Training Workshop to Monitor Sea Turtle Nesting Beaches in Colombia

Under the auspices of the project "Quantification of hawksbill nesting through rapid assessments along the Pacific coast of the Darien Gap (Chocó) between Colombia and Panama" a workshop was held in the beach La Cuevita (Choco, Colombia) between the 25th and 26th of August. The workshop aimed to train participants in sea turtle nesting beach monitoring.

The project objectives are:

1. Quantify the activity of hawksbill nesting in four beaches identified as potential for hawksbill reproduction in the region of the Darien Gap between Colombia and Panama.
2. Provide training, outreach and building local capacity to facilitate future conservation action in the region.

The event was attended by officials of the Utria National Park, members of Asociación Caguama for the conservation of sea turtles and 25 students from schools in El Valle, who for two days were trained in theoretical and practical aspects related to the life cycle of sea turtles, the threats they face and current monitoring techniques for monitoring and for the conservation of species, such as the hawksbill turtle in the Eastern Pacific, which is listed as Critically Endangered by IUCN.

The project is a technical and financial effort of WWF, National Parks, Asociación Caguama, CIMAD Foundation and Eastern Pacific Hawksbill Initiative (ICAPO).
Sea Turtle Monitoring Activities Have Begun in El Pelado Marine Reserve in Ecuador

The Santa Elena Provincial Directorate of the Ministry of Environment of Ecuador began the monitoring of sea turtles within the El Pelado Marine Reserve, after a training process of their park rangers using the IAC manuals. The monitoring activities are conducted along 8.5 km of beach, including the beaches Palmar, Valdivia, San Pedro, Bruja, Rosada and Ayangue.

In late August, at the beach Bruja, the first tracks of a sea turtle arriving and leaving the beach were recorded. After identifying the nest, it was determined it was a *Lepidochelys olivacea* nest, commonly known as olive ridley. With this record, the monitoring of the sea turtle nesting season in the El Pelado Marine Reserve began.

Furthermore, between July and September they recorded three stranded leatherback turtles (*Dermochelys coriacea*) in Palmar and Bruja beaches.

New Season for Life in Brazilian Nesting Beaches

The 35th sea turtle nesting season in Brazil has just begun. From September of this year to March 2016, sea turtles will arrive to the Brazilian beaches to nest. In five states, there will be night patrols to protect and tag nesting females, observe their behavior, take morphometric measurements and collect biological samples for genetic studies.

Approximately 1,100 km of beaches are patrolled by TAMAR (Sea Turtle Conservation Program in Brazil), which operates 23 stations in major feeding and nesting areas for sea turtles, both on the mainland coast and on oceanic islands. Nesting season requires hard work of all field teams that perform various tasks and monitor the nests until the hatchlings reach the sea.

This year, around sixty interns will conduct day and night patrols, along with a hundred other people hired people including fishermen and coastal communities members in general.

During the day, the nests are located, marked and kept *in situ*. Only when necessary, due to human or natural threats, the nests are transferred to safer places. Thanks to the activities of environmental education and social inclusion of local communities and tourists, about 80% of the nests remain *in situ*.
TAMAR has permanent environmental education programs to raise awareness among beach users, residents, investors, hotel staff, fishermen and tourists on the importance of the everybody’s cooperation for the five species of sea turtles that nest in Brazil, so they can continue their life cycle.

Visit www.tamar.org.br to learn more about the sea turtle conservation in Brazil.

**Little Turtles Hatched in Playa El Morro, Colombia**

Between July and November, few beaches in the Colombian Pacific with large tourism influx are used by sea turtles to deposit their nests. The main reason is that the natural habitat needed for the females to nest has been drastically changed into touristic beaches of this coast; making it practically impossible for a female to reach a beach like El Morro to nest.

Well, apparently for sea turtles nothing is impossible! On September 17th, at nightfall, tourists walking on the beach witnessed how life made its way through the sand, but unfortunately not going towards the sea. A horde of little turtles with frantic movements was advancing towards incandescent yellow lights of the beach berm, completely disoriented going in the opposite direction to their destination and survival. Fortunately for the hatchlings, this time there were those who gave them a hand. Tens of spontaneous conservationists quickly spread out across the beach of El Morro and in an effort of improvised coordination were able to collect more than 120 hatchlings of olive ridley (*Lepidochelys olivacea*), which were released safe and sound to the sea. This time the story had a happy ending. But we need more exceptional cases like this one so we can reconcile with nature and its creatures. At least the people that were at El Morro that night understood this.

Professor Jose Ivan Mojica from National University provided the information for this article. The photos were supplied by anonymous tourists who participated in the task of salvaging olive ridley hatchlings in El Morro.
Last September, the Caribbean Research and Management of Biodiversity Institute in Curaçao (CARMABI), Sea Turtle Conservation Bonaire (STCB), the Dutch based University of Groningen (RUG), IMARES of Wageningen University (WUR) and Turtugaruba in Aruba began a four-year research project on the ecology of Caribbean sea turtles funded by the Netherlands Organization for Scientific Research (NWO).

The effective protection of sea turtles requires information, which is practically absent in the Dutch Antilles. Although sea turtles are found throughout the Caribbean, there are few places they prefer. Among these places are important nesting and foraging areas around six Dutch islands in the Caribbean. The aim of the research project is to use ecological experiments, satellite tracking and molecular techniques to study the connectivity of sea turtles, both in relation to nesting and foraging among the Dutch Caribbean ABC islands, to assess whether populations are growing or decreasing and how they are connected to other populations in the Wider Caribbean and to assess threats to sea turtle populations, such as the impacts of climate change on sea grass and coral reefs. The results of this study will enhance the protection of sea turtles on the former Dutch Antilles.

For this project, Marjolijn Christianen and Jurjan van der Zee of the RUG, and Gielmon Egbrechts of STCB visited Klein Curaçao, accompanied by Sabine Berendse and Pieter de Geus of CARMABI. During the expedition two green turtles were equipped with satellite transmitters to track their migratory routes online for a year. One of the turtles was named “Miss Mermaid”, in honor of “Mermaid Boat Trips”, which has supported the entire 2015 season of CARMABI sea turtle project, taking two researchers twice a week for nest surveys, as well as taking the whole team for the satellite transmitter expedition. A third transmitter, donated by Marjolijn Christianen, is yet to be placed as soon as possible.

After placing the satellite transmitters, 32 sea turtles were studied, which were in excellent conditions, and several important marine habitats in Klein Curaçao, Boka Ascension and Wacawa were inspected.

CARMABI and RUG representatives were surprised by the successful start of this great collaborative for the research of sea turtles in Curaçao, and appreciate the help of all the volunteers of Sea Turtle Conservation Curaçao.

Green turtle equipped with a satellite transmitter in Curaçao ©Sea Turtle Conservation Curaçao
Upcoming Events

36th Annual Symposium on Sea Turtle Biology and Conservation. The symposium comes to South America for the first time! The International Sea Turtle Society will carry out the annual symposium No. 36 from February 29th to March 4th, 2016, at Científica del Sur University and Maria Angola Convention Center, in Lima, Peru.

The theme of the symposium is Crossroads, giving importance to the region as foraging ground for five sea turtle species and highlights the critical circumstances in their conservation.

The symposium aims to promote sea turtle research to strengthen conservation efforts at regional and international level.

Register in the symposium at: http://symposium.internationalseaturtlesociety.org/#/

Recent Publications

Differences in diurnal and nocturnal swimming patterns of olive hatchlings in the Gulf of Fonseca, Honduras
Noemi Duran and Stephen Dunbar
Journal of Experimental Marine Biology and Ecology

Sea turtle hatchlings from Honduran beaches along the Pacific coast must swim more than 30 km through the shallow, presumably predator-rich waters of the Gulf of Fonseca before reaching the open ocean. Olive ridley hatchlings from Punta Raton, Honduras, were tracked during the first 2 h of their offshore migration to assess aquatic predation rates. No predation events were observed. The absence of rocky bottom areas and reef structures where predators can refuge, and a decline in the number of predators due to overfishing are two possible reasons for this unexpected result. Additionally, diurnal and nocturnal swimming patterns of recently emerged olive ridley hatchlings were compared with regard to their position in the water column while swimming. At night hatchlings swam near the surface 97.5% of the time, with only sporadic brief dives. During daytime, however, hatchlings spent 78% of the time swimming at depth, going back to the surface for brief periods to breathe. Due to the high turbidity of the Gulf of Fonseca waters, this daytime behavior may serve to keep hatchlings out of sight of predatory sea birds. This newly described differential swimming behavior may have adaptive significance in avoiding aerial predation in the specific conditions of the Gulf of Fonseca.