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# Trans-Atlantic Leatherback Conservation

# Building solutions through international cooperation

## Building solutions of global significance

This project is part of WWF's global programme of work on bycatch, which brings together WWF and partners from around the world to mitigate bycatch in a coordinated and strategic manner. The programme works to build solutions with all stakeholders from local communities to regional fisheries organizations.

## The price of bycatch – Kawana's story

© NC-IUCN / Mark TORDOIR

Kawana was tagged with a satellite transmitter on the 26th June 2005 at Samsambo Beach, Suriname. She initially stayed close offshore, probably planning to nest again. Her diving profile and evidence of shoulder injuries to her body indicate that just 20 days after tagging, Kawana was caught in a fisherman's gillnet and drowned just offshore.

## Protecting leatherbacks at sea: Using the latest technology to protect an ancient species!

Leatherback turtles spend 99% of their life at sea and can travel across the entire Atlantic Ocean. However, today's intensive fishing operations mean that the open sea is no longer always a safe place for turtles, and tens of thousands of leatherbacks are caught each year on fishing hooks or drown entangled in nets – a problem known as 'bycatch'. Having survived for more than a hundred million years, threats such as bycatch mean that leatherbacks are now facing extinction, and are listed as critically endangered by IUCN.

There are several simple solutions to combat bycatch of marine turtles, but they cannot be implemented everywhere. Knowledge of when and where bycatch occurs is crucial to enable conservationists to implement solutions where they are needed most. Unfortunately, much of this information is currently lacking, particularly in the Central and Southern Atlantic. WWF, along with many partners, is therefore implementing a ground breaking multinational study of Atlantic leatherbacks using satellite telemetry. This pioneering technology is able to track turtle movements over the long term at sea, even recording diving depth and duration. Most importantly, it will allow scientists to identify 'hot-spots' of interaction between leatherbacks and fisheries.

The study aims to tag at least 25 leatherbacks from Panama, Suriname, French Guiana, Uruguay and Gabon. So far 16 turtles have been tagged, and the data from their satellite transmitters are downloaded every week and mapped on the WWF website. This innovative resource means that anyone with internet access can now follow individual leatherbacks in real time as they make their monumental journeys across the world's 2nd largest ocean.

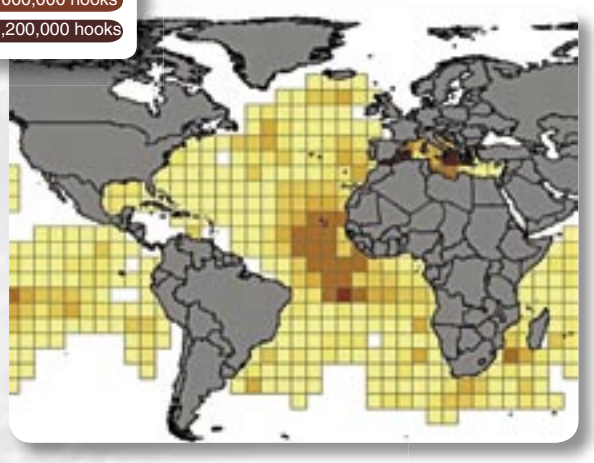
CCC and WWF staff in Chiriquí Beach, Panamá
© WWF / Carlos DREWS

## Solutions in action

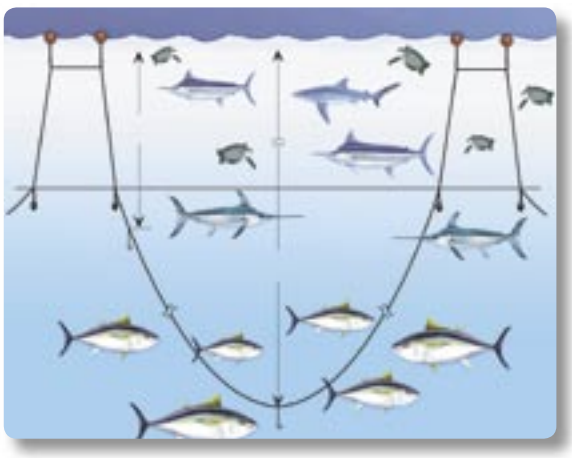
The information obtained from this study will be of paramount importance to governments, NGOs, scientists and fisheries agencies to design conservation solutions to tackle bycatch. These may be:

- Time-area closures – the cessation of fishing activities in specific areas and/or over certain periods of time when leatherback bycatch is most likely.
- Fisheries "best practice" – information on diving depths and durations of leatherbacks will enable scientists to determine how fisheries can operate in a manner which is least likely to harm turtles.
- Changes in fishing gear - The study will also provide an indication of which fisheries should be prioritized for the conversion from a 'J' shaped hook to a larger 'C' shaped hook on longlines. Studies in the Atlantic have shown that using a larger 'C' shaped hook can reduce marine turtle hookings by more than 67%.

This WWF coordinated project includes the design of the bycatch reduction measures and their implementation in the Atlantic through technology transfer, capacity building and policy work.

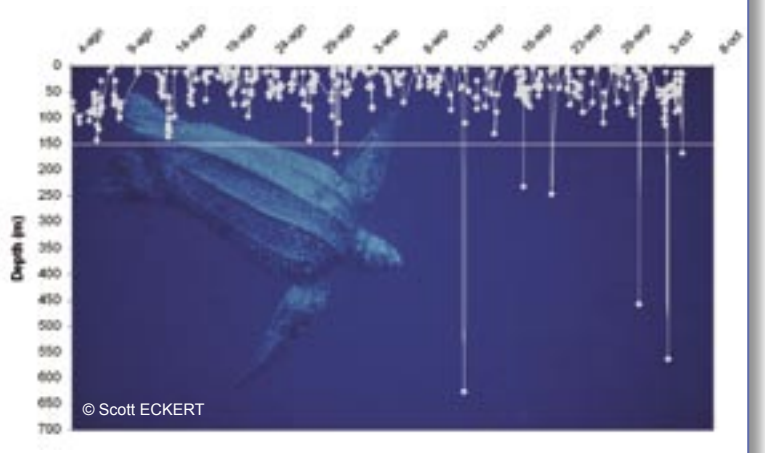



Long-line fishing effort in the Atlantic ocean (from Lewison et al. 2004)



Deep setting long-line gear designed by the winner of the SmartGear contest in 2004 to reduce bycatch

## Dive pattern of Gurí, the male Atlantic Leatherback tracked by Karumbé (August 4th – October 4th 2006)




## Gurí- a male leatherback

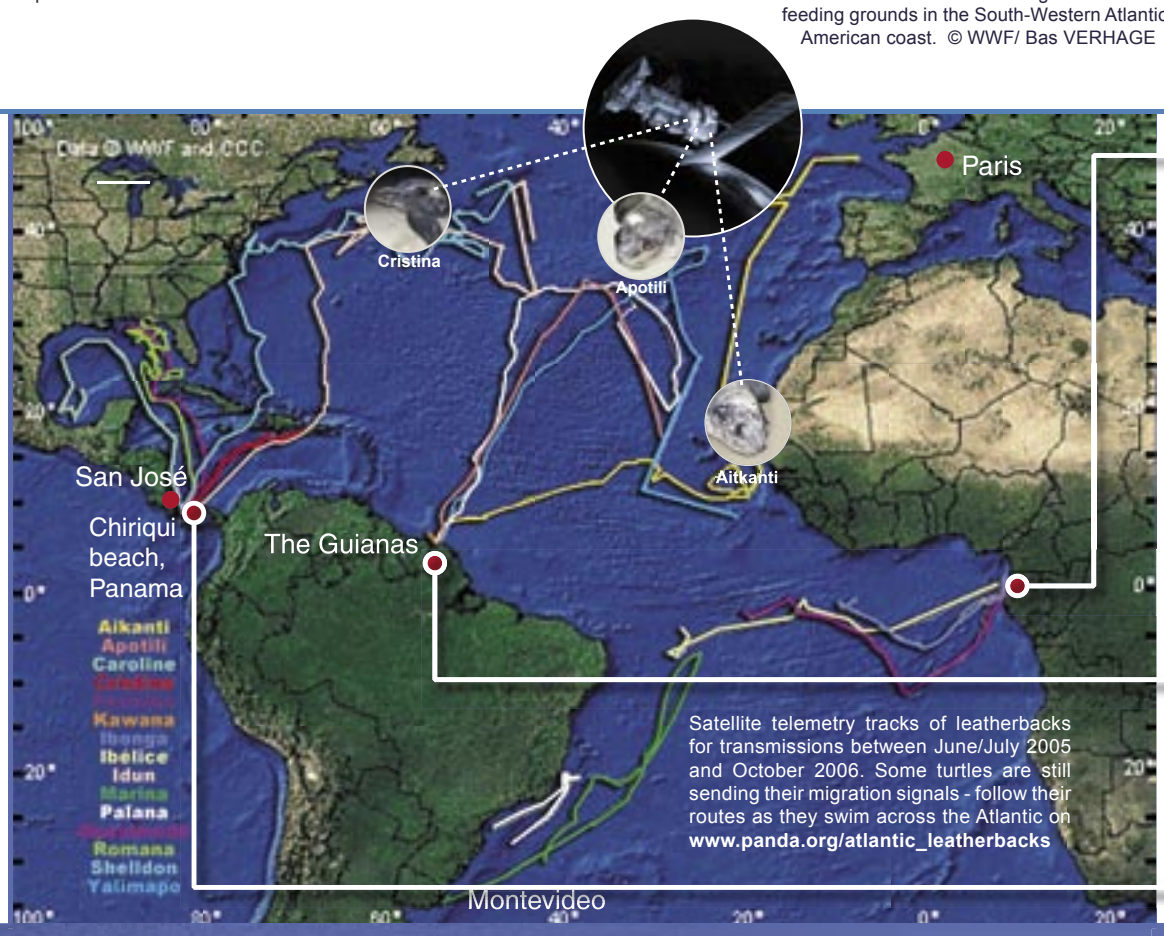
The first 20 days Gurí traveled 970 km from international waters to the coasts of Espirito Santo (Brazil) where it remained almost a month and a half, until October 4th. Most of the dives were less than 150 m deep. Nevertheless, during the last 24 days there were much deeper dives, at a time when it swum farther away from the coast. The deepest dive was 626 m, on September 12th.

Onboard a Uruguayan long line fishing vessel, a satellite transmitter was attached by Karumbé and fishemen to "Gurí", a 159 cm male leatherback incidentally captured during longlining at 27.96 ºS, 43.99 ºW in international waters on 31st of July 2006. © Marin Abreu / PNOFA

***Aitkanti*** travelled across the Atlantic ocean and visited the coasts of South America, Africa and Europe. CCC and WWF staff deployed the transmitter after her nesting in Samsambo beach, Suriname, in June 2005. She arrived to French waters in October 2006. Comprehensive leatherback conservation requires collaboration between nations across the whole Atlantic basin.

***Quasimoda***, named after a peculiar "hump" on its carapace, is an adult female leatherback encountered by WWF and partners nesting on the morning of March 5, 2006, in Pongara National Park in Gabon. She is one of several African leatherbacks that demonstrate with their travel routes the connection between African nesting sites and their corresponding feeding grounds in the South-Western Atlantic along the South American coast. © WWF/ Bas VERHAGE

***Zoe*** is the first leatherback to receive a satellite transmitter in the unique habitat of the Rio de la Plata river mouth. Swift and efficient collaboration between the Argentinian and Uruguayan teams of PRICTMA and Karumbé resulted in this deployment on 29th of October 2006 at Kiyú beach, upon notification by fishermen that the female had been caught in their nets and was in good shape. © Karumbé




## Gabon

WWF and partner organizations Ibonga, Kudu and Protomac, monitor and protect the leatherbacks nesting in the Gamba complex of Gabon, one of the largest nesting rookeries in the world. An ecotourism project with increasing visitor numbers complements the leatherback conservation efforts. One female tagged in Gabon was found in 2005 on the Argentinian coast, revealing that she travelled at least 7,000 km to seek nutrient rich waters in the South-Western Atlantic.

## The Guianas

The three countries of the Guianas (French Guiana, Suriname and Guyana) harbour the largest nesting assemblage of leatherbacks in the Western Atlantic. WWF has been working here on sea turtle conservation activities which include research, enforcement and developing alternatives (e.g. ecotourism) to unsustainable fishing practices and the harvesting of turtle meat and eggs.

## Chiriqui beach, Panama

Chiriqui beach is the second most important leatherback nesting site in the Caribbean. Whilst no tourism to the area currently exists, the Ngöbe community sees their natural resources, including the marine turtles, as a potential tourist attraction. WWF and partners, Caribbean Conservation Corporation and CoopeSolidar, are planning for the kind of tourism that the community wishes to receive, whilst building a regular sea turtle monitoring and protection project through permanent community participation.

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## Implementing Partners:

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