

Protecting Sea Turtle Populations in Suriname

2019 WIDECAST AGM

Paramaribo, 19 – 21 March 2019



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WWF Guianas



WWF Guianas Sea Turtle Programme

Monitoring & Enforcement

Threat Reduction

Responsible Tourism

Research

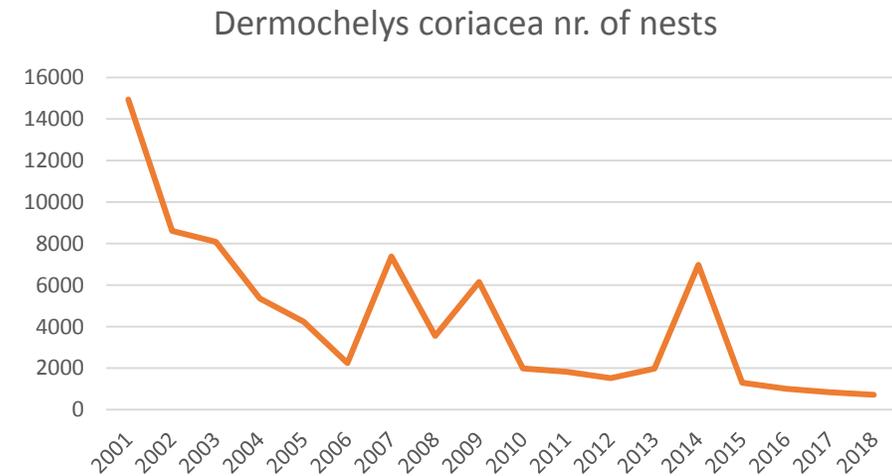
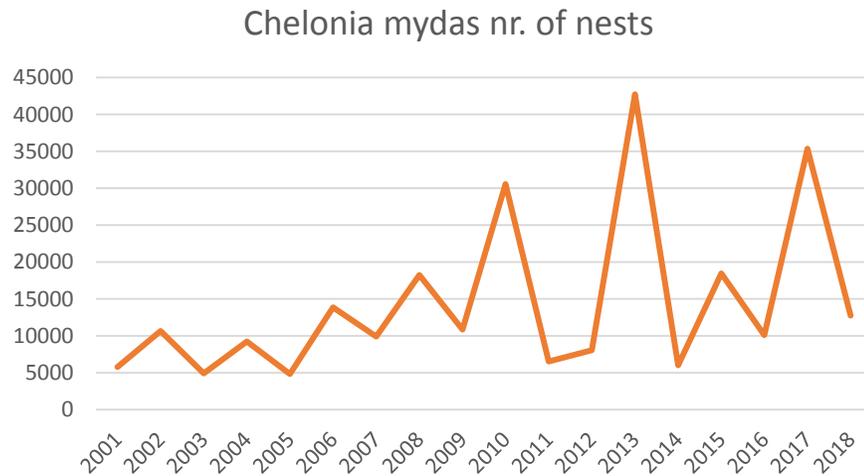
Awareness and Education





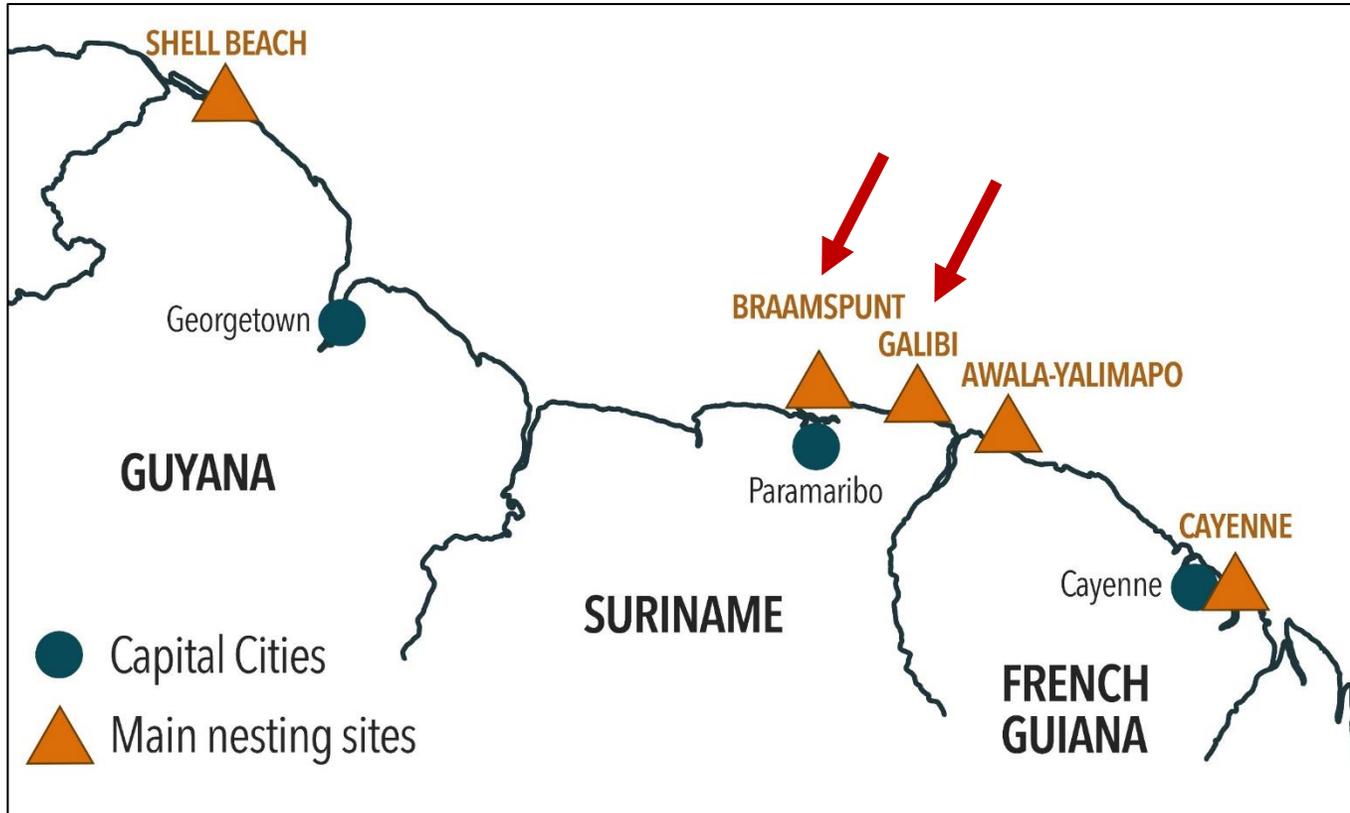
Monitoring & Enforcement

WWF manages a long-term nesting beach monitoring and enforcement (beach patrolling) program together with relevant government agencies – February-July



Data collection on nests, false crawls, dead turtles, threats, illegal practices, beach erosion

Monitoring stations



Babusanti



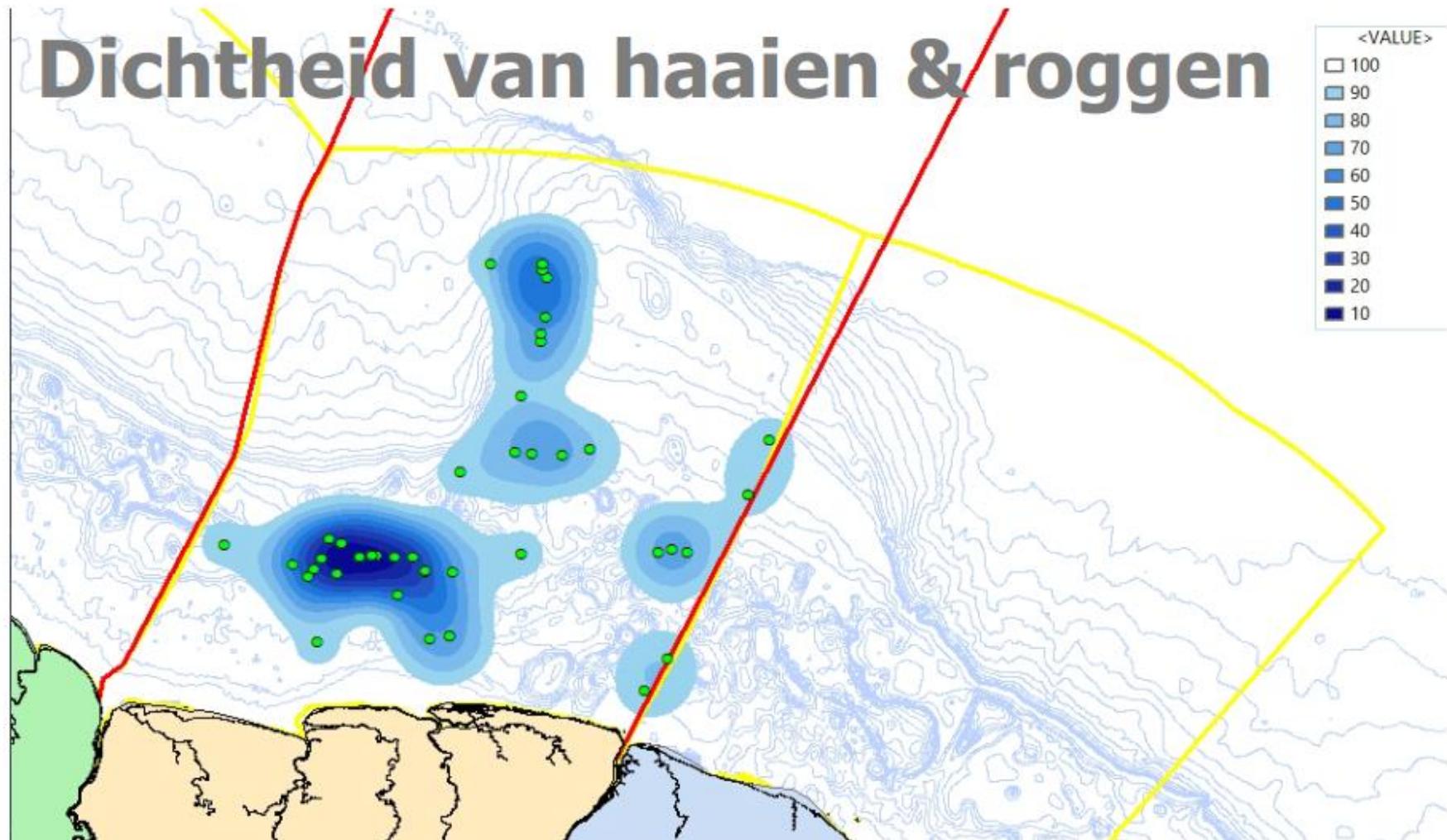
Braamspunt



Sightings offshore

Credit: Marijke de Boer

Dichtheid van haaien & roggen





Annual Overflights (March/April)
Shifting beaches/Erosion

Clean ups

WWF NIMOS SHATA WATERPROOF TOURS SURINAME GREEN HERITAGE FUND SURINAME Stichting SuReSur

ZATERDAG: 28 JULI 2018 VAN 11:00 - 15:00

CLEAN UP LEONSBERG

LOCATIE: DE PIER BIJ LEONSBERG

HOUD SURINAME SCHOON

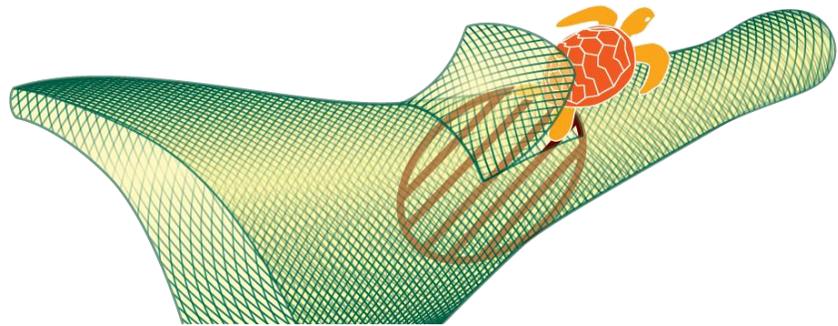
Neem je eigen laarzen en schepnet mee

Water aanwezig

Doe jij ook mee?



By Catch Reduction



- Reduce bycatch of ETP Species
- Trash and Turtle Excluding Devices (TTED) in industrial shrimp trawlers
- Develop and adopt Flexible Turtle Excluding Devices in fish trawlers
- Artisanal fisheries by catch

By catch data (interviews)



BYCATCH OF ENDANGERED, THREATENED
AND PROTECTED SPECIES IN THE COASTAL
ARTISANAL FISHERY OF SURINAME

2015-2016

ESTIMATED
TURTLE BY-CATCH BY THE COASTAL FISHING FLEET OF SURINAME

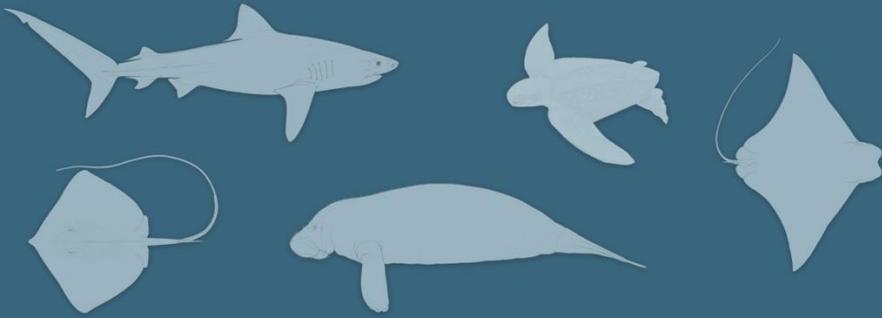
HMMADARIE

SEP 2006



ON BOARD GUIDE FOR THE IDENTIFICATION OF

MARINE ENDANGERED, THREATENED & PROTECTED (ETP) AND KEY SPECIES OF THE GUIANAS



Koninkrijk der Nederlanden



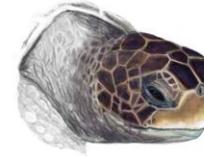
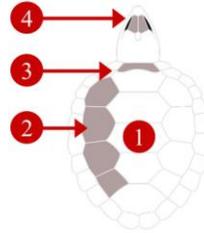
IUCN National Committee of The Netherlands



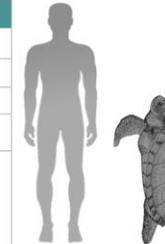
THE SIS PROGRAMME IS FINANCIALLY SUPPORTED BY THE DUTCH MINISTRY OF FOREIGN AFFAIRS (DGIS)

ETP Species Identification

Green Sea Turtle – *Chelonia mydas*



| CHARACTERISTICS | |
|-----------------|---|
| 1 | Carapace with thin scutes. |
| 2 | 4 pairs of lateral scutes. |
| 7 | 1st lateral scute is not touching precentral scute. |
| 8 | 1 pair of elongate prefrontal scales between orbits. |
| COLOUR | Upper side pale to very dark brown varying to brilliant combinations of yellow, brown, and greenish tones, forming radiated stripes, or abundantly splattered with dark blotches. |



| SIZE carapace length | |
|----------------------|--------|
| Mean | 100 cm |



SEA TURTLE HANDLING PRACTICES

CONSIDER THE SIZE OF THE TURTLE

All turtles should be boated if possible

TOO LARGE TO BOAT



DRIFT NETS & TRAWLING

Try to work the turtle free. If necessary, cut all net from the turtle. Cut away from the turtle to prevent any injuries. Do not leave any net on the turtle.

SMALL ENOUGH TO BOAT



*Lift the turtle on board.
DO NOT use a gaff to boat the animal.*

LONGLINES



Stop the vessel and bring the turtle as close to the boat as possible without putting too much strain on the line. Cut the line as close to the hook as practical.



*Use a dip net to lift the turtle on board.
DO NOT use a gaff and DO NOT pull on the line or grasp the eye sockets to bring the animal on board.*

DE-HOOKING A SEA TURTLE

Place a piece of wood in the turtle's mouth so it cannot bite, then cut the hook or line.



If the hook's barb is visible, use bolt cutters to cut the hook in half, and remove the two parts separately.



If the hook is not visible, remove as much line as possible without pulling too hard on the line, and cut it as close to the turtle as practical.



BYCATCH

FISHERIES OF SURINAME



Suriname is located in the Guianas, South America. It is part of the North Brazil Shelf Large Marine Ecosystem and rich in fishery resources.

FISHING LICENSES



686 VESSELS



MARINE CAPTURE



35 000 TON/YEAR



NUMBER OF ETP SPECIES*

*According to the IUCN Red List Taxonomy version 2017-3

A variety of unique marine species thrive in Surinamese waters and are sometimes accidentally caught by fishermen. Some of them are listed as Endangered, Threatened or Protected species or ETP species.

SEA TURTLES



The **HAWKSBILL TURTLE** is critically endangered

SHARKS



The **DAGGERNOSE SHARK** is critically endangered

RAY



The **CARIBBEAN ELECTRIC RAY** and the **SMALLTOOTH SAWFISH** are critically endangered

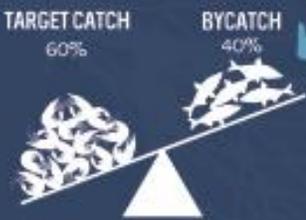
INDUSTRIAL FLEET

MARINE SHRIMP TRAWL



20% of the bycatch is **RETAINED**
80% of the bycatch is **DISCARDED**

SEABOB SHRIMP TRAWL



12% of the bycatch is **RETAINED**
88% of the bycatch is **DISCARDED**

ALL shrimp trawlers must be equipped with **TURTLE EXCLUDER DEVICES (TEDs)**

Experiments with TEDs for the finfish trawl fishery are on-going

FINFISH TRAWL



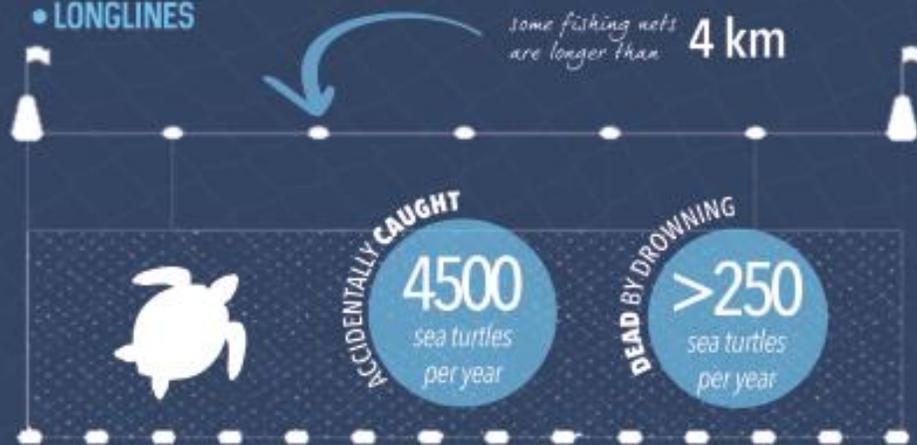
20 fish species are **RETAINED**

45% of the catch by weight is **DISCARDED**

ARTISANAL FLEET

- DRIFT NETS
- LONGLINES

some fishing nets are longer than **4 km**



MOSTLY LANDED

identification is sometimes difficult because fishermen

MOSTLY DISCARDED

No take zone

- 2013
- Size 15 – 15 km
- Enforcement: Coast guard









Responsible Tourism

- Annual training of tour operators, tour guides, boat captains on rules and guidelines for responsible sea turtle tourism before season starts
- Need to expand to unlicensed tour guides and boatmen –recent incidents of irresponsible watching practices



WELCOME TO THE MARINE TURTLE NESTING BEACH

Marine Turtles:
Admire,
don't DISTURB

RULES for visiting a
Marine Turtle nesting beach



Wear dark clothes
(draag donkere kleding)



Keep 2 meters distance
(bewaar 2 meters afstand)



Guide required
Jalkeen met een
gids naar het strand



Use red light
(gebruik rood licht)



Maximum group
size of 6
(maximale groepsgrootte 6 personen)



Stay quiet
(wees rustig en stil)



No campfire
(geen kampvuur)



No flash
(geen flit)



Do not help
hatchlings to the sea
(maak geen
hatchlings aan)



Do not take anything
from the beach
(neem niets
mee van het strand)



Do not obstruct arriving
or departing turtles
(belemmer
de schildpad niet)



Do not touch the turtle
(raak de schildpad niet aan
en zit er nooit op)



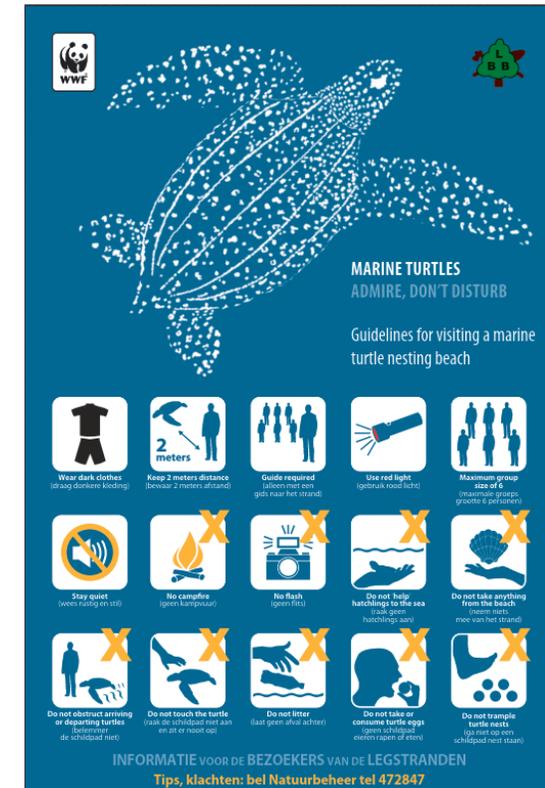
Do not litter
(laak geen afval achter)



Do not take or
consume turtle eggs
(geen schildpad
eieren rapen of eten)



Do not trample
turtle nests
(ga niet op een
schildpad nest staan)



Visitor Guidelines

WELKOM OP BRAAMSPUNT

LEGSTRAND VOOR ZEESCHILDPADDEN

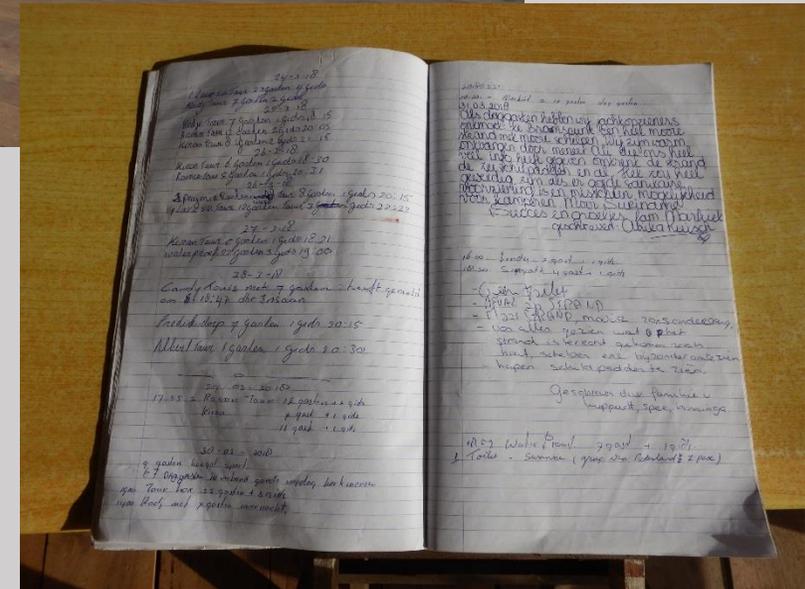


Verplicht aanmelden bij het
VISITORS CENTER



Illustratie zeeschildpad: Van Goyen - CARE2, project

Visitor Centre



Research

- Nest temperatures
- Beach profiling and erosion
- Hatching success Galibi and Braamspunt
- Study on visitor numbers and value of sea turtle tourism



Awareness & Education



WORLD WILDLIFE DAY 2019



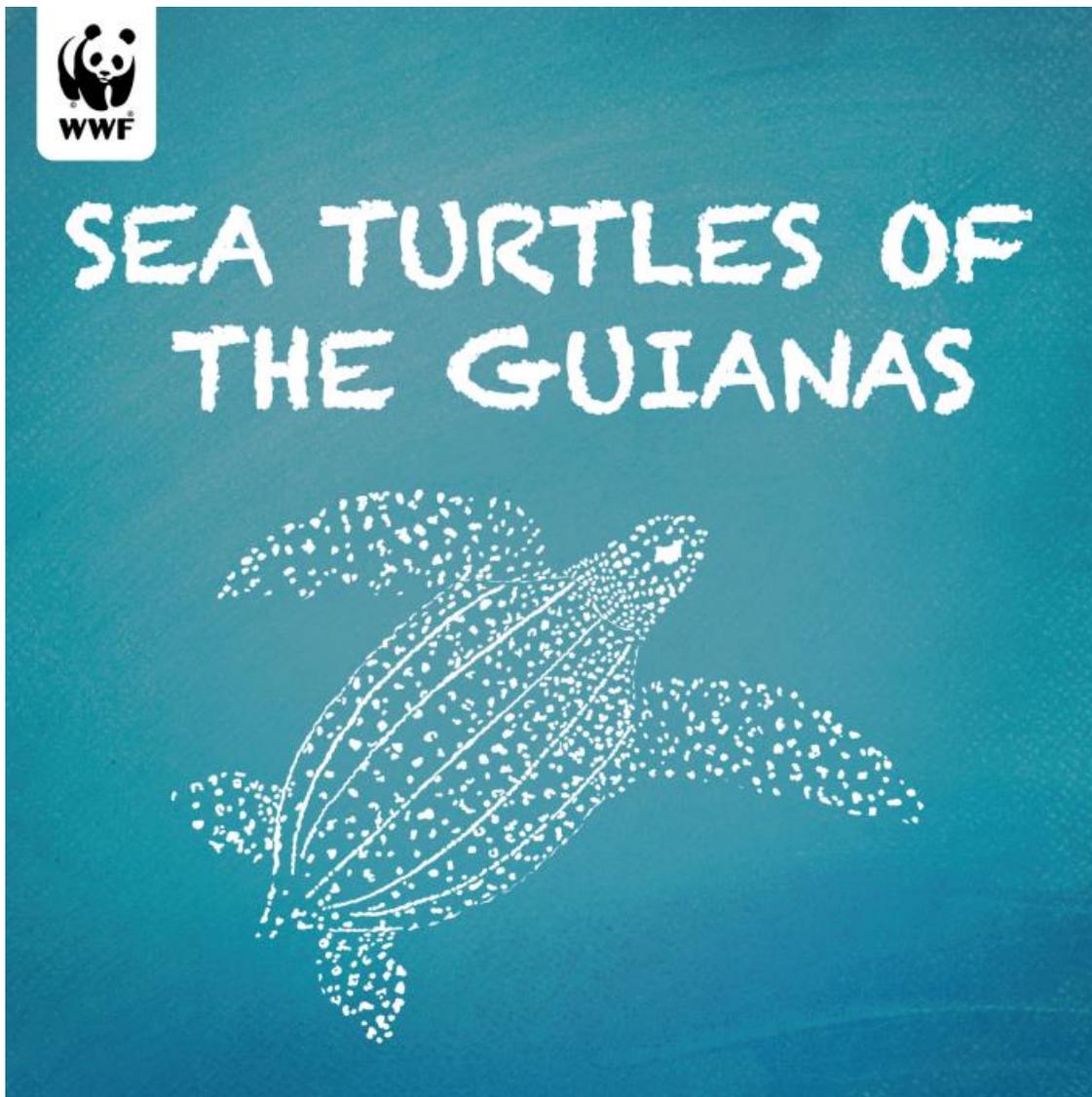
On this World Wildlife Day 2019, WWF Guianas is focussing on the *sea turtle*.

The Guianas are home to five of the seven species of sea turtles worldwide. Despite international protection, some of these are still threatened and endangered.

Every year, between February and July, adult females come on land to make their nest on sandy beaches of the Guianas.

It is possible to see these magnificent underwater animals from closeby and witness this spectacular event accompanied by a specialized trained guide.

Brochures



Identification of sea turtles

The Guianas are known for at least three species of nesting marine turtles: the leatherback, the green turtle and the olive ridley. The hawksbill occasionally nests in Guyana, while the loggerhead is found in the waters of the Guianas, but only to forage. The leatherback and the green turtle are the most common species nesting.

| Species | Scientific Name | Local Names | Weight | Length | Feeding Habits |
|--------------|-------------------------------|--|------------|---------------|---|
| Leatherback | <i>Dermochelys coriacea</i> | Lederschildpad (NL), Aitkanti (SR), Mata mata (GY), Tortue luth (FG) | 400-800 kg | avg 165 cm | Largest of all sea turtles; Only species covered with a skin; Feeds mainly on jellyfish |
| Green Turtle | <i>Chelonia mydas</i> | Soepschildpad (NL), Krapé (SR), Bettia (GY), Tortue verte (FG) | 160-250 kg | avg 110 cm | Feeds mainly on sea grass |
| Olive Ridley | <i>Lepidochelys olivacea</i> | Warana (NL, SR), Taracay (GY), Tortue olivâtre (FG) | 36-45 kg | avg 70 cm | Smallest sea turtle of the Guianas; Feeds mainly on shrimp |
| Hawksbill | <i>Eretmochelys imbricata</i> | Karetschildpad (NL), Carey (GY), Tortue imbriquée (FG) | 60-80 kg | avg 76-89 cm | Feeds mainly on sponges, sea anemones |
| Loggerhead | <i>Caretta caretta</i> | Onechte karet (NL), Tortue caouanne (FG) | 100-180 kg | avg 84-124 cm | Feeds mainly on clams, sea urchins |

Posters

  Surinaamse naam
Warana

Nederlandse naam
Warana

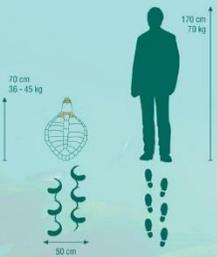
Engelse naam
Olive Ridley Turtle



Voedsel
Garnalen

Wetenschappelijke naam
Lepidochelys olivacea

Identificatie



70 cm
36 - 45 kg

170 cm
70 kg

Verspreidingsgebied



Legseizoen

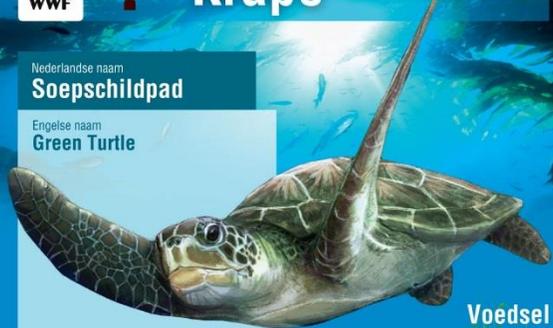


Jan Feb Mrt Apr Mei Jun Jul Aug Sep Okt Nov Dec

  Surinaamse naam
Krapé

Nederlandse naam
Soepschildpad

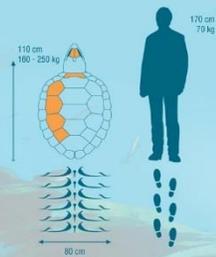
Engelse naam
Green Turtle



Voedsel
Zeegras, zeewier en algen

Wetenschappelijke naam
Chelonia mydas

Identificatie



110 cm
160 - 250 kg

170 cm
70 kg

Verspreidingsgebied



Legseizoen



Jan Feb Mrt Apr Mei Jun Jul Aug Sep Okt Nov Dec

  Surinaamse naam
Aitkanti

Nederlandse naam
Lederschildpad

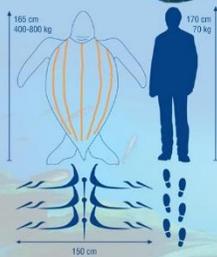
Engelse naam
Leatherback Turtle



Voedsel
Kwallen

Wetenschappelijke naam
Dermochelys coriacea

Identificatie



165 cm
400-800 kg

170 cm
70 kg

Verspreidingsgebied



Legseizoen

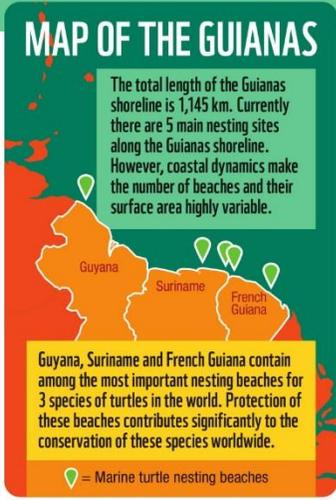
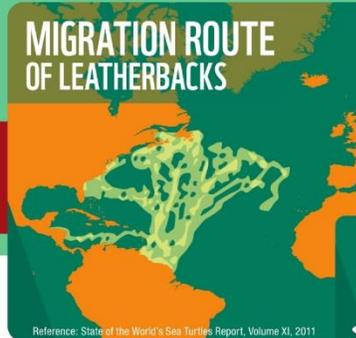


Jan Feb Mrt Apr Mei Jun Jul Aug Sep Okt Nov Dec



MARINE TURTLES IN THE GUIANAS

When not breeding, leatherbacks from this region migrate to the North Atlantic all the way to Nova Scotia Canada to feed on the abundant jellyfish, covering over 10,000 km.

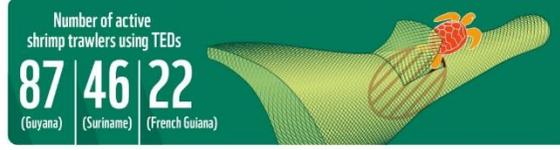


While Turtle Excluder Devices (TEDs) have been used by many shrimp trawlers in the Guianas for more than 20 years, bycatch by other fisheries (fish trawlers, tuna longlines, and gillnets) remains the main threat to turtles in this region.



5 Number of marine turtle species that either forage, nest or breed in the Guianas

7 Number of marine turtle species in the world



Unselective fishing gears catch at least **300,000** sea turtles worldwide each year

MARINE TURTLE SPECIES, THEIR OCCURRENCE & PROTECTION STATUS

LEATHERBACK
Dermochelys coriacea
Lederschildpad (NL), Aitkanti (SR), Tortue luth (FG), Mata mata (GY)
Occurrence: most common in French Guiana and Suriname
Status: **LC** LEAST CONCERN

GREEN SEA TURTLE
Chelonia mydas
Soepschildpad (NL), Krapé (SR), Tortue verte (FG), Bettia (GY)
Occurrence: Common
Status: **EN** ENDANGERED

OLIVE RIDLEY
Lepidochelys olivacea
Warana (SR, NL), Tortue olivâtre (FG), Taracay (GY)
Occurrence: rare in Suriname, common in French Guiana, very rare in Guyana
Status: **VU** VULNERABLE

HAWKSBILL
Eretmochelys imbricata
Karetschildpad (NL), Tortue imbriquée (FG), Carey (GY)
Occurrence: very rare (mostly Guyana)
Status: **CR** CRITICALLY ENDANGERED

LOGGERHEAD
Caretta caretta
Onechte karet (NL), Tortue caouanne (FG)
Occurrence: foraging offshore, very rare (only Guyana)
Status: **EN** ENDANGERED



424 Number of leatherbacks accidentally caught in gillnets in 2012 (SR).
Reference: Madari, H.M. 2012

25% Number of leatherbacks that have marks on flippers and the neck from fishing gear (FG).
Reference: Damien Chevalier, CNRS-IPHC

⚠️ HUMAN THREATS:

- Illegal consumption of eggs (mostly green turtle eggs)
- Bycatch (fish trawlers, tuna longlines and drifting gillnets)
- Coastal destruction and alteration
- Sandmining
- Off-shore oil and gas development

⚠️ OTHER THREATS:

- Climate change
- Eroding beaches
- Dog predation
- Jaguar predation

Monitoring of the Guianas nesting beaches dates back to the 1980s providing a valuable long term data set. Because sea turtles are highly migratory, protecting them requires a regional and international approach. WWF Guianas is committed to working with partners in all three countries to ensure the long-term protection of these shared turtle populations.

Anti Egg Poaching Campaign





School children exchange

Thank you

