VIRTUAL TOUR: ANTARCTIC ISLANDS UPDATE

AN EDUCATIONAL DIARY FROM THE FRENCH SOUTHERN ISLANDS

GIFT 2018 – VIENNA – APRIL 2018
LET’S BEGIN WITH A QUIZ...
A FEW QUESTIONS ABOUT THE PLACE WE TALK ABOUT

❖ How many of you have heard of « Kerguelen Islands »?

❖ Where do you think « French southern islands » are located?
  A. Southern Atlantic?
  B. Southern Pacific?
  C. Southern Indian Ocean?

❖ How far South are the French southern islands?
  A. Latitude 70°?
  B. Latitude 60°?
  C. Latitude 50°?
LANDS OF ENDLESS WINDS

[Map showing ocean currents and geographic features around Antarctica]

[Images of a ship navigating through rough waters and a bird flying over a frozen landscape]
A VISUAL TOUR: A SHORT VIDEO
THE LARGEST FRENCH NATURAL RESERVE
ONE OF THE LARGEST MARINE PROTECTED AREA
A PLACE FOR SCIENCE AND CONSERVATION
A PLACE FOR SCIENCE AND CONSERVATION

A REMOTE WILDERNESS REACHED ONLY BY SEA

= A GREAT POTENTIAL FOR AN EDUCATIONAL PROJECT

2 TEACHERS AT SEA FOR ONE MONTH ON M/S MARION DUFRESNE

TELLING THE DAY-TO-DAY OPERATIONS

SHARING THE SCIENCE BEING DONE
3 ARCHIPELAGO
ONE SUPPLY JOURNEY
ONE BOAT
4 TIMES A YEAR
ONE MONTH
5000KM+ AT SEA
FIRST STOP: CROZET ARCHIPELAGO

5 volcanic islands
1 settlement
Approx: 30 pers.

One of the biggest King penguin colony in the world

A resident Killer whales population
2nd STOP: KERGUELEN

1 main island
300+ islands & islets

Sustainably managed fisheries

1 main settlement
Approx. 50-80 pers.
Several small scientific hut
3rd STOP: AMSTERDAM

- 2 volcanic islands
- 1 settlement
- Approx: 20 pers.

- A critically endangered endemic species – Amsterdam Albatros
- A closely monitored and harvested crayfish population
AN EDUCATIONAL DIARY FROM THE FRENCH SOUTHERN ISLANDS?

WHO? ANY VOLUNTARY CLASS FROM 6 TO 18+ YEARS OLD

WHAT?

EDUCATIONAL RESOURCES

Q&A WITH SCIENTISTS

A BLOG
WHEN?

April 2018 : website opening, registration opened (free).

April-May-June 2018 : educational resources progressively released.

September – November 2018 : start of the diary, forum opening.

December 2018 : 1 month journey onboard M/S Marion Dufresne, collecting answers from the field and people (video), daily publications on the blog.

January > April 2019 : Dispatching video answers to the classes. Sharing classes productions on the forum.
Cook Ice cap, the largest french glacier… and the fastest retreat rate in the world!

OCEAN: MEASURING THE SEA LEVEL

PARTICIPATING SCIENTIST: LAURENT TESTUT – LEGOS Toulouse (TBC)

A simple and complex parameter…

ROSAME: a worldwide network of tide gauge
3 are located in the French southern Islands
BIODIVERSITY: FORAGING STRATEGY OF THE KING PENGUIN, OCEANS CURRENTS AND CLIMATE CHANGE

PARTICIPATING SCIENTIST: CHARLES-ANDRE BOST

> Monitoring king penguin foraging movements by satellite tracking
SUSTAINABLE MANAGEMENT OF FISHERIES

PARTICIPATING EXPERT: THIERRY CLOT (TAAF)

> Toothfish (Dissostichus eleginoides)
> A strictly controlled fishing float
> Rules to minimize marine birds mortality
Introduced species (on purpose or not), a plague to island biodiversity

Cat, rats, mice, reindeer, sheep, cows are alien species....

... with consequences on bird reproduction success (predation, diseases...), vegetation....
WASTE AND ENERGY SUSTAINABLE MANAGEMENT IN EXTREMELY ISOLATED HUMAN SETTLEMENTS

PARTICIPATING EXPERT: NATURAL RESERVE
A PLACE OF HISTORY

PARTICIPATING EXPERT: JEAN-FRANÇOIS LE MOËL
(ACADÉMIE DES SCIENCES DE L’OUTRE-MER)

Discovered in the late 18th century...

Port-Jeanne d’Arc – a whale hunting station (1908)
AMSTERDAM ALBATROS: PROTECTING AN ENDEMIC SPECIES

PARTICIPATING EXPERT: NATUREL RESERVE

Diomedea amsterdamiensis
Population: 140-150 birds

Only one nesting site: Amsterdam island
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