



# MARINE TURTLES IN FRENCH GUIANA

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## 2008-2012: 1st National Action Plan > 5 years

**The second (and current) National Action Plan** has been written in concertation with all structures gathered in the MT network, through several thematic workshops in 2013



Workshops to determine actions to implement, priorities, leaders of actions and partnerships

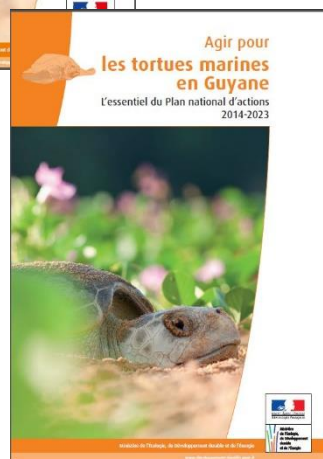
## 2014-2023, 2nd National Action Plan > 10 years



### Part I Diagnosis of Knowledge and status of the 3 species



### Part II The Action Plan : Objectives and Actions implemented by priority order



### Summary version in French & English

<http://www.tortuesmarinesguyane.org>

## 2014-2023, 2nd National Action Plan > 10 years

### **Main objective :** **Improve the conservation status of the marine turtles**

#### **5 main components:**

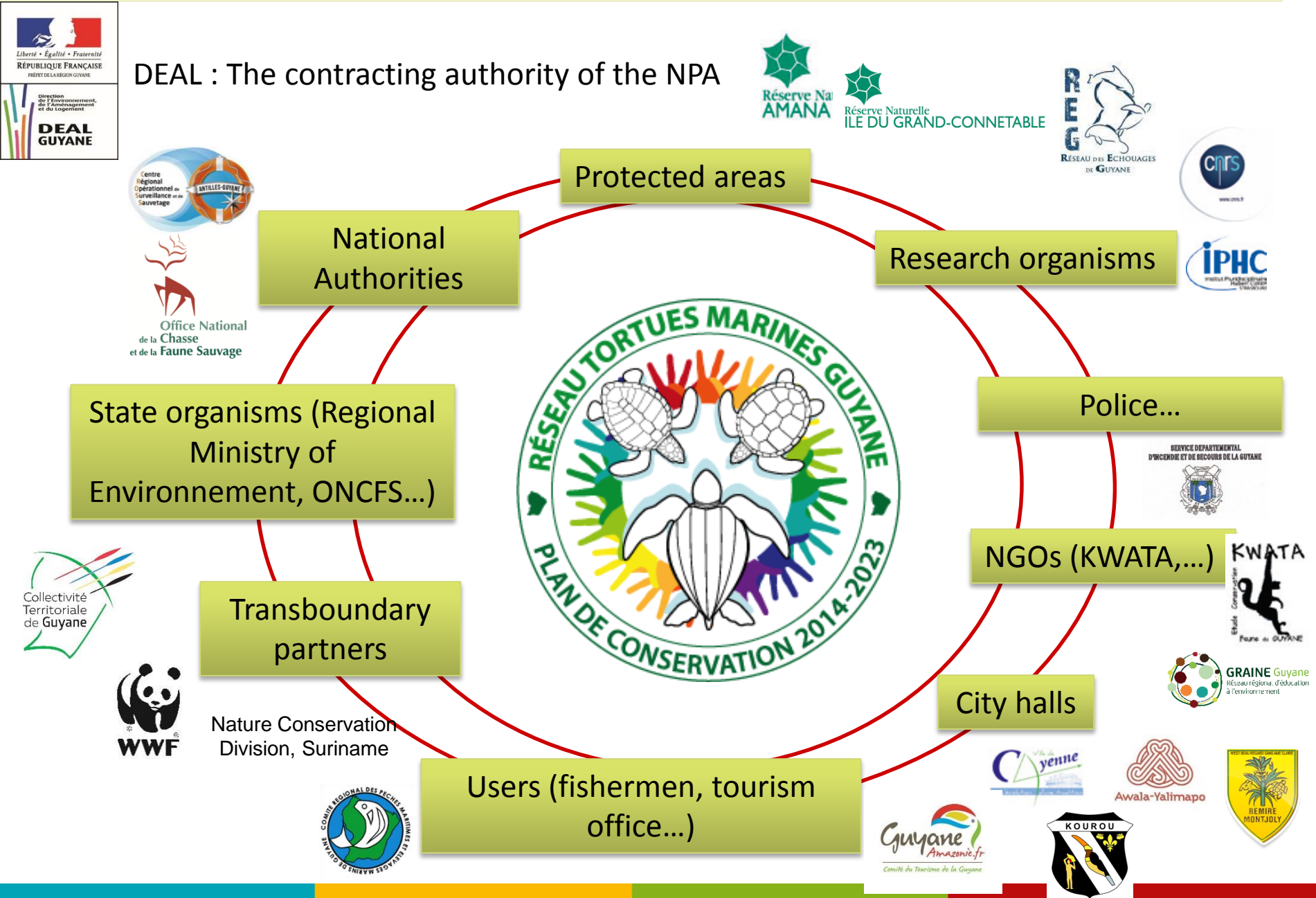
- 1- Alleviating threats (at sea and on land)
- 2- Research for conservation
- 3- Transboundary cooperation
- 4- Environmental education
- 5- Promoting as social and economical asset

**A total of 95 action sheets prioritized by the MT network**





MT NETWORK (around 25 structures)





No more than 30km of  
nesting beaches on the  
300km of coast

Coast : highly dynamic  
under the Amazon  
influence



Some beaches appear /  
disappear

Variability of the accessibility to  
the beaches

Mud banks could be an obstacle  
for MT

# Marine Turtles in French Guiana

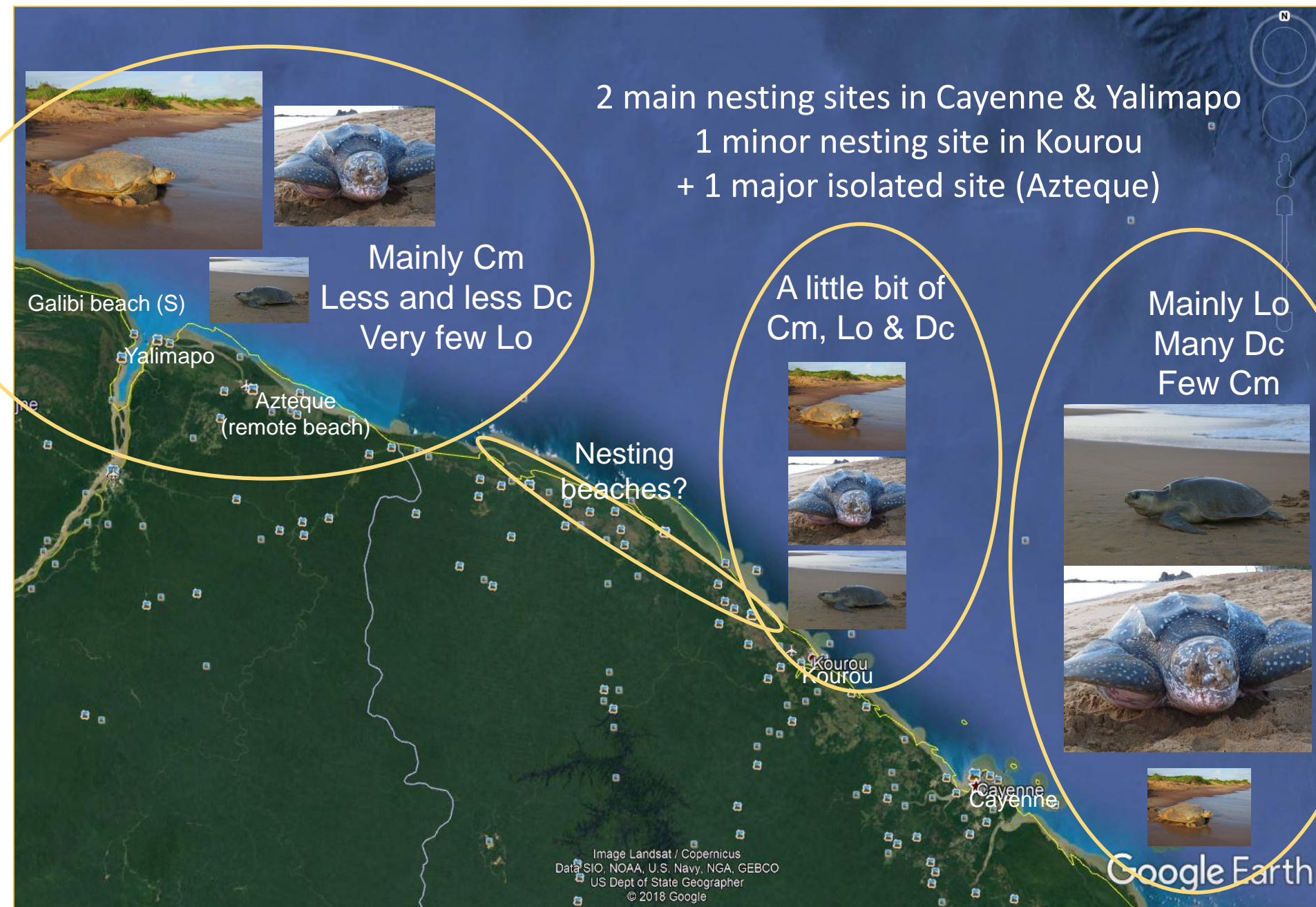


## Monitoring:

Since the end of the 70's **in the West** (mainly the leatherback in Yalimapo/Les Hattes beach, one of the major nesting site for leatherback in the world)

Since the end of the 90's **in the East** (mainly Olive Ridley)







# Partners of the MT monitoring



## Campagne Kawana

Historic site of monitoring of Dc since the 80's on Yalimapo and previous remote beaches (disappeared today). Dc flipper tag at the end of the 80's, then Pit tagging at the end of the 90's



Created in 1998. Morning MT nests counting since 1998 and Pit tagging between 1998 and 2005



Dc PIT-tagging since 2006

Cm PIT-tagging since 2012

Galibi beach (S)

Yalimapo

Azteque (and previous remote beaches)

Morning MT nests counting since 2014



Kourou



Morning MT nests counting since 1998  
Lo & Dc PIT tagging since 2009

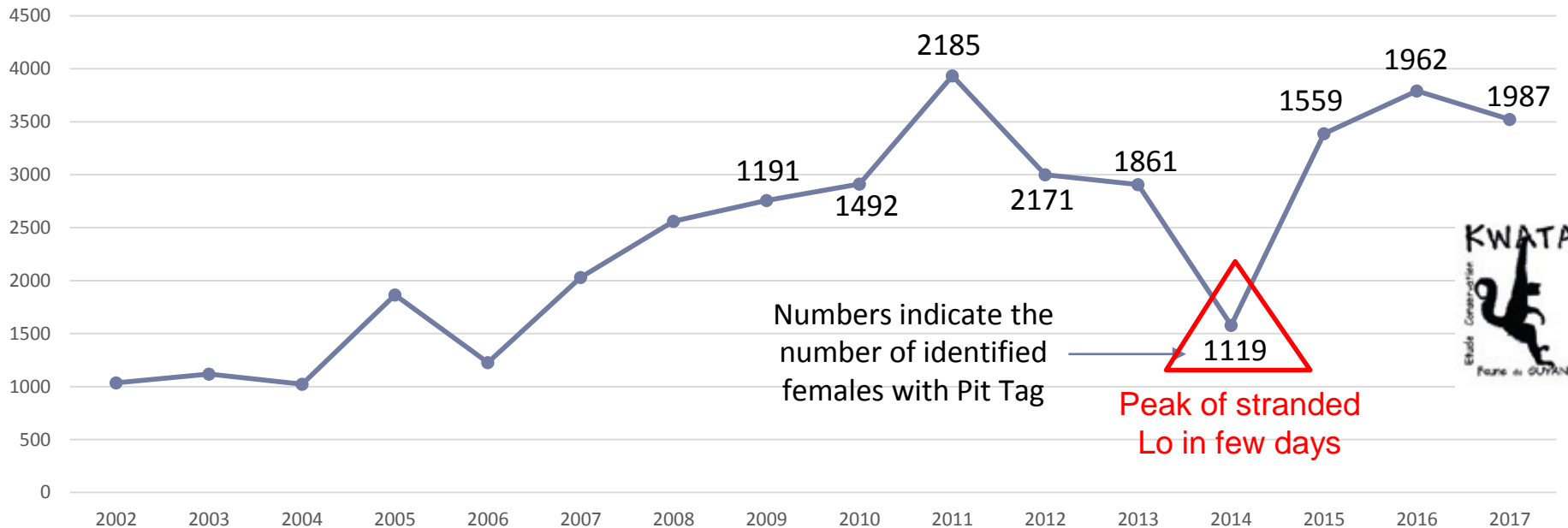
Cayenne

## How many Olive ridley in French Guiana?



**In 2017:** in the East 3848 nests / **1987 Lo** identified  
in the West: 3 nests

Number of Lo nests from 2002 to 2017 in the East



The counting monitoring effort is exactly the same year after year

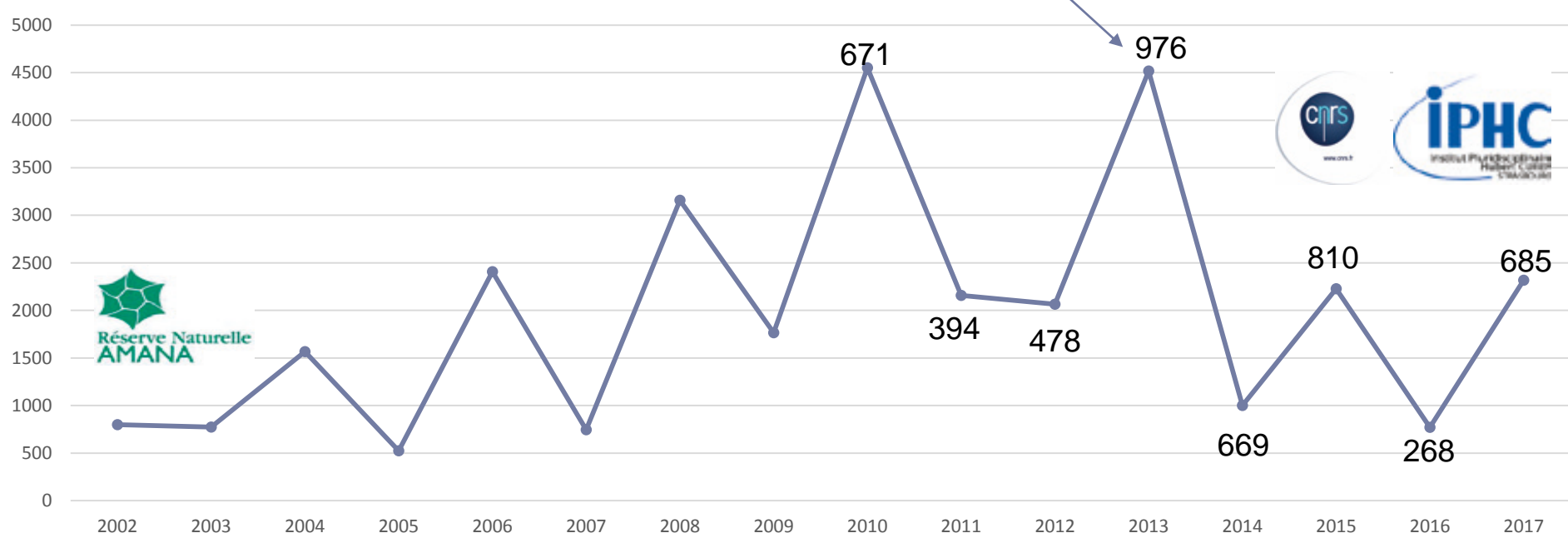
The number of identified females (pit-tagging by night) is mostly exhaustive year after year (depending of the task force until the end of the season)

## How many Green turtle in French Guiana?

**In 2017, in the East: 92 nests / 11 Cm identified**  
**in the West: 2318 nests / 685 Cm identified**



Number of Cm nests from 2002 to 2017 in the West



Number of nests is not corrected by the monitoring effort which is variable from year to year

The number of identified females is exhaustive since 2012

**It is highly probable that a part of this population nests in Suriname > importance of transboundary cooperation to have a exhaustive situation**

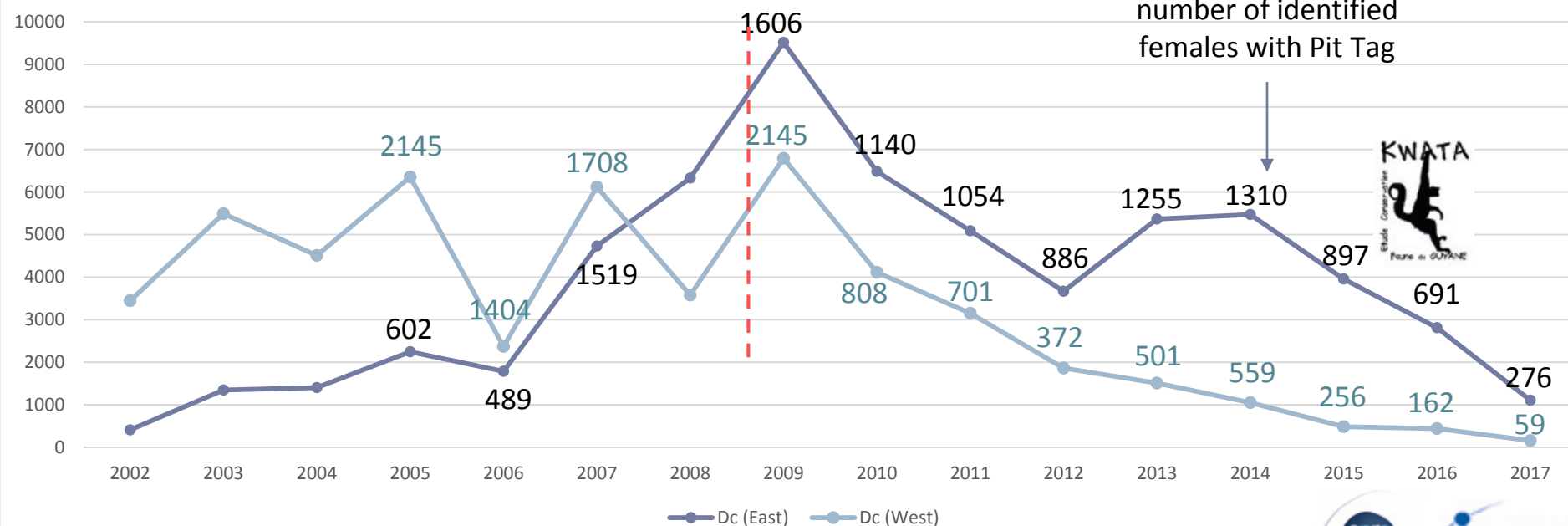


# How many leatherback in French Guiana?



**In 2017:** in the East : 1106 nests / **276 Dc** identified  
in the West: 156 nests / **59 Dc** identified

Number of Dc nests from 2002 to 2017 in the East and in the West



Heterogeneity of the nest counting effort between the East and the West

It is highly probable that a part of West population nests in Suriname

Diminution of the number of nests in the East and in the West since 2009



## All marine turtles are protected in France

### Recent regional evaluation of FG Species (2016)

Species	Mondial Red List	Regional Red List	Tendency
<i>Chelonia Mydas</i>	EN	VU	↓
<i>Dermochelys coriacea</i>	VU	VU	↓
<i>Lepidochelys olivacea</i>	VU	NT	→

Particular evaluation of the Dc (distinction from West and East)

Species	Population	Regional Red List	Tendency
<i>Dermochelys coriacea</i>	West	EN	↓
<i>Dermochelys coriacea</i>	East	NT	→

## Focus on genetic studies led by Kwata (Benoît de Thoisy)

OPEN ACCESS Freely available online



### Recent Demographic History and Present Fine-Scale Structure in the Northwest Atlantic Leatherback (*Dermochelys coriacea*) Turtle Population

Érica Molfetti<sup>1</sup>, Sibelle Torres Vilça<sup>2</sup>, Jean-Yves Georges<sup>3,4</sup>, Virginie Plot<sup>3,4</sup>, Eric Delcroix<sup>5</sup>, Rozen Le Scao<sup>6</sup>, Anne Lavergne<sup>7</sup>, Sébastien Barrioz<sup>8</sup>, Fabrício Rodrigues dos Santos<sup>1</sup>, Benoît de Thoisy<sup>7,8\*</sup>

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Genetic structure between the Dc in the East and in the West

Genetic signature nearer between Dc from Antilles/Cayenne than between Cayenne/Yalimapo



Mitochondrial DNA

The Journal of DNA Mapping, Sequencing, and Analysis

ISSN: 1940-1736 (Print) 1940-1744 (Online) Journal homepage: <http://www.tandfonline.com/loi/imdn20>



Two others studies on the Cm genetic are in course

Mixed-stock analysis in green turtles *Chelonia mydas*: mtDNA decipher current connections among west Atlantic populations

Juliana Costa Jordao, Ana Cristina Vigliar Bondioli, Lurdes Foresti de Almeida-Toledo, Karin Bilo, Rachel Berzins, Yvon Le Maho, Damien Chevallier & Benoît de Thoisy

Contact: [benoit@kwata.net](mailto:benoit@kwata.net)

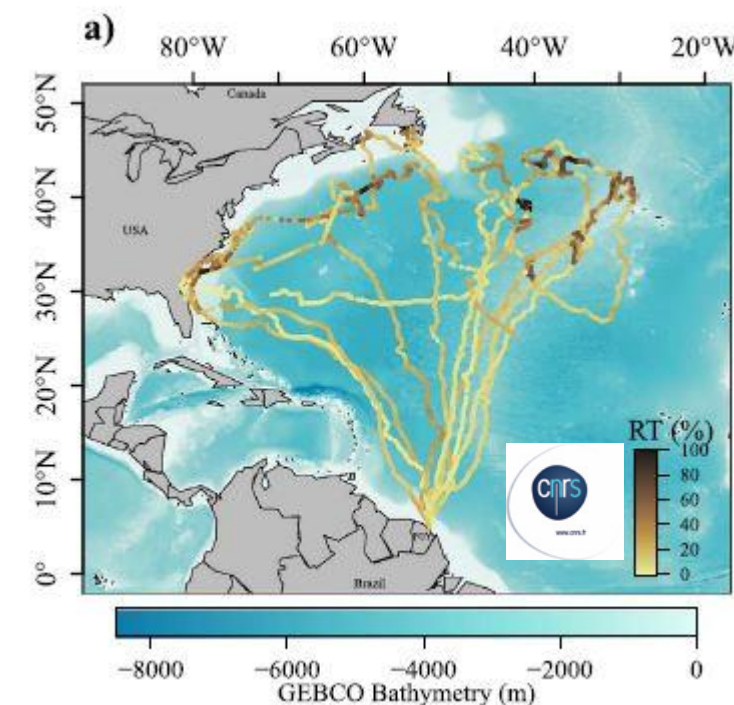


# Focus on the satellite tracking led by CNRS-IPHC (Damien Chevallier)



## On Green turtles

Baudouin et al. 2015. Biol.Cons  
Chambault et al. 2015. PlosOne  
Chambault et al. 2016 Mar Ecol Prog Ser



## On Olive ridley

Chambault et al. 2016. Progress in oceanography

## On Leatherback

Chambault et al. 2017. Deep Sea research

Contact: [damien.chevallier@iphc.cnrs.fr](mailto:damien.chevallier@iphc.cnrs.fr)

Thank you for your attention!

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