profile titles:

- 1) Reduction of by-catch of hawksbills throughout the Wider Caribbean Region
- 2) Reduction of Directed Take of Hawksbill Turtles and their Products in the Wider Caribbean
- 3) Identification of hawksbill direct nesting population units in the Wider Caribbean region
- 4) Harmonization of laws, regulations policies for the conservation of Hawksbills *Eretmochelys imbricata* in the wider Caribbean.

## ANNEX 3: LIST OF PARTICIPANTS

<b>Country Representatives</b>				
<b>Country</b>	<b>Name</b>	<b>Institution</b>	<b>Telephone</b>	<b>E-mail</b>
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